Health and Science Schools

Electronic Undergraduate Handbook 2013

University of Western Sydney

Units, courses, and arrangements for courses as stated in the postgraduate and undergraduate electronic handbooks (and any other University of Western Sydney (UWS) publications or announcements) are an expression of intent only and are not to be taken as a firm offer or undertaking.

UWS reserves the right to discontinue or vary its units, courses and announcements at any time without notice.

Information contained in this electronic handbook is correct at the time of production (March 2013), unless otherwise noted.

CRICOS Provider Code 00917K

In accordance with the Education Services for Overseas Students (ESOS) Act 2000, the University of Western Sydney (UWS) is registered on the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS), Provider Code 00917K.

Overseas students studying in Australia must comply with the requirements of the ESOS Act and the National Code. They should consult the Federal Government's Australian Educational International webpage for the description of the ESOS legislation and other relevant information. UWS International Postgraduate and Undergraduate Prospectuses and other promotional material specifically prepared for overseas students also provide information about CRICOS registered courses and conditions relating to study in Australia.

About the Health and Science Schools Electronic Undergraduate Handbook

Sessions and dates
There are two main sessions in 2013: Autumn and Spring. Weeks shown in the dateline refer to the session weeks for these main sessions.

The dateline is available at:
http://www.uws.edu.au/students/stuadmin/dateline.

Unit outlines
Brief outlines of all UWS undergraduate units listed in the course section are given in the second half of this electronic handbook.

The unit outlines give a brief overview of each unit. For some units this information is not available. Please check the UWS website for more recent information. For more information – details of textbooks, assessment methods, tutorial, group work and practical requirements – contact the unit coordinator.

More information on unit offerings can be found at: http://handbook.uws.edu.au/hbook/UNIT_SEARCH.ASP.

Unit not listed?
If the unit you are looking for is not in the alphabetical units section, consult your course coordinator for details or check the unit search web page for updated details on all units offered in 2013 at:
http://handbook.uws.edu.au/hbook/UNIT_SEARCH.ASP.

Prerequisites, co-requisites and assumed knowledge
Students wishing to enrol in a unit for which they do not have the prerequisites or assumed knowledge are advised to discuss their proposed enrolment with an academic adviser.

Where it is necessary to limit the number of students who can enrol in a unit through shortage of space, equipment, library resources, and so on, or to meet safety requirements, preference will be given to students who have completed the unit recommended sequence in the course.

Academic credit
In most courses, academic credit will be granted for previous studies. For example, UWS has a number of agreements with TAFE to grant credit for successfully completed TAFE studies. Seek advice about credit prior to, or at enrolment.

Electives and cross-discipline study
Electives are available in many courses. These may be selected from pools of electives listed under various courses.

Also, UWS actively encourages students to take elective units in disciplines other than their major area of study. Students should seek advice from their course coordinator in the first instance.

How to use this electronic book
The first part of this electronic book contains information about current undergraduate courses offered by the Schools of Computing, Engineering & Mathematics, Medicine, Nursing & Midwifery and Science & Health. The next part contains details of undergraduate unit sets in these courses, and the final part has details of all units within the courses.

The courses are arranged mainly alphabetically. If you know the course code, but not the name, consult the COURSE CODE INDEX.

The units are arranged alphabetically. If you know the code, but not the name, consult the UNIT CODE INDEX at the back of the electronic book.

Check website for updates
Every effort is taken to ensure that the information contained in this electronic book is correct at time of production. The latest information on course and unit offerings can be found at:
http://handbook.uws.edu.au/hbook/

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SCHOOL OF MEDICINE

Bachelor of Medical Research

4647.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencment year in this course is 2012 or later.

This course gives students who are enrolled in the UWS Bachelor of Medicine/Bachelor of Surgery (MBBS) the opportunity to take leave of absence from the normal medical course for 12 months full time or 24 months part time, after successfully completing Years 1 and 2 of MBBS, in order to gain a more detailed experience in medical research than is provided in the normal medical course. Years 1 and 2 of the Bachelor of Medical Research are identical to Years 1 and 2 of MBBS. It is expected that students will return to the medical course on completion of the intercalated year, which will complete the requirements for the Bachelor of Medical Research, but the degree is also available as an exit point for those who do not wish to resume MBBS.

Study Mode
Three years full-time or six years part-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal

Accreditation
The Australian Medical Council accredits the Bachelor of Medicine, Bachelor of Surgery (MBBS) program, and the addition of an extra year of research, as proposed here, meets one of their standards concerning provision of opportunities for research during medical courses.

Admission
Must be currently enrolled in Bachelor of Medicine/Bachelor of Surgery (MB BS) at UWS, and have successfully completed at least two years of that course, normally with a credit average, before being admitted to Year 3 of the intercalated Bachelor of Medical Research.

Course Structure
Qualification for this award requires the successful completion of 240 credit points, which include:

A common 160 credit point core, comprising the first two years of the Bachelor of Medicine / Bachelor of Surgery (MBBS) program

An 80 credit point intercalated program, specific to the new degree (Bachelor of Medical Research), which can be taken following the 2nd, 3rd or 4th year of the MBBS program, comprised of

A compulsory 60 credit point new unit, 400813 - Medical Research Project, and a choice of one of two existing course work combinations, totalling 20 credit points over two semesters, as shown below

Year 1

1H session (year long subjects)

400861.1	Foundations of Medicine 1

2H session

400861.1	Foundations of Medicine 1

Year 2

1H session (year long subjects)

400862.1	Foundations of Medicine 2

2H session

400862.1	Foundations of Medicine 2

Year 3

1H session

400813.2	Medical Research Project

Autumn session
Choose one of

300768.2	Methods of Scientific Researching
400864.3	Research Methods (Quantitative and Qualitative)

2H session

400813.2	Medical Research Project

Spring session
Choose one of

300768.2	Methods of Scientific Researching
400863.2	Foundations of Research and Evidence-Based Practice

Note: This program is available only to students who are selected into the UWS Bachelor of Medicine (MBBS) and Bachelor of Surgery; Years 1 and 2 of the Bachelor of Medical Research are identical to Years 1 and 2 of the MBBS program.

Note: Students may apply for leave of absence from MBBS (for 1 year full time or 2 years part time) and admission to the B Med Res once they have completed Years 1 and 2 of MBBS, and will normally be required to have a credit average in MBBS at the time they apply.

Note: Year 3 of the Bachelor of Medical Research will most commonly be undertaken between Years 2 and 3 or between Years 3 and 4 of the MBBS. It will not normally be possible to enrol for the Bachelor of Medical Research once Year 5 of MBBS has been completed, because of the need for current clinical skills as the graduates progress into the following Intern year.

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Bachelor of Medicine, Bachelor of Surgery

4641.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2011 or later.

This course prepares graduates for eligibility for registration as a medical practitioner in Australia or New Zealand. It is an integrated program in which the basic sciences and areas of knowledge underpinning medical practice are learnt in a framework that emphasises active learning, based on clinical and other relevant scenarios. Teaching of clinical skills begins in the first year and continues throughout the program. In the last three years of the course, students undertake clinical placements in a wide range of settings across Greater Western Sydney and beyond. Students who undertake the embedded Honours program during the final two years of the course will also carry out a research project.

Study Mode
Five years full-time. In the first two years of the course, students will study at the Campbelltown campus of the University. In the later years, students may be required to spend a period of time in one or more clinical rotations outside the Sydney metropolitan area, and will also be rotated to a substantial number of different locations within Sydney.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Advanced Standing
The course is extensively integrated horizontally, and as a result it will not be possible to grant credit for units taken in other courses.

Accreditation
The Bachelor of Medicine, Bachelor of Surgery (MBBS) program is fully accredited by the Australian Medical Council. Graduates will be eligible for registration as a medical practitioner by the Australian Health Practitioner Regulation Agency.

Inherent requirements
There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission
Potential students should apply through the Universities Admission Centre (UAC) and directly to the School of Medicine. Selection is on the basis of:

- Academic merit (ATAR or its equivalent, for those without a completed degree; grade point average in their most recent degree, for graduate applicants)
- Results of the Undergraduate Medicine and Health Sciences Admission Test (UMAT); and
- Performance at an interview.

Evidence of connection to Greater Western Sydney may also be taken into account.

The requirements for International applicants (who must apply via the UWS International Office) to be considered for admission to the medical course are:

Achieve an academic rank of 95.5 or more (derived on submission of academic results) Meet English proficiency requirements.

- For students commencing in 2013 - Achieve a scholastic performance in the final year of secondary school equivalent to a New South Wales ATAR of 95.50 (or 93.50 for applicants from Greater Western Sydney)(International Baccalaureate 37 or 36 for the Greater Western Sydney applicants) or higher.
- for those who have completed a 3 year or longer Bachelors degree, the grade point average in the degree must be at least 5.6 on the 7 point scale,
- Have completed IELTS or equivalent examination (Academic Module) and achieve a minimum score of 6.5 in each of the four components, and an overall score of at least 7.0
- For more information on entry requirements and how to apply please see the School of Medicine web page.

For Honours Students:

Completion of Year 3 of UWS MBBS, with a grade-point average in the course to that time of 6.0 or better. Applications will be directly to the School, from currently enrolled students in Year 3 of MBBS.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements
To be enrolled in this course students must comply with the current occupational screening and vaccination policy of NSW Health and meet NSW Clinconnect requirements at course commencement. Student details s must obtain Student Registration by the Medical Board of NSWwill be registered with the Australian Health Practitioner Regulation Agency , and must successfully complete a Work Cover Authority approved First Aid Certificate prior to the completion of the first semester of the course.Also see inherent requirements section above. Travel Requirements: The main hospitals outside of the Sydney Metropolitan Area

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are Lismore and Bathurst, although clinical training at other rural hospitals may be required. The School will consider special circumstances of students when allocating them to hospitals on rotation. However, wethe School reserves the right to allocate students to hospitals that are not their first preference to ensure that students receive the highest possible quality of teaching. Applicants for entry into UWS Medicine must take this into consideration and be willing to undertake their training in a range of hospital and health care facilities.

Course Structure

Qualification for the award requires the successful completion of 400 credit points including the units listed in the sequence below.

Full-time

Year 1

1H Session

400861.1   Foundations of Medicine 1

2H Session

400861.1   Foundations of Medicine 1

Year 2

1H Session

400862.1   Foundations of Medicine 2

2H Session

400862.1   Foundations of Medicine 2

Year 3

1H Session

400810.2   Integrated Clinical Rotations 1

2H Session

400810.2   Integrated Clinical Rotations 1

Year 4 (Non-Honours stream)

1H Session

400811.1   Integrated Clinical Rotations 2

2H Session

400811.1   Integrated Clinical Rotations 2

Year 4 (Honours stream)

Honours stream students will complete the following units:

1H Session

400811.1   Integrated Clinical Rotations 2
400959.1   Honours Research Project 1

2H Session

400811.1   Integrated Clinical Rotations 2
400959.1   Honours Research Project 1

Year 5 (Non-Honours stream)

1H Session

400977.1   Integrated Clinical Rotations 3

2H session

400978.1   Integrated Clinical Rotations 4

Year 5 (Honours stream)

Honours stream students will complete the following units:

1H Session

400977.1   Integrated Clinical Rotations 3
400960.1   Honours Research Project 2

2H session

400978.1   Integrated Clinical Rotations 4
400960.1   Honours Research Project 2

Please Note: the curriculum for year 5 is subject to approval, and therefore may be altered.

Unsatisfactory Completion of Core Units

Students who are unable to satisfy the requirements of the core unit 400977 Integrated Clinical Rotations 3 will be expected to enrol and complete the unit 400979 - Integrated Clinical Rotations (General). Students should seek immediate academic advice regarding their planned progression and pattern of enrolment, which may have to be varied to meet unit and course requirements.

400979.1   Integrated Clinical Rotations (General)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Bachelor of Medicine, Bachelor of Surgery/Bachelor of Arts

4671.2

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students who commenced study in this course in 2012 or later.

This combined program is offered to a small number of students (quota of three) who have demonstrated extremely high academic achievement during their Year 12 school studies, and who wish to broaden their medical studies by also completing the requirements for a Bachelor of Arts (BA). In addition to completing all components of the medical course, they will also complete 160 credit points of studies for the BA, one year of which will be taken off from

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the MBBS program to study 80 credit points of units for the BA full-time. Some students will choose to complete the program in seven years rather than six, in which case no overload would be needed. Students accepted into the combined program will need to consult with course advisors for both MBBS and BA to plan how to dovetail the commitments needed for each component course. Students should refer to the separate handbook entries for the component degrees.

Study Mode
Six years full-time if 80 credit points of Bachelor of Arts units taken in overload. Seven years full-time if no overload.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The Bachelor of Medicine, Bachelor of Surgery course is accredited by the Australian Medical Council until end 2013.

Admission
The admissions requirements and processes will be the same as for the MBBS (including the requirements to apply directly to the School of Medicine by the September closing date each year, to have a current UMAT score, and to have taken part in the Schools Multi-mini Interview (MMI), but with the following differences:

- The UAI (or its equivalent) cutoff for consideration for entry to this combined degree is 99.90. (ATAR 99.85)
- There will be a quota of three places for the combined degree in the first instance (it is important to set a quota, since the NSW hospitals and IMET do their planning for Intern places based on a steady pipeline of graduates emerging from the NSW medical courses; the quota could be adjusted slowly in future years if the level of demand supports it).
- Up to ten places will be set aside for the MMI for applicants with the MBBS/BA UAC course code (i.e. The same ratio of interview places to actual course places as for the straight MBBS). If there are more than 10 eligible applicants, they will be ranked by their UMAT score.
- The final ranked selection list, for the UAC admissions process, will be based solely on the interview performance.

For more information on entry requirements and how to apply please see the School of Medicine web page.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure
Qualification for the award requires the successful completion of 560 credit points including the units listed in the sequence below.

Students will take a year off from the MBBS program (ideally between Years 2 and 3 or between Years 3 and 4) to study BA full-time. Some students will prefer to take a second full-time year off to complete the 160 credit points of Arts units required for the BA, while others will request and be approved to carry a small overload (average of 10 credit points per semester) in Years 1-4 of MBBS to complete 80 credit points of Arts units.

A typical structure is set out below, but the overload (or decision to NOT overload) and the particular year in which a student would intercalate from the MBBS program can be tailored to individual students' needs.

Recommended Sequence

Full-time

Year 1
1H session

400861.1   Foundations of Medicine 1

and one 10 credit point Bachelor of Arts unit

2H Session

400861.1   Foundations of Medicine 1

and one 10 credit point Bachelor of Arts unit

Year 2

1H Session

400862.1   Foundations of Medicine 2

and one 10 credit point Bachelor of Arts core unit

2H Session

400862.1   Foundations of Medicine 2

and one 10 credit point Bachelor of Arts core unit

Year 3

400810.2   Integrated Clinical Rotations 1

and 20 credit points of Bachelor of Arts core units - 10 credit points per semester

Year 4
80 credit points of full-time Bachelor of Arts units

Year 5

400811.1   Integrated Clinical Rotations 2

and 20 credit points of Bachelor of Arts units - 10 credit points per semester

Year 6

400977.1   Integrated Clinical Rotations 3
400978.1   Integrated Clinical Rotations 4

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(Bachelor of Arts requirements complete)

Bachelor of Arts Majors

M1026.1	Arabic
M1032.1	Asian Studies and International Relations
M1027.1	Chinese
M1034.1	Cultural and Social Analysis
M1035.1	English, Text and Writing
M1031.1	Global Studies
M1033.1	History and Political Thought
M1041.1	Indigenous Australian Studies
M1036.1	Islamic Studies
M1029.1	Italian
M1028.1	Japanese
M1037.1	Linguistics
M1025.1	Media and Visual Cultures
M1050.1	Psychological Studies
M1024.1	Religion, Anthropology and Philosophy
M1030.1	Spanish

Bachelor of Arts Submajors

SM1042.1	Asian Studies and International Relations
SM1035.1	Chinese
SM1043.1	Cultural and Social Analysis
SM1044.1	English, Text and Writing
SM1040.1	Global Studies
SM1041.1	History and Political Thought
SM1051.1	Indigenous Australian Creative Expressions
SM1049.1	Indigenous Australian Studies
SM1050.1	Indigenous Economics
SM1045.1	Islamic Studies
SM1036.1	Italian
SM1037.1	Japanese
SM1046.1	Linguistics
SM1033.1	Media and Visual Cultures
SM1069.1	Psychological Studies
SM1032.1	Religion, Anthropology and Philosophy
SM1038.1	Spanish

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Unit Sets

Major - Religion, Anthropology and Philosophy

M1024.1

This multidisciplinary major pursues critical and rational analysis of questions about individuals and societies; about human knowledge, culture and existence. It inquires into issues about human nature; the scope and limits of knowledge and belief; God and ethics; conflict and violence; ritual and myth; and religion, politics and culture. The major provides students with rigorous training in analytic and creative thinking, intellectual independence and cultural and ethical awareness.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

| 101686.2 | Anthropology and Philosophy Look at Religion |

and seven units from the following pools with no less than three units at Level 3

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

| 101462.2 | Understanding Islam and Muslim Societies |

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100850.2	Buddhism in the Contemporary World
100852.2	Classics of Modern Philosophy
101856.1	Film and Philosophy
101464.3	Great Texts of Islam: Qur'an and Hadith
101843.2	Philosophy and Environment
101881.1	Philosophy and the Good Life
101867.1	The Ethical Life
101294.3	The Western Philosophical Tradition

Level 3 Unit Pool

101295.2	Aesthetics
101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
100863.3	Ethical Cultures
100998.4	Evolutionary Thinking
100961.4	Humanities Internship
101467.2	Islam in Southeast Asia
101463.4	Islam in the Modern World
101465.2	Islamic Law in a Changing World

101724.2	Literary Animals
100875.4	Literature and Philosophy
100275.4	Philosophies of Love and Death
101761.2	Philosophy and the Visual
100879.2	Philosophy Today
101665.3	Politics and Religion
101003.2	Religion and Culture
101359.5	Sociology of Religion
100969.2	Theories of Conflict and Violence
101880.1	The Space of Literature
101798.2	Understanding Freedom
101010.3	What is the Human?
101471.2	Women in Arabic and Islamic Literature

Major - Media and Visual Cultures

M1025.1

The rapid flow of visual images with which we communicate today – on the internet, by web and moblogs – is a contemporary manifestation of the importance of visual cultures in everyday life. The Media and Visual Cultures major area equips students with multidisciplinary knowledge and skills in critical art history and theory, digital media, film and television studies, philosophy, and cultural studies. It aims to create career ready graduates with the skills necessary to interpret the production and dissemination of visual images and their meanings in a variety of media as well as cultural and institutional contexts.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

| 101734.2 | Media and Visual Cultures: Case Studies |

and the Level 3 unit

| 101295.2 | Aesthetics |

Students must also complete six of the Level 2/3 units from the following pools with no less than two at Level 3:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100245.2	Asian Cinema
101248.3	Australian Art 1
101626.4	Children's Literature: Image and Text
101250.3	Digital Futures
101856.1	Film and Philosophy
10157.2	History and Theory of the Avant-Garde
100964.2	Introduction to Film Studies
101254.3	The Animated Image: Histories and Theories
10371.3	The Art Museum - from the Prince to the Public
100890.2	The Art of Landscape
101795.2	The Musical

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10158.2	Writings on Art

Level 3 Unit Pool

400087.5	Applied Critical Methods
100959.2	Australian Art II
100989.2	Cinema and Realism
100990.2	Cinema, Culture, Memory
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
101001.3	Modernity and Cinema
101761.2	Philosophy and the Visual
101253.3	Public Memory and Commemoration
101006.2	Social Semiotics
101738.2	The Art Game: Fraud, Forgery, Theft and Perfidy
101266.2	The Art of Modern Life
101717.2	The Italian Renaissance Unpacked
101668.2	World Cinema

Major - Arabic

M1026.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Arabic comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100041.2	Arabic 101

100042.2	Arabic 102

Level 2 unit pool

101699.2	Language and Communication Skills 2A: Arabic
101704.2	Language and Communication Skills 2B: Arabic

Level 3 unit pool

400087.5	Applied Critical Methods
100048.2	Arabic 302 - Arabic Advanced Language and Grammar
100049.2	Arabic 303: Advanced Writing Skills
100050.2	Arabic 304: Arabic Advanced Speaking
100052.2	Arabic 306: Arabic Novel and Short Story
100054.2	Arabic 308:Language Past and Present
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101792.2	Texts in Contemporary Arab Society and Culture
101668.2	World Cinema

Major - Chinese

M1027.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Chinese comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

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100056.2   Chinese 101
100057.2   Chinese 102

Level 2 unit pool

101700.2   Language and Communication Skills 2A:
                Chinese
101705.2   Language and Communication Skills 2B:
                Chinese

Level 3 unit pool

400087.5   Applied Critical Methods
100063.2   Chinese 302
100064.2   Chinese 303: Twentieth-Century Chinese
                Literature
100065.2   Chinese 304: Chinese Classical Literature
100066.2   Chinese 305: Chinese Cinema
100067.2   Chinese 307: The Cultural Context of China
100961.4   Humanities Internship
101454.2   Intercultural Pragmatics
101710.2   Languages and Grammatical Concepts 3A:
                Chinese
101668.2   World Cinema

Major - Japanese

M1028.1

Second language skills are a key competency for
employment in an increasingly globalised society. Students
undertake study of a language other than English (Arabic,
Chinese, Italian, Japanese, Spanish) suited to their level of
language proficiency and career aspirations. The major
area includes units about specialized topics, including
literature, cinema and culture. Competence in a modern
language other than English opens doors to many careers
in education, government and community-based industries
and businesses.

Location

Campus   **Mode**

 Bankstown Campus Internal

Unit Set Structure

A major in Japanese comprises a sequence of 80 credit
points with 60 credit points at Level 2 and 3 (with no less
than 30 credit points of these at Level 3), however students
commencing at beginner"s level, that is units 101 and 102,
and who follow the recommended course structure, are
only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of
competence in the language and they should not backtrack,
i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the
same language; or

- take a Level 2 unit after passing a Level 3 unit in the
same language.

Level 1 unit pool

100085.2   Japanese 101

100086.2   Japanese 102

Level 2 unit pool

101702.2   Language and Communication Skills 2A:
                Japanese
101707.2   Language and Communication Skills 2B:
                Japanese

Level 3 unit pool

400087.5   Applied Critical Methods
100961.4   Humanities Internship
101454.2   Intercultural Pragmatics
100092.3   Japanese 302
100093.2   Japanese 303: Contemporary Culture and
                Society
100094.1   Japanese 304: Discourse in Japanese
100096.2   Japanese 306: Japanese for Business
100098.1   Japanese 308: Japanese Textual Studies
101712.2   Languages and Grammatical Concepts 3A:
                Japanese
101668.2   World Cinema
101669.2   World Literature in Translation

Major - Italian

M1029.1

Second language skills are a key competency for
employment in an increasingly globalised society. Students
undertake study of a language other than English (Arabic,
Chinese, Italian, Japanese, Spanish) suited to their level of
language proficiency and career aspirations. The major
area includes units about specialized topics, including
literature, cinema and culture. Competence in a modern
language other than English opens doors to many careers
in education, government and community-based industries
and businesses.

Location

Campus   **Mode**

 Bankstown Campus Internal

Unit Set Structure

A major in Italian comprises a sequence of 80 credit points
with 60 credit points at Level 2 and 3 (with no less than 30
credit points of these at Level 3), however students
commencing at beginner"s level, that is units 101 and 102,
and who follow the recommended course structure, are
only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of
competence in the language and they should not backtrack,
i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the
same language; or

- take a Level 2 unit after passing a Level 3 unit in the
same language.

Level 1 unit pool

100130.2   Italian 101

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100131.2   Italian 102

Level 2 unit pool

101701.2   Language and Communication Skills 2A:
             Italian
101706.2   Language and Communication Skills 2B:
             Italian

Level 3 unit pool

400087.5   Applied Critical Methods
100961.4   Humanities Internship
101454.2   Intercultural Pragmatics
100138.2   Italian 303: Contemporary Italy in European
             and International Contexts
100140.1   Italian 305: Modern Literature
100141.2   Italian 306: Classical Literature
100143.2   Italian 308: Italian Cinema
101711.2   Languages and Grammatical Concepts 3A:
             Italian
101668.2   World Cinema
101669.2   World Literature in Translation

Major - Spanish

M1030.1

Second language skills are a key competency for
employment in an increasingly globalised society. Students
undertake study of a language other than English (Arabic,
Chinese, Italian, Japanese, Spanish) suited to their level of
language proficiency and career aspirations. The major
area includes units about specialized topics, including
literature, cinema and culture. Competence in a modern
language other than English opens doors to many careers
in education, government and community-based industries
and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Spanish comprises a sequence of 80 credit
points with 60 credit points at Level 2 and 3 (with no less
than 30 credit points of these at Level 3), however students
commencing at beginner''s level, that is units 101 and 102,
and who follow the recommended course structure, are
only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of
competence in the language and they should not backtrack,
i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the
same language; or

- take a Level 2 unit after passing a Level 3 unit in the
same language.

Level 1 unit pool

100145.2   Spanish 101
100146.2   Spanish 102

Level 2 unit pool

101703.2   Language and Communication Skills 2A:
             Spanish
101708.2   Language and Communication Skills 2B:
             Spanish

Level 3 unit pool

400087.5   Applied Critical Methods
100961.4   Humanities Internship
101454.2   Intercultural Pragmatics
101713.2   Languages and Grammatical Concepts 3A:
             Spanish
101791.2   Short Fiction in the Americas
100153.2   Spanish 303: Advanced Writing Skills
100154.2   Spanish 304: Advanced Speaking Skills
100155.2   Spanish 305: Contemporary Literature
100156.2   Spanish 306: Contemporary History
100157.2   Spanish 307: Classical Literature
100158.2   Spanish 308: Spanish Sociolinguistics
101668.2   World Cinema
101669.2   World Literature in Translation

Major - Global Studies

M1031.1

What does it mean to live in an increasingly globalised
world? Global Studies offers students the opportunity to
acquire key competencies in cross-cultural communication
and global issues to act as socially aware global citizens in
international settings. Global Studies addresses issues
such as consumer and popular culture, global histories of
food and technology, the interconnection of race, identity
and transnational migration and intercultural pragmatics.
Students have the opportunity to complete a semester of
study abroad.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the Level 1 unit

101673.2   The First Globalisation

And seven units from the following pools with no less than
three Level 3 units in order to complete the major.

**Note: Not all units will be offered each year. Units will
be offered on a rotational basis.**

Level 1 unit pool

101737.2   World Politics: An Introduction

Level 2 unit pool

101857.2   Doing Business in China

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101543.2	India: Global Contexts
100871.3	International Texts and Contexts
101797.2	Political Terror

Level 3 unit pool

400087.5	Applied Critical Methods
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100994.2	Consumer Culture
100858.3	Culture and Globalisation
101674.2	Global Histories of Food
101735.2	Global Politics
101736.2	Governing the Globe
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101468.2	Islam, Media and Conflict
101733.2	Looking at Global Politics Through Film
101732.2	Media, The Everyday and Uneven Modernities
101666.2	Race, Identity and Globalisation
101717.2	The Italian Renaissance Unpacked
101848.1	Transnationalism and Migration
101831.2	Transport and the Making of the Modern World
101668.2	World Cinema
101669.2	World Literature in Translation
101830.2	WWII in Asia and the Pacific

Major - Asian Studies and International Relations

M1032.1

This major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study modern and contemporary Asia, the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The major area includes a range of units concerned with the United States, Europe and Australia as well as with Asia itself, and units in international relations. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Students are encouraged to undertake a submajor in an Asian language in conjunction with the major. Employment opportunities may be found in the State and Commonwealth public service, overseas organisations, trade and tourist organisations, business and industry, education and research.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

| 101442.2 | Asia in the World |

and seven units from the following pools with no less than three Level 3 units in order to pass the major:

Level 1 Unit Pool

| 101737.2 | World Politics: An Introduction |

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100245.2	Asian Cinema
100847.2	Asia and the West: The Imperial Encounter
100850.2	Buddhism in the Contemporary World
100855.2	Contemporary Japan: Culture and Society
101857.2	Doing Business in China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101543.2	India: Global Contexts
100872.2	International Politics of North Asia
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
63111.3	Special Topics in Asian and International Studies
101404.3	The History of Modern Indonesia
101871.1	War

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
400087.5	Applied Critical Methods
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100962.2	International Politics of the Southeast Asian Region
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

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Major - History and Political Thought

M1033.1

Since the revival of humanist studies in Renaissance Europe in the 15th century, universities have placed history and political thought at the heart of studies in the humanities. Through study of the political thought and social, political and cultural history of Australian, Asian and European societies, students gain knowledge and critical skills relevant to a variety of careers in education, government and non-governmental organizations. Study of the writings of political thinkers from ancient Greece and Rome, such as Plato and Cicero, and the early modern period, such as Hobbes and Machiavelli, to noted 19th century figures, such as Hegel and Marx, prepare students to engage with contemporary issues of governance, such as sovereignty, power, opportunity, property, civic freedom and social justice.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students would be eligible for this major having successfully completed 80 credit points with no less than three Level 3 units.

Students must complete the compulsory Level 1 unit

100873.3	Inventing Modernity

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100848.2	Australian Politics
100868.2	Foundations of Modern Australia
101737.2	World Politics: An Introduction

Level 2 unit pool

101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100869.2	Foundations of Modern Europe 1500-1800
101543.2	India: Global Contexts
100001.3	Keeping the Past
101843.2	Philosophy and Environment
101797.2	Political Terror
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
100882.3	Politics of Sex and Gender
63111.3	Special Topics in Asian and International Studies
101867.1	The Ethical Life
101404.3	The History of Modern Indonesia

101294.3	The Western Philosophical Tradition
101871.1	War
100293.3	War and Society: 20th Century Australia

Level 3 unit pool

400087.5	Applied Critical Methods
100966.3	American History, 1898-1945
100986.2	Australian History 1860-1920
100987.3	Australian History Since 1920
101685.3	Australian Indigenous History
101872.1	Australian Indigenous History from Federation to Reconciliation
100991.2	Citizenship Ancient and Modern
100852.2	Classics of Modern Philosophy
101799.2	Convicts and Settlers - Australian History 1788 - 1840
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100863.3	Ethical Cultures
100254.3	Exploring Local History
100864.2	Europe in the Twentieth Century
101844.2	Feminist Theories
101674.2	Global Histories of Food
101735.2	Global Politics
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100963.3	Interpreting Australia: Australian Historians and Historiography
101801.2	Interpreting Fascism
101823.2	Lay Participation in Justice Processes
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
101665.3	Politics and Religion
100278.2	Politics of Post-War Japan
100908.2	Race Politics
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
100969.2	Theories of Conflict and Violence
101831.2	Transport and the Making of the Modern World
101798.2	Understanding Freedom
101731.3	Understanding Power
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

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Major - Cultural and Social Analysis

M1034.1

Cultural and Social Analysis is an interdisciplinary major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic productions, and education, communication, welfare or health services, in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

100897.2	Everyday Life

and seven units from the following pools with no less than three Level 3 units in order to complete the major.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101409.2	Aboriginal Cultural Texts
100854.3	Contemporary Popular Cultures
100871.3	International Texts and Contexts
101251.2	Introduction to Psychoanalysis
100273.3	New Ethnicities, Old Racisms
100882.3	Politics of Sex and Gender
100281.3	Sexual Culture/s
100884.2	Social Inequalities
100886.2	Special Topics in Cultural and Social Analysis
100889.2	Technocultures
101867.1	The Ethical Life
100291.5	Urban Life/Urban Culture
100298.2	Youth Cultures and Moral Panics
101879.1	Women with Muslim Identity

Level 3 Unit Pool

400087.5	Applied Critical Methods
101265.2	Children's Culture
100990.2	Cinema, Culture, Memory
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100858.3	Culture and Globalisation
100996.3	Death and Culture
100860.3	Emotions, Culture and Community
100998.4	Evolutionary Thinking
101844.2	Feminist Theories
101716.3	Healing and Culture
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101739.3	Literature and Trauma
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
100877.3	Multicultural Studies
101252.2	Psychoanalytic Criticism
101253.3	Public Memory and Commemoration
101003.2	Religion and Culture
101005.4	Representing Crime
101006.2	Social Semiotics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101008.2	Technologies of Racism
101009.3	The Body in Culture
101848.1	Transnationalism and Migration
101798.2	Understanding Freedom
101731.3	Understanding Power
101898.1	Violence in Everyday Life
101010.3	What is the Human?

Major - English, Text and Writing

M1035.1

The English, Text and Writing major invites students to explore contemporary approaches to language, literary study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. English, Text and Writing focuses on the imaginative workings of language, and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points with no less than three Level 3 units.

Students must complete the compulsory Level 1 unit

100862.2	English, Text & Writing

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Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100641.3	Approaches to Text

Level 2 unit pool

101626.4	Children's Literature: Image and Text
100900.3	Comedy and Tragedy
101408.2	Critical Discourse Analysis
101452.2	History of the English Language
100870.2	Hypertext Fictions
100871.3	International Texts and Contexts
100964.2	Introduction to Film Studies
100505.2	Special Topics in English, Text and Writing
101795.2	The Musical
100893.4	The Novel
101455.3	The Structure of English
100896.3	Writing Fiction
101869.1	Studies in Postcolonial Literature
101873.1	The Sound of Language

Level 3 unit pool

400087.5	Applied Critical Methods
100845.3	American Literature
100849.4	Australian Textual Studies
101242.3	Children's Literature
100856.4	Creative Non-Fiction
100859.3	Creative Writing Project
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101724.2	Literary Animals
100875.4	Literature and Philosophy
101739.3	Literature and Trauma
100874.4	Literature, History and Culture
101033.4	Modernism
101001.3	Modernity and Cinema
101406.2	Queering Text
101650.3	Race in Literature
101005.4	Representing Crime
101791.2	Short Fiction in the Americas
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English
101471.2	Women in Arabic and Islamic Literature
101668.2	World Cinema
101669.2	World Literature in Translation
101670.3	Writing and Society
100895.4	Writing For Performance
101011.3	Writing Poetry
100582.2	Writing Portfolio
101796.1	19th Century American Literature
101880.1	The Space of Literature

Major - Islamic Studies

M1036.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches. Students are encouraged to undertake a sub-major in Arabic to complement the Islamic Studies major.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

An Islamic Studies major must include the following Level 1 unit

101462.2	Understanding Islam and Muslim Societies

The remaining seven units must include at least three Level 3 units drawn from the following pools:

Level 2 unit pool

101464.3	Great Texts of Islam: Qur'an and Hadith
100273.3	New Ethnicities, Old Racisms

Level 3 unit pool

101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
101466.2	Ethical Traditions in Islam
100961.4	Humanities Internship
101822.3	Islam in the West
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101468.2	Islam, Media and Conflict
101465.2	Islamic Law in a Changing World
100877.3	Multicultural Studies
101359.5	Sociology of Religion
101792.2	Texts in Contemporary Arab Society and Culture
101783.2	The International Relations of the Middle East Since 1945
101471.2	Women in Arabic and Islamic Literature

Major - Linguistics

M1037.1

Through study of what language is and how it works, students gain conceptual tools and knowledge relevant to the relationship of language and society as well linguistics-related disciplines, such as Sociolinguistics, Psycholinguistics, Developmental Linguistics, Bilingualism, and other applied linguistics areas. Understanding of the relationship between language learning, communicative competence and cultural practices, both in the Australian context and in a global context, provides a foundation for

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many careers including primary and secondary teaching, policy analysis, communication, social and welfare services in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete eight units from the following pools, with no less than three units at Level 3.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100194.2	Introduction to Interpreting
100195.2	Introduction to Translation

Level 2 unit pool

101452.2	History of the English Language
100928.3	Linguistics
101873.1	The Sound of Language
101302.2	Translation Technologies

Level 3 unit pool

400087.5	Applied Critical Methods
101449.2	Bilingualism and Biculturalism
101441.2	English Semantics and Pragmatics
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101710.2	Languages and Grammatical Concepts 3A: Chinese
101711.2	Languages and Grammatical Concepts 3A: Italian
101712.2	Languages and Grammatical Concepts 3A: Japanese
101713.2	Languages and Grammatical Concepts 3A: Spanish
101451.2	Second Language Acquisition
101721.2	Second Language Learning and Teaching
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English

Major - Indigenous Australian Studies

M1041.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian

Studies Major addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

Students must complete the following level one unit

101751.2	Contextualising Indigenous Australia (Day Mode)

Choose seven of the following units including three Level 3 units

Level 1 units

101878.1	Indigenous Landscapes
101762.1	Who do you think you are? (Day Mode)

Level 2 units

101754.2	From Corroborees to Curtain Raisers (Day Mode)
101755.1	From Ochre to Acrylics to New Technologies
101752.1	Pigments of the Imagination
101753.2	Revaluing Indigenous Economics (Day Mode)

Level 3 units - choose three of

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101757.1	The Making of the `Aborigines'
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Major - Psychological Studies

M1050.1

The Psychological Studies major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to to enrol in an accredited Psychology sequence need to complete the Psychology key program of 200 credit points.

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Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
100013.3	Experimental Design and Analysis
101676.2	Human Learning
101680.3	Perception
101184.2	Psychology: Human Behaviour
101183.2	Psychology: Behavioural Science

Sub-major - Religion, Anthropology and Philosophy

SM1032.1

This multidisciplinary sub-major pursues critical and rational analysis of questions about individuals and societies; about human knowledge, culture and existence. It inquires into issues about human nature; the scope and limits of knowledge and belief; God and ethics; conflict and violence; ritual and myth; and religion, politics and culture. The sub-major provides students with rigorous training in analytic and creative thinking, intellectual independence and cultural and ethical awareness.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pool with no more than one unit at Level 1

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

101462.2	Understanding Islam and Muslim Societies

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100850.2	Buddhism in the Contemporary World
100852.2	Classics of Modern Philosophy
101856.1	Film and Philosophy
101464.3	Great Texts of Islam: Qur'an and Hadith
101843.2	Philosophy and Environment
101881.1	Philosophy and the Good Life
101867.1	The Ethical Life
101294.3	The Western Philosophical Tradition

Level 3 Unit Pool

101295.2	Aesthetics
101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
100863.3	Ethical Cultures
100998.4	Evolutionary Thinking
100961.4	Humanities Internship
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101465.2	Islamic Law in a Changing World
101724.2	Literary Animals
100875.4	Literature and Philosophy
100275.4	Philosophies of Love and Death
101761.2	Philosophy and the Visual
100879.2	Philosophy Today
101665.3	Politics and Religion
101003.2	Religion and Culture
101359.5	Sociology of Religion
100969.2	Theories of Conflict and Violence
101880.1	The Space of Literature
101798.2	Understanding Freedom
101010.3	What is the Human?
101471.2	Women in Arabic and Islamic Literature

Sub-major - Media and Visual Cultures

SM1033.1

The rapid flow of visual images with which we communicate today – on the internet, by web and moblogs – is a contemporary manifestation of the importance of visual cultures in everyday life. The Media and Visual Cultures sub-major area equips students with multidisciplinary knowledge and skills in critical art history and theory, digital media, film and television studies, philosophy, and cultural studies. It aims to create career ready graduates with the skills necessary to interpret the production and dissemination of visual images and their meanings in a variety of media as well as cultural and institutional contexts.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100245.2	Asian Cinema
101248.3	Australian Art 1
101626.4	Children's Literature: Image and Text
101250.3	Digital Futures
101856.1	Film and Philosophy
10157.2	History and Theory of the Avant-Garde

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100964.2	Introduction to Film Studies
101254.3	The Animated Image: Histories and Theories
10371.3	The Art Museum - from the Prince to the Public
100890.2	The Art of Landscape
101795.2	The Musical
10158.2	Writings on Art

Level 3 Unit Pool

400087.5	Applied Critical Methods
100959.2	Australian Art II
100989.2	Cinema and Realism
100990.2	Cinema, Culture, Memory
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
101001.3	Modernity and Cinema
101761.2	Philosophy and the Visual
101253.3	Public Memory and Commemoration
101006.2	Social Semiotics
101738.2	The Art Game: Fraud, Forgery, Theft and Perfidy
101266.2	The Art of Modern Life
101717.2	The Italian Renaissance Unpacked
101668.2	World Cinema

Sub-major - Chinese

SM1035.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

A sub-major in Chinese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100056.2	Chinese 101
100057.2	Chinese 102

Level 2 unit pool

101700.2	Language and Communication Skills 2A: Chinese
101705.2	Language and Communication Skills 2B: Chinese

Level 3 unit pool

100063.2	Chinese 302
100064.2	Chinese 303: Twentieth-Century Chinese Literature
100065.2	Chinese 304: Chinese Classical Literature
100066.2	Chinese 305: Chinese Cinema
100067.2	Chinese 307: The Cultural Context of China Intercultural Pragmatics
101454.2	Languages and Grammatical Concepts 3A: Chinese
101710.2	
101668.2	World Cinema

Sub-major - Italian

SM1036.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A sub-major in Italian is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100130.2	Italian 101
100131.2	Italian 102

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Level 2 unit pool

101701.2	Language and Communication Skills 2A: Italian
101706.2	Language and Communication Skills 2B: Italian

Level 3 unit pool

101454.2	Intercultural Pragmatics
100138.2	Italian 303: Contemporary Italy in European and International Contexts
100140.1	Italian 305: Modern Literature
100141.2	Italian 306: Classical Literature
100143.2	Italian 308: Italian Cinema
101711.2	Languages and Grammatical Concepts 3A: Italian
101668.2	World Cinema
101669.2	World Literature in Translation

Sub-major - Japanese

SM1037.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

A sub-major in Japanese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100085.2	Japanese 101
100086.2	Japanese 102

Level 2 unit pool

101702.2	Language and Communication Skills 2A: Japanese

101707.2	Language and Communication Skills 2B: Japanese

Level 3 unit pool

101454.2	Intercultural Pragmatics
100093.2	Japanese 303: Contemporary Culture and Society
100094.1	Japanese 304: Discourse in Japanese
100096.2	Japanese 306: Japanese for Business
100098.1	Japanese 308: Japanese Textual Studies
101712.2	Languages and Grammatical Concepts 3A: Japanese
101668.2	World Cinema
101669.2	World Literature in Translation

Sub-major - Spanish

SM1038.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A sub-major in Spanish is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100145.2	Spanish 101
100146.2	Spanish 102

Level 2 unit pool

101703.2	Language and Communication Skills 2A: Spanish
101708.2	Language and Communication Skills 2B: Spanish

Level 3 unit pool

400087.5	Applied Critical Methods
100961.4	Humanities Internship

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101454.2	Intercultural Pragmatics
101713.2	Languages and Grammatical Concepts 3A: Spanish
101791.2	Short Fiction in the Americas
100153.2	Spanish 303: Advanced Writing Skills
100154.2	Spanish 304: Advanced Speaking Skills
100155.2	Spanish 305: Contemporary Literature
100156.2	Spanish 306: Contemporary History
100157.2	Spanish 307: Classical Literature
100158.2	Spanish 308: Spanish Sociolinguistics
101668.2	World Cinema
101669.2	World Literature in Translation

101468.2	Islam, Media and Conflict
101733.2	Looking at Global Politics Through Film
101732.2	Media, The Everyday and Uneven Modernities
101666.2	Race, Identity and Globalisation
101717.2	The Italian Renaissance Unpacked
101848.1	Transnationalism and Migration
101831.2	Transport and the Making of the Modern World
101668.2	World Cinema
101669.2	World Literature in Translation
101830.2	WWII in Asia and the Pacific

Sub-major - Global Studies

SM1040.1

What does it mean to live in an increasingly globalised world? Global Studies offers students the opportunity to acquire key competencies in cross-cultural communication and global issues to act as socially aware global citizens in international settings. Global Studies addresses issues such as consumer and popular culture, global histories of food and technology, the interconnection of race, identity and transnational migration and intercultural pragmatics. Students have the opportunity to complete a semester of study abroad.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at Level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

101737.2	World Politics: An Introduction

Level 2 unit pool

101857.2	Doing Business in China
101543.2	India: Global Contexts
100871.3	International Texts and Contexts
101797.2	Political Terror

Level 3 unit pool

400087.5	Applied Critical Methods
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100994.2	Consumer Culture
100858.3	Culture and Globalisation
101674.2	Global Histories of Food
101735.2	Global Politics
101736.2	Governing the Globe
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics

Sub-major - History and Political Thought

SM1041.1

Since the revival of humanist studies in Renaissance Europe in the 15th century, universities have placed history and political thought at the heart of studies in the humanities. Through study of the political thought and social, political and cultural history of Australian, Asian and European societies, students gain knowledge and critical skills relevant to a variety of careers in education, government and non-governmental organizations. Study of the writings of political thinkers from ancient Greece and Rome, such as Plato and Cicero, and the early modern period, such as Hobbes and Machiavelli, to noted 19th century figures, such as Hegel and Marx, prepare students to engage with contemporary issues of governance, such as sovereignty, power, opportunity, property, civic freedom and social justice.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100848.2	Australian Politics
100868.2	Foundations of Modern Australia
100873.3	Inventing Modernity
101737.2	World Politics: An Introduction

Level 2 unit pool

101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100869.2	Foundations of Modern Europe 1500-1800
101543.2	India: Global Contexts
100001.3	Keeping the Past

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101843.2	Philosophy and Environment
101797.2	Political Terror
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
100882.3	Politics of Sex and Gender
63111.3	Special Topics in Asian and International Studies
101867.1	The Ethical Life
101404.3	The History of Modern Indonesia
101294.3	The Western Philosophical Tradition
101871.1	War
100293.3	War and Society: 20th Century Australia

Level 3 unit pool

400087.5	Applied Critical Methods
100966.3	American History, 1898-1945
100986.2	Australian History 1860-1920
100987.3	Australian History Since 1920
101685.3	Australian Indigenous History
101872.1	Australian Indigenous History from Federation to Reconciliation
100991.2	Citizenship Ancient and Modern
100852.2	Classics of Modern Philosophy
101799.2	Convicts and Settlers - Australian History 1788 - 1840
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100863.3	Ethical Cultures
100864.2	Europe in the Twentieth Century
100254.3	Exploring Local History
101844.2	Feminist Theories
101674.2	Global Histories of Food
101735.2	Global Politics
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100963.3	Interpreting Australia: Australian Historians and Historiography
101801.2	Interpreting Fascism
101823.2	Lay Participation in Justice Processes
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
101665.3	Politics and Religion
100278.2	Politics of Post-War Japan
100908.2	Race Politics
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
100969.2	Theories of Conflict and Violence
101831.2	Transport and the Making of the Modern World
101798.2	Understanding Freedom
101731.3	Understanding Power
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Sub-major - Asian Studies and International Relations

SM1042.1

This sub-major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study modern and contemporary Asia, the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The sub-major area includes a range of units concerned with the United States, Europe and Australia as well as with Asia itself, and units in international relations. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Students are encouraged to undertake a sub-major in an Asian language in conjunction with the major. Employment opportunities may be found in the State and Commonwealth public service, overseas organisations, trade and tourist organisations, business and industry, education and research

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

101737.2	World Politics: An Introduction

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100847.2	Asia and the West: The Imperial Encounter
100245.2	Asian Cinema
100850.2	Buddhism in the Contemporary World
100855.2	Contemporary Japan: Culture and Society
101857.2	Doing Business in China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101543.2	India: Global Contexts
100872.2	International Politics of North Asia
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
63111.3	Special Topics in Asian and International Studies
101404.3	The History of Modern Indonesia
101871.1	War

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Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
400087.5	Applied Critical Methods
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100962.2	International Politics of the Southeast Asian Region
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Sub-major - Cultural and Social Analysis

SM1043.1

Cultural and Social Analysis is an interdisciplinary sub-major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This sub-major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic productions, and education, communication, welfare or health services, in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the Level 2/3 units from the following pools

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101409.2	Aboriginal Cultural Texts
100854.3	Contemporary Popular Cultures
100871.3	International Texts and Contexts
101251.2	Introduction to Psychoanalysis
100273.3	New Ethnicities, Old Racisms
100882.3	Politics of Sex and Gender
100281.3	Sexual Culture/s
100884.2	Social Inequalities
100886.2	Special Topics in Cultural and Social Analysis
100889.2	Technocultures
101867.1	The Ethical Life
100291.5	Urban Life/Urban Culture
101879.1	Women with Muslim Identity
100298.2	Youth Cultures and Moral Panics

Level 3 Unit Pool

400087.5	Applied Critical Methods
101265.2	Children's Culture
100990.2	Cinema, Culture, Memory
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100858.3	Culture and Globalisation
100996.3	Death and Culture
100860.3	Emotions, Culture and Community
100998.4	Evolutionary Thinking
101844.2	Feminist Theories
101716.3	Healing and Culture
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101739.3	Literature and Trauma
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
100877.3	Multicultural Studies
101252.2	Psychoanalytic Criticism
101253.3	Public Memory and Commemoration
101003.2	Religion and Culture
101005.4	Representing Crime
101006.2	Social Semiotics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101008.2	Technologies of Racism
101009.3	The Body in Culture
101848.1	Transnationalism and Migration
101798.2	Understanding Freedom
101731.3	Understanding Power
101010.3	What is the Human?

Sub-major - English, Text and Writing

SM1044.1

The English, Text and Writing sub-major invites students to explore contemporary approaches to language, literary

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study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. English, Text and Writing focuses on the imaginative workings of language, and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at Level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100641.3	Approaches to Text

Level 2 unit pool

101626.4	Children's Literature: Image and Text
100900.3	Comedy and Tragedy
101408.2	Critical Discourse Analysis
101452.2	History of the English Language
100870.2	Hypertext Fictions
100871.3	International Texts and Contexts
100964.2	Introduction to Film Studies
100505.2	Special Topics in English, Text and Writing
101869.1	Studies in Postcolonial Literature
101795.2	The Musical
100893.4	The Novel
101873.1	The Sound of Language
101455.3	The Structure of English
100896.3	Writing Fiction

Level 3 unit pool

400087.5	Applied Critical Methods
100845.3	American Literature
100849.4	Australian Textual Studies
101242.3	Children's Literature
100856.4	Creative Non-Fiction
100859.3	Creative Writing Project
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101724.2	Literary Animals
100875.4	Literature and Philosophy
101739.3	Literature and Trauma
100874.4	Literature, History and Culture
101033.4	Modernism
101001.3	Modernity and Cinema
101406.2	Queering Text
101650.3	Race in Literature
101005.4	Representing Crime

101791.2	Short Fiction in the Americas
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English
101471.2	Women in Arabic and Islamic Literature
101668.2	World Cinema
101669.2	World Literature in Translation
101670.3	Writing and Society
100895.4	Writing For Performance
101011.3	Writing Poetry
100582.2	Writing Portfolio
101796.1	19th Century American Literature
101880.1	The Space of Literature

Sub-major - Islamic Studies

SM1045.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at level 1

Level 2 unit pool

101464.3	Great Texts of Islam: Qur'an and Hadith
100273.3	New Ethnicities, Old Racisms

Level 3 unit pool

101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
101466.2	Ethical Traditions in Islam
100961.4	Humanities Internship
101822.3	Islam in the West
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101468.2	Islam, Media and Conflict
101465.2	Islamic Law in a Changing World
100877.3	Multicultural Studies
101359.5	Sociology of Religion
101792.2	Texts in Contemporary Arab Society and Culture
101783.2	The International Relations of the Middle East Since 1945
101471.2	Women in Arabic and Islamic Literature

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Sub-major - Linguistics

SM1046.1

Through study of what language is and how it works, students gain conceptual tools and knowledge relevant to the relationship of language and society as well linguistics-related disciplines, such as Sociolinguistics, Psycholinguistics, Developmental Linguistics, Bilingualism, and other applied linguistics areas. Understanding of the relationship between language learning, communicative competence and cultural practices, both in the Australian context and in a global context, provides a foundation for many careers including primary and secondary teaching, policy analysis, communication, social and welfare services in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	External

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100194.2	Introduction to Interpreting
100195.2	Introduction to Translation

Level 2 unit pool

101452.2	History of the English Language
100928.3	Linguistics
101873.1	The Sound of Language
101302.2	Translation Technologies

Level 3 unit pool

400087.5	Applied Critical Methods
101449.2	Bilingualism and Biculturalism
101441.2	English Semantics and Pragmatics
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101710.2	Languages and Grammatical Concepts 3A: Chinese
101711.2	Languages and Grammatical Concepts 3A: Italian
101712.2	Languages and Grammatical Concepts 3A: Japanese
101713.2	Languages and Grammatical Concepts 3A: Spanish
101451.2	Second Language Acquisition
101721.2	Second Language Learning and Teaching
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English

Sub-major - Indigenous Australian Studies

SM1049.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101751.2	Contextualising Indigenous Australia (Day Mode)
101752.1	Pigments of the Imagination

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)
101757.1	The Making of the `Aborigines'

Sub-major - Indigenous Economics

SM1050.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

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Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101751.2	Contextualising Indigenous Australia (Day Mode)
101753.2	Revaluing Indigenous Economics (Day Mode)
101757.1	The Making of the `Aborigines'

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Sub-major - Indigenous Australian Creative Expressions

SM1051.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101751.2	Contextualising Indigenous Australia (Day Mode)
101754.2	From Corroborees to Curtain Raisers (Day Mode)
101755.1	From Ochre to Acrylics to New Technologies

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Sub-major - Psychological Studies

SM1069.1

The Psychological Studies sub-major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies sub-major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to to enrol in an accredited Psychology sequence need to complete the Psychology key program of 200 credit points.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

This sub-major is restricted to students enrolled in 1604 - Bachelor of Arts, 1706 - Bachelor of Arts, 1652 - Bachelor of Arts (Pathway to Teaching Secondary) or 1655 - Bachelor of Arts (Dean''s Scholars).

Students must complete 40 credit points as follows

100013.3	Experimental Design and Analysis
101183.2	Psychology: Behavioural Science
101184.2	Psychology: Human Behaviour

Choose one of

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
101676.2	Human Learning
101680.3	Perception

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SCHOOL OF NURSING AND MIDWIFERY

Bachelor of Midwifery

4684.1

This version of the course is available to new and continuing students. Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in the course was 2013 or later.

This course prepares graduates for eligibility to apply for registration throughout Australia as beginning professional registered midwife. This course will develop midwives for the future who can integrate local and international knowledge for the benefit of pregnant and birthing women in Greater Western Sydney, and beyond. Graduates will work in partnership with women (and their families) in order to provide effective 'woman centred' care. Graduates from UWS will practice according to the International Definition of the Midwife and the Australian Nursing and Midwifery Council National Competency Standards for the Midwife. Students will apply critical, reflective and intellectual skills to the provision of evidence based midwifery care. The acquisition of midwifery knowledge and skills occurs initially in campus-based simulated clinical practice settings and consolidation occurs as students undertake clinical placements in a variety of health care settings. Prospective students should be aware that full disclosure of any issues of impairment or misconduct is a declaration requirement when applying for registration as a registered midwife.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Advanced Standing
Applications for advanced standing are assessed on a case by case basis except where there is an agreed pattern of advanced standing for a particular qualification or pathways.

Accreditation
The Bachelor of Midwifery has accreditation and approval from the Nurses and Midwives Board NSW. From 1 July 2010 the approval, recognition and accreditation of courses has been transferred to the Australian Nursing and Midwifery Council (ANMAC). Course accreditation can be checked on their website. Http://www.anmac.org.au/accreditation-services. Please note: from 1 July 2010 practitioners applying for registration as a nurse or midwife for the first time in Australia are required to demonstrate English language proficiency as specified by the Nursing and Midwifery Board of Australia (NMBA). These requirements include: a) the IELTS examination (academic module) with a minimum score of 7 in each of the four components (listening, reading, writing and speaking); or b) completion and an overall pass in the Occupational English Test (OET) with grades A or B only in each of the four

components. For further details, refer to the NMBA website. Http://www.nursingmidwiferyboard.gov.au/Registration-Standards.aspx

Inherent requirements
There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission
Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

International applicants must apply directly to the University of Western Sydney via UWS International.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements
Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: a Working with Children Check student declaration; a Student Undertaking Form and have applied for a National Police Certificate; Adult Health Immunisation Schedule and Workcover accredited Senior First Aid Certificate. International Students must also provide an Overseas Police Check (With English Translation)

Course Structure
Qualification for this award requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time

Year 1

Autumn session

401001.1	Primary Health Care in Action
401002.1	Bioscience 1
401030.1	Midwifery Knowledge 1
401045.1	Introduction to Midwifery Practice Experience

2H session

401033.1	Midwifery Practice Experience 1

Spring session

401005.1	Human Relations and Life Transitions
401031.1	Bioscience for Midwifery
401032.1	Midwifery Knowledge 2

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Year 2

1H session

401035.1   Midwifery Practice Experience 2

Autumn session

401009.1   Health in a Culturally Diverse Community
401011.1   Research Principles for Nursing and
              Midwifery
401034.1   Midwifery Knowledge 3

2H session

401038.1   Midwifery Practice Experience 3

Spring session

401013.1   Promoting Mental Health and Wellbeing 1
401036.1   Complex Care 1
401037.1   Legal and Ethical Issues in Midwifery

Year 3

1H session

401042.1   Midwifery Practice Experience 4

Autumn session

401039.1   Complex Care 2
401040.1   Collaborative Care
401041.1   Midwifery Practice - Teaching and Learning

2H session

401043.1   Midwifery Practice - Models of Care
401044.1   Midwifery Practice Experience 5

Spring session

401021.1   Being a Professional Nurse or Midwife
401022.1   Leadership in Nursing and Midwifery

Midwifery Practice Experience

To enable students to experience midwifery practice across the calendar year as required by ANMAC, all Midwifery Practice Experience units (MPE's) are offered as 'H' units. The major types of experiences are in blocks of learning and in a woman-centred continuity of care model. Practice experiences for the Bachelor of Midwifery are documented within the practice units.

Practice Block

A number of practice experiences, in a variety of practice placements, are scheduled throughout the three year course. There are fewer hours of clinical practice in first year (approximately 25%) compared to second year (50%), with the most clinical practice allocated to the third year (75%) to enable students to consolidate their practice in readiness to meet the ANMC Competencies for practice as a midwife.

This practice occurs in blocks of time (from 1 day a week to 5 days per week) and includes working in hospital areas

such as antenatal clinics; antenatal wards; birthing units; postnatal wards; newborn nursery; postnatal home visiting; operating theatres for caesarean sections; ultrasound clinics; fetal and maternal assessment units and gynaecology wards. The practice also includes working in such areas as community centres with child and family nurses; midwives in group practice; rural hospitals; and ambulance services.

Continuity of Care

Continuity of care/carer enables women to develop a relationship with the same caregiver(s) throughout pregnancy, birth and the postnatal period. Continuity of care/carer facilitates relationships and consistent information, which is essential to the provision of care that is safe, sensitive and appropriate. Students undertaking this course will be introduced to the theoretical concepts and evidence the bases for continuity of care/carer model within the Midwifery Knowledge units, while continuity of care / carer experience will be gained within the Midwifery Practice Experience units. Throughout the course, students will refine and develop their understanding of continuity of care/carer, underpinned by a woman-centred care philosophy, where women are involved in their own care, making informed choices and having control over both their care and their relationships with their caregivers. In this relationship-based care model, women generally feel that their choices are respected and supported (Johnson & Stewart, 2003). Students will follow 20 women over the course of the BMid within this model of care.

Students will begin their first midwifery practice placement within eight weeks of commencing the course in the Autumn semester or as soon as they have met all the pre-requisites. Students will attend well women's antenatal clinics on a weekly basis and begin by observing the practice of midwifery care. They will practice their midwifery skills on campus and as they gain confidence they will begin to have more 'hands on' approach under the supervision of a midwife. During the antenatal clinic placements it is expected that students will meet and work in partnership with five women in the continuity of care model in first and second years, while in third year they will follow 10 women, providing most of the 'hands on care' under the supervisor of a midwife. Students will follow the women throughout their pregnancy, labour and birth and during the postnatal period for up six weeks as determined by the woman, and the supervising midwife. This may include visits to the woman's home.

The practice blocks, together with the 20 continuity of care experiences across the calendar year, provide the BMid curriculum with approximately fifty percent clinical practice and fifty percent theory, which is a requirement of ANMC.

Bachelor of Nursing

4691.1

This version of the course is available to new and continuing students. Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in the course was 2013 or later.

This course prepares graduates for eligibility to apply for registration throughout Australia as beginning professional

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generalist registered nurses. The focus of the course is on inquiry-based learning, critical thinking and reflective practice in relation to the theory and practice of nursing in health and health breakdown across the lifespan. Using a primary health care framework students study application of physical and behavioural sciences to nursing; inquiry and evidence-based practice principles and utilisation within nursing; nursing care of individuals, families and groups from diverse backgrounds across the lifespan. The acquisition of nursing knowledge and skills occurs initially in campus-based simulated clinical practice settings and consolidation occurs as students undertake clinical placements in a variety of health care settings. Prospective students should be aware that full disclosure of any issues of impairment or misconduct is a declaration requirement when applying for registration as a registered nurse. An English language skills registration standard is also applicable to all students applying for registration: (http://www.nursingmidwiferyboard.gov.au)

Study Mode

Three years full-time - A reduced load may be possible in consultation with Academic Course Advisor. Details of units that could comprise a reduced study load can be located on the School of Nursing and Midwifery Homepage - http://www.uws.edu.au/nursingandmidwifery

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Advanced Standing

Advanced standing is granted on a case by case basis. Prospective students will need to provide formal evidence of qualifications and supporting documentation to enable assessment. Decisions will be based on evidence of currency of the qualification and also evidence of equivalence in learning outcomes/ major content having been satisfactorily completed. Advanced standing for professional practice experience units may require the satisfactory completion of a skill challenge workshop prior to commencement of studies.
http://www.uws.edu.au/nursingandmidwifery

- Certificate 111 or IV Health Related Qualifications: 10 cps unspecified (elective)
- Enrolled Nurse/Division 2 Nurse – Certificate IV or Advanced Certificate
- Enrolled Nurse/Division 2 Nurse – Diploma
- Overseas Registered Nurse – Certificate
- Overseas Registered Nurse – Diploma (not post secondary school)
- Overseas Registered Nurse – Diploma (3years post secondary school)
- Overseas Registered Nurse – Degree

Accreditation

The Bachelor of Nursing – Graduate Entry has accreditation and approval from the Nurses and Midwives Board NSW. From 1 July 2010 the approval, recognition and accreditation of courses has been transferred to the Australian Nursing and Midwifery Council (ANMAC). Course accreditation can be checked on their website. http://www.anmac.org.au/accreditation-services. Please note: from 1 July 2010 practitioners applying for registration as a nurse or midwife for the first time in Australia are required to demonstrate English language proficiency as specified by the Nursing and Midwifery Board of Australia (NMBA). These requirements include: a) the IELTS examination (academic module) with a minimum score of 7 in each of the four components (listening, reading, writing and speaking); or b) completion and an overall pass in the Occupational English Test (OET) with grades A or B only in each of the four components. For further details, refer to the NMBA website. http://www.nursingmidwiferyboard.gov.au/Registration-Standards.aspx

Admission

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements

Students will need to have completed all of the special requirements before commencement of any Professional Practice Experience unit. Units with special requirements will remain invalid until these requirements are met. At present the special requirements include: a Working with Children Check student declaration; a Student Undertaking Form, a National Police Certificate; Adult Health Immunisation Schedule and First Aid Certificate. International Students must also provide an Overseas Police Check (With English Translation). Students who have not completed the special requirements prerequisites will not be able to enrol in Professional Practice Experience units and as a consequence are not permitted to attend professional practice placements.

Course Structure

Qualification for this award requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time

Year 1

Autumn session

401000.1   Professional Practice Experience 1

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401001.1	Primary Health Care in Action
401002.1	Bioscience 1
401003.1	Professional Communication

Spring session

401004.1	Professional Practice Experience 2
401005.1	Human Relations and Life Transitions
401006.1	Bioscience 2
401007.1	Approaches to Professional Nursing Practice

Year 2

Autumn session

401008.1	Professional Practice Experience 3
401009.1	Health in a Culturally Diverse Community
401010.1	Health Variations 1
401011.1	Research Principles for Nursing and Midwifery

Spring session

401012.1	Professional Practice Experience 4
401013.1	Promoting Mental Health and Wellbeing 1
401014.1	Health Variations 2
401015.1	Health Variations 3

Year 3

Autumn session

401016.1	Professional Practice Experience 5
401017.1	Promoting Mental Health and Wellbeing 2
401018.1	Health Variations 4
401019.1	Health Variations 5

Spring session

401020.1	Professional Practice Experience 6
401021.1	Being a Professional Nurse or Midwife
401022.1	Leadership in Nursing and Midwifery

And one elective

Additional Core Unit for Students with an Exceptional Study Pattern

To ensure currency of skill base, it is an accreditation requirement that students satisfactorily complete a minimum 4 week clinical practicum in the final session of their pre-registration Nursing program. Students within the Bachelor of Nursing who vary their study sequence significantly from the normal progression may be required to study the additional unit listed and should discuss this with the Academic Course Advisor.

| 400768.3 | Maintaining Clinical Currency |

Elective Units

The elective unit in the Bachelor of Nursing may be chosen from across UWS, provided that unit pre-requisites are met, space is available and students are able to meet all scheduled activities without compromising any nursing unit requirements.

The following are elective units in the Nursing discipline area which are not listed elsewhere in the Handbook.

400621.2	Bugs and Drugs
400961.1	Drugs on Line
400958.1	A Field Study: Comparative Studies of Health Care Delivery

Professional Practice Experience

The Professional Practice Experience is the foundation for student learning in the course. It consists of three major learning contexts for students: professional practice, service learning, and simulation. Professional practice in the health care sector may take place in any level of the health service appropriate to the focus for the specific Professional Practice Experience unit, for example aged care facilities, hospitals, GP practices, community health teams. This environment is essential for providing students complexity of the nursing experience, the ability to apply learning in situations involving ill persons, and socialises students into the work domain.

Simulation is a teaching and learning strategy where aspects of the professional practice environment, such as a hospital ward or patient, are artificially created to enable students to learn in a safe, non-threatening environment. Clinical practice units, simulated professional practice environments, will be used that allow students to undertake learning activities, such as administering medications and oxygen therapy. The School has a wide range of simulation equipment and dedicated high fidelity simulation rooms on each campus.

Service learning contexts are facilities offered within the local community related to health and well-being, for example a fitness centre, local pharmacist, child care centre, or homeless shelter. Students will develop learning objectives in collaboration with teaching staff and apply knowledge and skills learnt to these environments. This context allows the student to explore other health related support services outside the acute care sector.

The percentage of time spent by students in each context will vary, depending on the stage of the student in the course, the theoretical knowledge acquisition, and ANMC competency development. For example at the beginning of the course more hours will be spent in the simulation and service learning context than in the health care sector. As the course progresses there is a scaling up of hours spent in the health care sector with fewer hours being spent in the service learning and simulation contexts. In the final session of third year a significant proportion of knowledge and skills consolidation will occur primarily in a clinical practice environment.

Bachelor of Nursing - Graduate Entry

4643.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2011 or later.

This course prepares graduates for eligibility to apply for registration throughout Australia as beginning professional registered nurses. The focus of the course is on inquiry-based learning, critical thinking and reflective practice in relation to the theory and practice of nursing in health and health breakdown across the lifespan. Students study

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application of physical and behavioural sciences to nursing; inquiry and evidence-based practice principles; and utilisation within nursing; and the nursing care of individuals, families and groups from diverse backgrounds across the lifespan. The acquisition of nursing knowledge and skills will occur in campus-based simulated clinical practice settings and consolidation occurs as students undertake clinical placements in a variety of health care settings. Prospective students should be aware that full disclosure of any issues of impairment or misconduct is a requirement when applying for registration as a registered nurse.

Study Mode
Two years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Accreditation
The Bachelor of Nursing - Graduate Entry is accredited with the Nurses and Midwives Board of NSW (NMB). From 1st July 2010 the approval, recognition and accreditation of courses has been transferred to the Australian Nursing and Midwifery Council (ANMC). Course accreditation can be checked on their website. Http://www. nursingmidwiferyboard.gov.au/Accreditation.aspx . Please note: from 1 July 2010 practitioners applying for registration as a nurse or midwife for the first time in Australia are required to demonstrate English language proficiency as specified by the Nursing and Midwifery Board of Australia (NMBA). These requirements include: a) the IELTS examination (academic module) with a minimum score of 7 in each of the four components (listening, reading, writing and speaking); or b) completion and an overall pass in the Occupational English Test (OET) with grades A or B only in each of the four components. For further details, refer to the NMBA website. Http://www.nursingmidwiferyboard.gov. au/Registration-Standards.aspx

Admission
Applicants must have successfully completed an undergraduate degree in biological sciences: human biological sciences, anatomy and physiology, chemistry, physics, biology, natural science, microbiology, medicine, dentistry, pharmacy, human science, naturopathy, complementary medicine.

or

An undergraduate degree in arts/behavioural sciences: human behavioural and social sciences, psychology, sociology, human communications, human behaviour

or

An overseas 3 year post secondary qualification as a registered nurse

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying

directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements
To be enrolled in this course students must comply with the current occupational screening and vaccination policy of NSW Health at course commencement. The Bachelor of Nursing (Graduate Entry) program incorporates the teaching of nursing practical techniques/ skills and clinical training through physical contact between supervising clinicians, lecturers, students and patients of both genders and all backgrounds. This contact is guided by protocols and codes of conduct and is a compulsory requirement of the course as currently accredited. Students entering the program must do so with an understanding that accommodations cannot be made in this area for any reason.

Course Structure
Qualification for this award requires the successful completion of 170 credit points including the units listed in the recommended sequence below.

Recommended Sequence

Full-time

Year 1

Quarter 1 session

400776.3	Introduction to Nursing Practice

Autumn session

400753.4	Medical-Surgical Nursing 1
400814.2	Alterations in Nutrition, Elimination and Sexuality
400755.2	Evidence-Based Nursing 1
400756.2	Family Health Care: Health Issues and Australian Indigenous People

Spring session

400757.3	Medical-Surgical Nursing 2
400815.2	Alterations in Breathing, Work/Leisure and Mobility
400759.4	Mental Health Nursing 1
400760.2	Family Health Care: Child and Adolescent Nursing

Year 2

Autumn session

400761.3	Family Health Care: High Acuity Nursing

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| 400762.2 | Mental Health Nursing 2 |
| 400763.2 | Family Health Care: Chronicity and Palliative Care Nursing |

Spring session

400764.3	Transition to Graduate Practice
400765.2	Evidence-Based Nursing 2
400766.3	Leadership in Graduate Practice
400767.3	Family Health Care: Older Adult Nursing

Bachelor of Nursing (Advanced)

4693.1

This version of the course is available to new and continuing students. Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in the course was 2013 or later.

This course prepares graduates for eligibility to apply for registration throughout Australia as beginning professional generalist registered nurses. The focus of the course is on inquiry-based learning, critical thinking and reflective practice in relation to the theory and practice of nursing in health and health breakdown across the lifespan. Students study application of physical and behavioural sciences to nursing; inquiry and evidence-based practice principles and utilisation within nursing; nursing care of individuals, families and groups from diverse backgrounds across the lifespan. The acquisition of nursing knowledge and skills occurs initially in campus-based simulated clinical practice settings and consolidation occurs as students undertake clinical placements in a variety of health care settings. Prospective students should be aware that full disclosure of any issues of impairment or misconduct is a declaration requirement when applying for registration as a registered nurse. Students should also be aware that the regulatory authority (the Nursing and Midwifery Board of Australia) may have additional criteria that the student will need to meet prior to registration to practice being granted.

Students in the Bachelor of Nursing (Advanced) will follow a similar study program set out for the Bachelor of Nursing. However there will be several units of study that engage students in additional learning, assessment and professional practice activities and opportunities. Each student will be allocated an Academic Mentor and are encouraged to participate in scholarly activities that will further enhance their knowledge and skills.

To maintain their enrolment in the Bachelor of Nursing (Advanced) students must maintain a Grade Point Average (GPA) of 5.5 or above, otherwise they will be transferred to the standard 4691 – Bachelor of Nursing course. At enrolment students will be required to sign a declaration acknowledging the requirement to maintain a GPA greater than or equal to 5.5.

Study Mode

Three years full-time. (This program will only be offered in full-time mode and is not available for students wishing to undertake a reduced load).

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Advanced Standing

Advanced standing is granted on a case by case basis. Students in this program will only be able to attract advanced standing for the elective unit (10 cps unspecified). Prospective students will need to provide formal evidence of qualifications and supporting documentation to enable assessment. Credit transfer will be granted to eligible students internally transferring from the Bachelor of Nursing to the Bachelor of Nursing (Advanced) for completed first year nursing units.

Accreditation

The Bachelor of Nursing (Advanced) has accreditation and approval from the Nurses and Midwives Board NSW. From 1 July 2010 the approval, recognition and accreditation of courses has been transferred to the Australian Nursing and Midwifery Council (ANMAC). Course accreditation can be checked on their website. Http://www.anmac.org.au/accreditation-services. Please note: from 1 July 2010 practitioners applying for registration as a nurse or midwife for the first time in Australia are required to demonstrate English language proficiency as specified by the Nursing and Midwifery Board of Australia (NMBA). These requirements include: a) the IELTS examination (academic module) with a minimum score of 7 in each of the four components (listening, reading, writing and speaking); or b) completion and an overall pass in the Occupational English Test (OET) with grades A or B only in each of the four components. For further details, refer to the NMBA website. Http://www.nursingmidwiferyboard.gov.au/Registration-Standards.aspx

Admission

Students who are likely to attract an ATAR of more than 90 may apply for admission via UAC or transfer as a post UWS Year 1 Bachelor of Nursing student with a GPA of greater than 5.5

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills

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Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements

Students will need to have completed all of the special requirements before commencement of any Professional Practice Experience unit. Units with special requirements will remain invalid until these requirements are met. At present the special requirements include: a Working with Children Check student declaration; a Student Undertaking Form, a National Police Certificate; Adult Health Immunisation Schedule and First Aid Certificate. International Students must also provide an Overseas Police Check (With English Translation). Students who have not completed the special requirements prerequisites will not be able to enrol in Professional Practice Experience units and as a consequence are not permitted to attend professional practice placements.

Course Structure

Qualification for this award requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time

Year 1

Autumn session

401000.1	Professional Practice Experience 1
401001.1	Primary Health Care in Action
401002.1	Bioscience 1
401003.1	Professional Communication

Spring session

401004.1	Professional Practice Experience 2
401005.1	Human Relations and Life Transitions
401006.1	Bioscience 2
401007.1	Approaches to Professional Nursing Practice

Year 2

Autumn session

401008.1	Professional Practice Experience 3
401009.1	Health in a Culturally Diverse Community
401010.1	Health Variations 1
401023.1	Research Principles for Nursing (Advanced)

Spring session

401012.1	Professional Practice Experience 4
401013.1	Promoting Mental Health and Wellbeing 1
401024.1	Health Variations 2 (Advanced)
401015.1	Health Variations 3

Year 3

Autumn session

401016.1	Professional Practice Experience 5
401025.1	Promoting Mental Health and Wellbeing 2 (Advanced)
401026.1	Health Variations 4 (Advanced)
401019.1	Health Variations 5

Spring session

401020.1	Professional Practice Experience 6
401027.1	Being a Professional Nurse (Advanced)
401028.1	Leadership in Nursing (Advanced)

And one elective

Additional Core Unit for Students with an Exceptional Study Pattern:

To ensure currency of skill base, it is an accreditation requirement that students satisfactorily complete a minimum 4 week clinical practicum in the final session of their pre-registration Nursing program. Students within the Bachelor of Nursing (Advanced) who vary their study sequence significantly from the normal progression may be required to study the additional unit listed and should discuss this with the Head of Program.

400768.3	Maintaining Clinical Currency

Elective Units:

The elective unit in the Bachelor of Nursing may be chosen from across UWS, provided that unit pre-requisites are met, space is available and students are able to meet all scheduled activities without compromising any nursing unit requirements.

The following are elective units in the Nursing discipline area which are not listed elsewhere in the Handbook. Some of these units are open to students from across UWS provided that prerequisites are met and space is available.

400621.2	Bugs and Drugs
400961.1	Drugs on Line
400958.1	A Field Study: Comparative Studies of Health Care Delivery

Professional Practice Experience

The Professional Practice Experience is the foundation for student learning in the course. It consists of three major learning contexts for students: professional practice, service learning, and simulation. Professional practice in the health care sector may take place in any level of the health service appropriate to the focus for the specific Professional Practice Experience unit, for example aged care facilities, hospitals, GP practices, community health teams. This environment is essential for providing students complexity of the nursing experience, the ability to apply learning in situations involving ill persons, and socialises students into the work domain.

Simulation is a teaching and learning strategy where aspects of the professional practice environment, such as a hospital ward or patient, are artificially created on campus to enable students to learn in a safe, non-threatening environment. Clinical Practice Units, simulated professional practice environments, will be used to allow students to undertake learning activities related to all core nursing skills such as administering medications and monitoring a patient's condition. The School has a wide range of simulation equipment and dedicated high fidelity simulation rooms on each campus.

Service learning contexts are facilities offered within the local community related to health and well-being, for example a fitness centre, local pharmacist, child care centre, or homeless shelter. Students will develop learning

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objectives for Service Learning placements in collaboration with teaching staff so that they can apply knowledge and skills to these environments. This context allows the student to explore health related support services outside the acute care sector.

The percentage of time spent by students in each context will vary depending on the stage of the student in the course, the theoretical knowledge already acquired and the stage of competency development. For example at the beginning of the course more hours will be spent in the simulation and service learning context than in the health care sector. As the course progresses there is a scaling up of hours spent in the health care sector with fewer hours being spent in the service learning and simulation contexts. In the final session of third year a significant proportion of knowledge and skills consolidation will occur primarily in a clinical practice environment.

Bachelor of Nursing (Honours)

4529.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2008 or later.

This program is designed for graduates of the Bachelor of Nursing degree and other similar degrees. Successful completion of the program will provide students with a sound basis for subsequent research within their own work environments as well as enabling them to progress to higher researcher-related programs.

This program provides an opportunity for students, under guidance, to plan and implement a research project in the area of nursing practice. Knowledge and experience gained by students through completing this program will contribute to the knowledge base for nursing practice.

The program of study combines a research project with course work. The course work, undertaken during the first semester of enrolment, comprises two units of study. The remainder of the program is devoted to completion of a research project and the preparation of a thesis.

This program can be undertaken concurrently with any new graduate transitional program offered by various hospitals.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	External
Parramatta Campus	Full Time	Multi Modal
Parramatta Campus	Part Time	Multi Modal

Advanced Standing
Advanced Standing will be assessed in accordance with UWS policy.

Admission
The Bachelor of Nursing (Honours) degree is a second award as nursing students must satisfy the requirements for State registration as a Registered Nurse with a Bachelor's pass before proceeding into an Honours program.

Applicants must have obtained a Grade Point Average (GPA) of 5 (Credit level) or better throughout their Bachelor of Nursing course or a GPA of 5.75 or better in the final year of their Bachelor of Nursing (pass) degree. This criterion ensures that candidates are capable of achieving the high standards required for Bachelor of Nursing (Honours) studies. In addition, applicants must have completed at least 20 credit points of research or equivalent at an undergraduate level.

International applicants should contact UWS International for details on admission. Contact information for the International Office is available via the UWS website.

Special Requirements
To be enrolled in this course students must comply with the Occupational Screening and Vaccination Policy of NSW Health at course commencement.

Course Structure
Qualification for this award requires the successful completion of 80 credit points including the units listed in the recommended sequence below.

Recommended Sequence

Full-time

Year 1

Autumn session

400803.2	Research in Nursing Practice
400202.2	Nursing Honours Thesis A (Full-time)
400201.3	Readings and Methodology

Spring session

400203.2	Nursing Honours Thesis B (Full-time)

Part-time

Year 1

Autumn session

400803.2	Research in Nursing Practice

Spring session

400201.3	Readings and Methodology

2H session

400204.2	Nursing Honours Thesis (Part-time)

Year 2

1H session

400204.2	Nursing Honours Thesis (Part-time)

2H session

400204.2	Nursing Honours Thesis (Part-time)

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Unit Sets

Major - Religion, Anthropology and Philosophy

M1024.1

This multidisciplinary major pursues critical and rational analysis of questions about individuals and societies; about human knowledge, culture and existence. It inquires into issues about human nature; the scope and limits of knowledge and belief; God and ethics; conflict and violence; ritual and myth; and religion, politics and culture. The major provides students with rigorous training in analytic and creative thinking, intellectual independence and cultural and ethical awareness.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

101686.2	Anthropology and Philosophy Look at Religion

and seven units from the following pools with no less than three units at Level 3

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

101462.2	Understanding Islam and Muslim Societies

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100850.2	Buddhism in the Contemporary World
100852.2	Classics of Modern Philosophy
101856.1	Film and Philosophy
101464.3	Great Texts of Islam: Qur'an and Hadith
101843.2	Philosophy and Environment
101881.1	Philosophy and the Good Life
101867.1	The Ethical Life
101294.3	The Western Philosophical Tradition

Level 3 Unit Pool

101295.2	Aesthetics
101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
100863.3	Ethical Cultures
100998.4	Evolutionary Thinking
100961.4	Humanities Internship
101467.2	Islam in Southeast Asia
101463.4	Islam in the Modern World
101465.2	Islamic Law in a Changing World
101724.2	Literary Animals
100875.4	Literature and Philosophy
100275.4	Philosophies of Love and Death
101761.2	Philosophy and the Visual
100879.2	Philosophy Today
101665.3	Politics and Religion
101003.2	Religion and Culture
101359.5	Sociology of Religion
100969.2	Theories of Conflict and Violence
101880.1	The Space of Literature
101798.2	Understanding Freedom
101010.3	What is the Human?
101471.2	Women in Arabic and Islamic Literature

Major - Media and Visual Cultures

M1025.1

The rapid flow of visual images with which we communicate today – on the internet, by web and moblogs – is a contemporary manifestation of the importance of visual cultures in everyday life. The Media and Visual Cultures major area equips students with multidisciplinary knowledge and skills in critical art history and theory, digital media, film and television studies, philosophy, and cultural studies. It aims to create career ready graduates with the skills necessary to interpret the production and dissemination of visual images and their meanings in a variety of media as well as cultural and institutional contexts.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

101734.2	Media and Visual Cultures: Case Studies

and the Level 3 unit

101295.2	Aesthetics

Students must also complete six of the Level 2/3 units from the following pools with no less than two at Level 3:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100245.2	Asian Cinema
101248.3	Australian Art 1
101626.4	Children's Literature: Image and Text
101250.3	Digital Futures
101856.1	Film and Philosophy
10157.2	History and Theory of the Avant-Garde
100964.2	Introduction to Film Studies
101254.3	The Animated Image: Histories and Theories
10371.3	The Art Museum - from the Prince to the Public
100890.2	The Art of Landscape
101795.2	The Musical

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10158.2	Writings on Art

Level 3 Unit Pool

400087.5	Applied Critical Methods
100959.2	Australian Art II
100989.2	Cinema and Realism
100990.2	Cinema, Culture, Memory
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
101001.3	Modernity and Cinema
101761.2	Philosophy and the Visual
101253.3	Public Memory and Commemoration
101006.2	Social Semiotics
101738.2	The Art Game: Fraud, Forgery, Theft and Perfidy
101266.2	The Art of Modern Life
101717.2	The Italian Renaissance Unpacked
101668.2	World Cinema

Major - Arabic

M1026.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Arabic comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100041.2	Arabic 101

100042.2	Arabic 102

Level 2 unit pool

101699.2	Language and Communication Skills 2A: Arabic
101704.2	Language and Communication Skills 2B: Arabic

Level 3 unit pool

400087.5	Applied Critical Methods
100048.2	Arabic 302 - Arabic Advanced Language and Grammar
100049.2	Arabic 303: Advanced Writing Skills
100050.2	Arabic 304: Arabic Advanced Speaking
100052.2	Arabic 306: Arabic Novel and Short Story
100054.2	Arabic 308:Language Past and Present
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101792.2	Texts in Contemporary Arab Society and Culture
101668.2	World Cinema

Major - Chinese

M1027.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Chinese comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

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100056.2	Chinese 101
100057.2	Chinese 102

Level 2 unit pool

101700.2	Language and Communication Skills 2A: Chinese
101705.2	Language and Communication Skills 2B: Chinese

Level 3 unit pool

400087.5	Applied Critical Methods
100063.2	Chinese 302
100064.2	Chinese 303: Twentieth-Century Chinese Literature
100065.2	Chinese 304: Chinese Classical Literature
100066.2	Chinese 305: Chinese Cinema
100067.2	Chinese 307: The Cultural Context of China
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101710.2	Languages and Grammatical Concepts 3A: Chinese
101668.2	World Cinema

Major - Japanese

M1028.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Japanese comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100085.2	Japanese 101

100086.2	Japanese 102

Level 2 unit pool

101702.2	Language and Communication Skills 2A: Japanese
101707.2	Language and Communication Skills 2B: Japanese

Level 3 unit pool

400087.5	Applied Critical Methods
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
100092.3	Japanese 302
100093.2	Japanese 303: Contemporary Culture and Society
100094.1	Japanese 304: Discourse in Japanese
100096.2	Japanese 306: Japanese for Business
100098.1	Japanese 308: Japanese Textual Studies
101712.2	Languages and Grammatical Concepts 3A: Japanese
101668.2	World Cinema
101669.2	World Literature in Translation

Major - Italian

M1029.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Italian comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100130.2	Italian 101

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100131.2   Italian 102

Level 2 unit pool

101701.2   Language and Communication Skills 2A: Italian
101706.2   Language and Communication Skills 2B: Italian

Level 3 unit pool

400087.5   Applied Critical Methods
100961.4   Humanities Internship
101454.2   Intercultural Pragmatics
100138.2   Italian 303: Contemporary Italy in European and International Contexts
100140.1   Italian 305: Modern Literature
100141.2   Italian 306: Classical Literature
100143.2   Italian 308: Italian Cinema
101711.2   Languages and Grammatical Concepts 3A: Italian
101668.2   World Cinema
101669.2   World Literature in Translation

Major - Spanish

M1030.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Spanish comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100145.2   Spanish 101
100146.2   Spanish 102

Level 2 unit pool

101703.2   Language and Communication Skills 2A: Spanish
101708.2   Language and Communication Skills 2B: Spanish

Level 3 unit pool

400087.5   Applied Critical Methods
100961.4   Humanities Internship
101454.2   Intercultural Pragmatics
101713.2   Languages and Grammatical Concepts 3A: Spanish
101791.2   Short Fiction in the Americas
100153.2   Spanish 303: Advanced Writing Skills
100154.2   Spanish 304: Advanced Speaking Skills
100155.2   Spanish 305: Contemporary Literature
100156.2   Spanish 306: Contemporary History
100157.2   Spanish 307: Classical Literature
100158.2   Spanish 308: Spanish Sociolinguistics
101668.2   World Cinema
101669.2   World Literature in Translation

Major - Global Studies

M1031.1

What does it mean to live in an increasingly globalised world? Global Studies offers students the opportunity to acquire key competencies in cross-cultural communication and global issues to act as socially aware global citizens in international settings. Global Studies addresses issues such as consumer and popular culture, global histories of food and technology, the interconnection of race, identity and transnational migration and intercultural pragmatics. Students have the opportunity to complete a semester of study abroad.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the Level 1 unit

101673.2   The First Globalisation

And seven units from the following pools with no less than three Level 3 units in order to complete the major.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

101737.2   World Politics: An Introduction

Level 2 unit pool

101857.2   Doing Business in China

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101543.2	India: Global Contexts
100871.3	International Texts and Contexts
101797.2	Political Terror

Level 3 unit pool

400087.5	Applied Critical Methods
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100994.2	Consumer Culture
100858.3	Culture and Globalisation
101674.2	Global Histories of Food
101735.2	Global Politics
101736.2	Governing the Globe
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101468.2	Islam, Media and Conflict
101733.2	Looking at Global Politics Through Film
101732.2	Media, The Everyday and Uneven Modernities
101666.2	Race, Identity and Globalisation
101717.2	The Italian Renaissance Unpacked
101848.1	Transnationalism and Migration
101831.2	Transport and the Making of the Modern World
101668.2	World Cinema
101669.2	World Literature in Translation
101830.2	WWII in Asia and the Pacific

Major - Asian Studies and International Relations

M1032.1

This major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study modern and contemporary Asia, the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The major area includes a range of units concerned with the United States, Europe and Australia as well as with Asia itself, and units in international relations. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Students are encouraged to undertake a submajor in an Asian language in conjunction with the major. Employment opportunities may be found in the State and Commonwealth public service, overseas organisations, trade and tourist organisations, business and industry, education and research.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

101442.2	Asia in the World

and seven units from the following pools with no less than three Level 3 units in order to pass the major:

Level 1 Unit Pool

101737.2	World Politics: An Introduction

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100245.2	Asian Cinema
100847.2	Asia and the West: The Imperial Encounter
100850.2	Buddhism in the Contemporary World
100855.2	Contemporary Japan: Culture and Society
101857.2	Doing Business in China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101543.2	India: Global Contexts
100872.2	International Politics of North Asia
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
63111.3	Special Topics in Asian and International Studies
101404.3	The History of Modern Indonesia
101871.1	War

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
400087.5	Applied Critical Methods
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100962.2	International Politics of the Southeast Asian Region
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

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Major - History and Political Thought

M1033.1

Since the revival of humanist studies in Renaissance Europe in the 15th century, universities have placed history and political thought at the heart of studies in the humanities. Through study of the political thought and social, political and cultural history of Australian, Asian and European societies, students gain knowledge and critical skills relevant to a variety of careers in education, government and non-governmental organizations. Study of the writings of political thinkers from ancient Greece and Rome, such as Plato and Cicero, and the early modern period, such as Hobbes and Machiavelli, to noted 19th century figures, such as Hegel and Marx, prepare students to engage with contemporary issues of governance, such as sovereignty, power, opportunity, property, civic freedom and social justice.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students would be eligible for this major having successfully completed 80 credit points with no less than three Level 3 units.

Students must complete the compulsory Level 1 unit

100873.3	Inventing Modernity

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100848.2	Australian Politics
100868.2	Foundations of Modern Australia
101737.2	World Politics: An Introduction

Level 2 unit pool

101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100869.2	Foundations of Modern Europe 1500-1800
101543.2	India: Global Contexts
100001.3	Keeping the Past
101843.2	Philosophy and Environment
101797.2	Political Terror
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
100882.3	Politics of Sex and Gender
63111.3	Special Topics in Asian and International Studies
101867.1	The Ethical Life
101404.3	The History of Modern Indonesia
101294.3	The Western Philosophical Tradition
101871.1	War
100293.3	War and Society: 20th Century Australia

Level 3 unit pool

400087.5	Applied Critical Methods
100966.3	American History, 1898-1945
100986.2	Australian History 1860-1920
100987.3	Australian History Since 1920
101685.3	Australian Indigenous History
101872.1	Australian Indigenous History from Federation to Reconciliation
100991.2	Citizenship Ancient and Modern
100852.2	Classics of Modern Philosophy
101799.2	Convicts and Settlers - Australian History 1788 - 1840
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100863.3	Ethical Cultures
100254.3	Exploring Local History
100864.2	Europe in the Twentieth Century
101844.2	Feminist Theories
101674.2	Global Histories of Food
101735.2	Global Politics
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100963.3	Interpreting Australia: Australian Historians and Historiography
101801.2	Interpreting Fascism
101823.2	Lay Participation in Justice Processes
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
101665.3	Politics and Religion
100278.2	Politics of Post-War Japan
100908.2	Race Politics
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
100969.2	Theories of Conflict and Violence
101831.2	Transport and the Making of the Modern World
101798.2	Understanding Freedom
101731.3	Understanding Power
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

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Major - Cultural and Social Analysis

M1034.1

Cultural and Social Analysis is an interdisciplinary major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic productions, and education, communication, welfare or health services, in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

100897.2	Everyday Life

and seven units from the following pools with no less than three Level 3 units in order to complete the major.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101409.2	Aboriginal Cultural Texts
100854.3	Contemporary Popular Cultures
100871.3	International Texts and Contexts
101251.2	Introduction to Psychoanalysis
100273.3	New Ethnicities, Old Racisms
100882.3	Politics of Sex and Gender
100281.3	Sexual Culture/s
100884.2	Social Inequalities
100886.2	Special Topics in Cultural and Social Analysis
100889.2	Technocultures
101867.1	The Ethical Life
100291.5	Urban Life/Urban Culture
100298.2	Youth Cultures and Moral Panics
101879.1	Women with Muslim Identity

Level 3 Unit Pool

400087.5	Applied Critical Methods
101265.2	Children's Culture
100990.2	Cinema, Culture, Memory
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100858.3	Culture and Globalisation
100996.3	Death and Culture
100860.3	Emotions, Culture and Community
100998.4	Evolutionary Thinking
101844.2	Feminist Theories
101716.3	Healing and Culture
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101739.3	Literature and Trauma
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
100877.3	Multicultural Studies
101252.2	Psychoanalytic Criticism
101253.3	Public Memory and Commemoration
101003.2	Religion and Culture
101005.4	Representing Crime
101006.2	Social Semiotics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101008.2	Technologies of Racism
101009.3	The Body in Culture
101848.1	Transnationalism and Migration
101798.2	Understanding Freedom
101731.3	Understanding Power
101898.1	Violence in Everyday Life
101010.3	What is the Human?

Major - English, Text and Writing

M1035.1

The English, Text and Writing major invites students to explore contemporary approaches to language, literary study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. English, Text and Writing focuses on the imaginative workings of language, and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points with no less than three Level 3 units.

Students must complete the compulsory Level 1 unit

100862.2	English, Text & Writing

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Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100641.3   Approaches to Text

Level 2 unit pool

101626.4   Children's Literature: Image and Text
100900.3   Comedy and Tragedy
101408.2   Critical Discourse Analysis
101452.2   History of the English Language
100870.2   Hypertext Fictions
100871.3   International Texts and Contexts
100964.2   Introduction to Film Studies
100505.2   Special Topics in English, Text and Writing
101795.2   The Musical
100893.4   The Novel
101455.3   The Structure of English
100896.3   Writing Fiction
101869.1   Studies in Postcolonial Literature
101873.1   The Sound of Language

Level 3 unit pool

400087.5   Applied Critical Methods
100845.3   American Literature
100849.4   Australian Textual Studies
101242.3   Children's Literature
100856.4   Creative Non-Fiction
100859.3   Creative Writing Project
100256.4   Film and Affect
100866.3   Film and Drama
100961.4   Humanities Internship
101724.2   Literary Animals
100875.4   Literature and Philosophy
101739.3   Literature and Trauma
100874.4   Literature, History and Culture
101033.4   Modernism
101001.3   Modernity and Cinema
101406.2   Queering Text
101650.3   Race in Literature
101005.4   Representing Crime
101791.2   Short Fiction in the Americas
101832.2   Talking Normal: Sociolinguistics and Modern Literature
101453.2   Text and Discourse in English
101471.2   Women in Arabic and Islamic Literature
101668.2   World Cinema
101669.2   World Literature in Translation
101670.3   Writing and Society
100895.4   Writing For Performance
101011.3   Writing Poetry
100582.2   Writing Portfolio
101796.1   19th Century American Literature
101880.1   The Space of Literature

Major - Islamic Studies

M1036.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches. Students are encouraged to undertake a sub-major in Arabic to complement the Islamic Studies major.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

An Islamic Studies major must include the following Level 1 unit

101462.2   Understanding Islam and Muslim Societies

The remaining seven units must include at least three Level 3 units drawn from the following pools:

Level 2 unit pool

101464.3   Great Texts of Islam: Qur'an and Hadith
100273.3   New Ethnicities, Old Racisms

Level 3 unit pool

101688.2   Anthropology of Religion
400087.5   Applied Critical Methods
101466.2   Ethical Traditions in Islam
100961.4   Humanities Internship
101822.3   Islam in the West
101463.4   Islam in the Modern World
101467.2   Islam in Southeast Asia
101468.2   Islam, Media and Conflict
101465.2   Islamic Law in a Changing World
100877.3   Multicultural Studies
101359.5   Sociology of Religion
101792.2   Texts in Contemporary Arab Society and Culture
101783.2   The International Relations of the Middle East Since 1945
101471.2   Women in Arabic and Islamic Literature

Major - Linguistics

M1037.1

Through study of what language is and how it works, students gain conceptual tools and knowledge relevant to the relationship of language and society as well linguistics-related disciplines, such as Sociolinguistics, Psycholinguistics, Developmental Linguistics, Bilingualism, and other applied linguistics areas. Understanding of the relationship between language learning, communicative competence and cultural practices, both in the Australian context and in a global context, provides a foundation for

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many careers including primary and secondary teaching, policy analysis, communication, social and welfare services in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete eight units from the following pools, with no less than three units at Level 3.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100194.2	Introduction to Interpreting
100195.2	Introduction to Translation

Level 2 unit pool

101452.2	History of the English Language
100928.3	Linguistics
101873.1	The Sound of Language
101302.2	Translation Technologies

Level 3 unit pool

400087.5	Applied Critical Methods
101449.2	Bilingualism and Biculturalism
101441.2	English Semantics and Pragmatics
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101710.2	Languages and Grammatical Concepts 3A: Chinese
101711.2	Languages and Grammatical Concepts 3A: Italian
101712.2	Languages and Grammatical Concepts 3A: Japanese
101713.2	Languages and Grammatical Concepts 3A: Spanish
101451.2	Second Language Acquisition
101721.2	Second Language Learning and Teaching
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English

Major - Indigenous Australian Studies

M1041.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian

Studies Major addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

Students must complete the following level one unit

101751.2	Contextualising Indigenous Australia (Day Mode)

Choose seven of the following units including three Level 3 units

Level 1 units

101878.1	Indigenous Landscapes
101762.1	Who do you think you are? (Day Mode)

Level 2 units

101754.2	From Corroborees to Curtain Raisers (Day Mode)
101755.1	From Ochre to Acrylics to New Technologies
101752.1	Pigments of the Imagination
101753.2	Revaluing Indigenous Economics (Day Mode)

Level 3 units - choose three of

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101757.1	The Making of the `Aborigines'
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Major - Psychological Studies

M1050.1

The Psychological Studies major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to to enrol in an accredited Psychology sequence need to complete the Psychology key program of 200 credit points.

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Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
100013.3	Experimental Design and Analysis
101676.2	Human Learning
101680.3	Perception
101184.2	Psychology: Human Behaviour
101183.2	Psychology: Behavioural Science

Sub-major - Religion, Anthropology and Philosophy

SM1032.1

This multidisciplinary sub-major pursues critical and rational analysis of questions about individuals and societies; about human knowledge, culture and existence. It inquires into issues about human nature; the scope and limits of knowledge and belief; God and ethics; conflict and violence; ritual and myth; and religion, politics and culture. The sub-major provides students with rigorous training in analytic and creative thinking, intellectual independence and cultural and ethical awareness.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pool with no more than one unit at Level 1

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

101462.2	Understanding Islam and Muslim Societies

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100850.2	Buddhism in the Contemporary World
100852.2	Classics of Modern Philosophy
101856.1	Film and Philosophy
101464.3	Great Texts of Islam: Qur'an and Hadith
101843.2	Philosophy and Environment
101881.1	Philosophy and the Good Life
101867.1	The Ethical Life
101294.3	The Western Philosophical Tradition

Level 3 Unit Pool

101295.2	Aesthetics
101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
100863.3	Ethical Cultures
100998.4	Evolutionary Thinking
100961.4	Humanities Internship
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101465.2	Islamic Law in a Changing World
101724.2	Literary Animals
100875.4	Literature and Philosophy
100275.4	Philosophies of Love and Death
101761.2	Philosophy and the Visual
100879.2	Philosophy Today
101665.3	Politics and Religion
101003.2	Religion and Culture
101359.5	Sociology of Religion
100969.2	Theories of Conflict and Violence
101880.1	The Space of Literature
101798.2	Understanding Freedom
101010.3	What is the Human?
101471.2	Women in Arabic and Islamic Literature

Sub-major - Media and Visual Cultures

SM1033.1

The rapid flow of visual images with which we communicate today – on the internet, by web and moblogs – is a contemporary manifestation of the importance of visual cultures in everyday life. The Media and Visual Cultures sub-major area equips students with multidisciplinary knowledge and skills in critical art history and theory, digital media, film and television studies, philosophy, and cultural studies. It aims to create career ready graduates with the skills necessary to interpret the production and dissemination of visual images and their meanings in a variety of media as well as cultural and institutional contexts.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100245.2	Asian Cinema
101248.3	Australian Art 1
101626.4	Children's Literature: Image and Text
101250.3	Digital Futures
101856.1	Film and Philosophy
10157.2	History and Theory of the Avant-Garde

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100964.2	Introduction to Film Studies
101254.3	The Animated Image: Histories and Theories
10371.3	The Art Museum - from the Prince to the Public
100890.2	The Art of Landscape
101795.2	The Musical
10158.2	Writings on Art

Level 3 Unit Pool

400087.5	Applied Critical Methods
100959.2	Australian Art II
100989.2	Cinema and Realism
100990.2	Cinema, Culture, Memory
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
101001.3	Modernity and Cinema
101761.2	Philosophy and the Visual
101253.3	Public Memory and Commemoration
101006.2	Social Semiotics
101738.2	The Art Game: Fraud, Forgery, Theft and Perfidy
101266.2	The Art of Modern Life
101717.2	The Italian Renaissance Unpacked
101668.2	World Cinema

Sub-major - Chinese

SM1035.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

A sub-major in Chinese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100056.2	Chinese 101
100057.2	Chinese 102

Level 2 unit pool

101700.2	Language and Communication Skills 2A: Chinese
101705.2	Language and Communication Skills 2B: Chinese

Level 3 unit pool

100063.2	Chinese 302
100064.2	Chinese 303: Twentieth-Century Chinese Literature
100065.2	Chinese 304: Chinese Classical Literature
100066.2	Chinese 305: Chinese Cinema
100067.2	Chinese 307: The Cultural Context of China Intercultural Pragmatics
101454.2	
101710.2	Languages and Grammatical Concepts 3A: Chinese
101668.2	World Cinema

Sub-major - Italian

SM1036.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A sub-major in Italian is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100130.2	Italian 101
100131.2	Italian 102

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Level 2 unit pool

101701.2	Language and Communication Skills 2A: Italian
101706.2	Language and Communication Skills 2B: Italian

Level 3 unit pool

101454.2	Intercultural Pragmatics
100138.2	Italian 303: Contemporary Italy in European and International Contexts
100140.1	Italian 305: Modern Literature
100141.2	Italian 306: Classical Literature
100143.2	Italian 308: Italian Cinema
101711.2	Languages and Grammatical Concepts 3A: Italian
101668.2	World Cinema
101669.2	World Literature in Translation

Sub-major - Japanese

SM1037.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

A sub-major in Japanese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100085.2	Japanese 101
100086.2	Japanese 102

Level 2 unit pool

101702.2	Language and Communication Skills 2A: Japanese

101707.2	Language and Communication Skills 2B: Japanese

Level 3 unit pool

101454.2	Intercultural Pragmatics
100093.2	Japanese 303: Contemporary Culture and Society
100094.1	Japanese 304: Discourse in Japanese
100096.2	Japanese 306: Japanese for Business
100098.1	Japanese 308: Japanese Textual Studies
101712.2	Languages and Grammatical Concepts 3A: Japanese
101668.2	World Cinema
101669.2	World Literature in Translation

Sub-major - Spanish

SM1038.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A sub-major in Spanish is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100145.2	Spanish 101
100146.2	Spanish 102

Level 2 unit pool

101703.2	Language and Communication Skills 2A: Spanish
101708.2	Language and Communication Skills 2B: Spanish

Level 3 unit pool

400087.5	Applied Critical Methods
100961.4	Humanities Internship

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101454.2	Intercultural Pragmatics
101713.2	Languages and Grammatical Concepts 3A: Spanish
101791.2	Short Fiction in the Americas
100153.2	Spanish 303: Advanced Writing Skills
100154.2	Spanish 304: Advanced Speaking Skills
100155.2	Spanish 305: Contemporary Literature
100156.2	Spanish 306: Contemporary History
100157.2	Spanish 307: Classical Literature
100158.2	Spanish 308: Spanish Sociolinguistics
101668.2	World Cinema
101669.2	World Literature in Translation

101468.2	Islam, Media and Conflict
101733.2	Looking at Global Politics Through Film
101732.2	Media, The Everyday and Uneven Modernities
101666.2	Race, Identity and Globalisation
101717.2	The Italian Renaissance Unpacked
101848.1	Transnationalism and Migration
101831.2	Transport and the Making of the Modern World
101668.2	World Cinema
101669.2	World Literature in Translation
101830.2	WWII in Asia and the Pacific

Sub-major - Global Studies

SM1040.1

What does it mean to live in an increasingly globalised world? Global Studies offers students the opportunity to acquire key competencies in cross-cultural communication and global issues to act as socially aware global citizens in international settings. Global Studies addresses issues such as consumer and popular culture, global histories of food and technology, the interconnection of race, identity and transnational migration and intercultural pragmatics. Students have the opportunity to complete a semester of study abroad.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at Level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

101737.2	World Politics: An Introduction

Level 2 unit pool

101857.2	Doing Business in China
101543.2	India: Global Contexts
100871.3	International Texts and Contexts
101797.2	Political Terror

Level 3 unit pool

400087.5	Applied Critical Methods
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100994.2	Consumer Culture
100858.3	Culture and Globalisation
101674.2	Global Histories of Food
101735.2	Global Politics
101736.2	Governing the Globe
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics

Sub-major - History and Political Thought

SM1041.1

Since the revival of humanist studies in Renaissance Europe in the 15th century, universities have placed history and political thought at the heart of studies in the humanities. Through study of the political thought and social, political and cultural history of Australian, Asian and European societies, students gain knowledge and critical skills relevant to a variety of careers in education, government and non-governmental organizations. Study of the writings of political thinkers from ancient Greece and Rome, such as Plato and Cicero, and the early modern period, such as Hobbes and Machiavelli, to noted 19th century figures, such as Hegel and Marx, prepare students to engage with contemporary issues of governance, such as sovereignty, power, opportunity, property, civic freedom and social justice.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100848.2	Australian Politics
100868.2	Foundations of Modern Australia
100873.3	Inventing Modernity
101737.2	World Politics: An Introduction

Level 2 unit pool

101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100869.2	Foundations of Modern Europe 1500-1800
101543.2	India: Global Contexts
100001.3	Keeping the Past

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101843.2	Philosophy and Environment
101797.2	Political Terror
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
100882.3	Politics of Sex and Gender
63111.3	Special Topics in Asian and International Studies
101867.1	The Ethical Life
101404.3	The History of Modern Indonesia
101294.3	The Western Philosophical Tradition
101871.1	War
100293.3	War and Society: 20th Century Australia

Level 3 unit pool

400087.5	Applied Critical Methods
100966.3	American History, 1898-1945
100986.2	Australian History 1860-1920
100987.3	Australian History Since 1920
101685.3	Australian Indigenous History
101872.1	Australian Indigenous History from Federation to Reconciliation
100991.2	Citizenship Ancient and Modern
100852.2	Classics of Modern Philosophy
101799.2	Convicts and Settlers - Australian History 1788 - 1840
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100863.3	Ethical Cultures
100864.2	Europe in the Twentieth Century
100254.3	Exploring Local History
101844.2	Feminist Theories
101674.2	Global Histories of Food
101735.2	Global Politics
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100963.3	Interpreting Australia: Australian Historians and Historiography
101801.2	Interpreting Fascism
101823.2	Lay Participation in Justice Processes
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
101665.3	Politics and Religion
100278.2	Politics of Post-War Japan
100908.2	Race Politics
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
100969.2	Theories of Conflict and Violence
101831.2	Transport and the Making of the Modern World
101798.2	Understanding Freedom
101731.3	Understanding Power
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Sub-major - Asian Studies and International Relations

SM1042.1

This sub-major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study modern and contemporary Asia, the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The sub-major area includes a range of units concerned with the United States, Europe and Australia as well as with Asia itself, and units in international relations. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Students are encouraged to undertake a sub-major in an Asian language in conjunction with the major. Employment opportunities may be found in the State and Commonwealth public service, overseas organisations, trade and tourist organisations, business and industry, education and research

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

| 101737.2 | World Politics: An Introduction |

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100847.2	Asia and the West: The Imperial Encounter
100245.2	Asian Cinema
100850.2	Buddhism in the Contemporary World
100855.2	Contemporary Japan: Culture and Society
101857.2	Doing Business in China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101543.2	India: Global Contexts
100872.2	International Politics of North Asia
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
63111.3	Special Topics in Asian and International Studies
101404.3	The History of Modern Indonesia
101871.1	War

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Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
400087.5	Applied Critical Methods
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100962.2	International Politics of the Southeast Asian Region
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Sub-major - Cultural and Social Analysis

SM1043.1

Cultural and Social Analysis is an interdisciplinary sub-major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This sub-major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic productions, and education, communication, welfare or health services, in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the Level 2/3 units from the following pools

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101409.2	Aboriginal Cultural Texts
100854.3	Contemporary Popular Cultures
100871.3	International Texts and Contexts
101251.2	Introduction to Psychoanalysis
100273.3	New Ethnicities, Old Racisms
100882.3	Politics of Sex and Gender
100281.3	Sexual Culture/s
100884.2	Social Inequalities
100886.2	Special Topics in Cultural and Social Analysis
100889.2	Technocultures
101867.1	The Ethical Life
100291.5	Urban Life/Urban Culture
101879.1	Women with Muslim Identity
100298.2	Youth Cultures and Moral Panics

Level 3 Unit Pool

400087.5	Applied Critical Methods
101265.2	Children's Culture
100990.2	Cinema, Culture, Memory
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100858.3	Culture and Globalisation
100996.3	Death and Culture
100860.3	Emotions, Culture and Community
100998.4	Evolutionary Thinking
101844.2	Feminist Theories
101716.3	Healing and Culture
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101739.3	Literature and Trauma
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
100877.3	Multicultural Studies
101252.2	Psychoanalytic Criticism
101253.3	Public Memory and Commemoration
101003.2	Religion and Culture
101005.4	Representing Crime
101006.2	Social Semiotics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101008.2	Technologies of Racism
101009.3	The Body in Culture
101848.1	Transnationalism and Migration
101798.2	Understanding Freedom
101731.3	Understanding Power
101010.3	What is the Human?

Sub-major - English, Text and Writing

SM1044.1

The English, Text and Writing sub-major invites students to explore contemporary approaches to language, literary

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study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. English, Text and Writing focuses on the imaginative workings of language, and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at Level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100641.3   Approaches to Text

Level 2 unit pool

101626.4   Children's Literature: Image and Text
100900.3   Comedy and Tragedy
101408.2   Critical Discourse Analysis
101452.2   History of the English Language
100870.2   Hypertext Fictions
100871.3   International Texts and Contexts
100964.2   Introduction to Film Studies
100505.2   Special Topics in English, Text and Writing
101869.1   Studies in Postcolonial Literature
101795.2   The Musical
100893.4   The Novel
101873.1   The Sound of Language
101455.3   The Structure of English
100896.3   Writing Fiction

Level 3 unit pool

400087.5   Applied Critical Methods
100845.3   American Literature
100849.4   Australian Textual Studies
101242.3   Children's Literature
100856.4   Creative Non-Fiction
100859.3   Creative Writing Project
100256.4   Film and Affect
100866.3   Film and Drama
100961.4   Humanities Internship
101724.2   Literary Animals
100875.4   Literature and Philosophy
101739.3   Literature and Trauma
100874.4   Literature, History and Culture
101033.4   Modernism
101001.3   Modernity and Cinema
101406.2   Queering Text
101650.3   Race in Literature
101005.4   Representing Crime

101791.2   Short Fiction in the Americas
101832.2   Talking Normal: Sociolinguistics and Modern Literature
101453.2   Text and Discourse in English
101471.2   Women in Arabic and Islamic Literature
101668.2   World Cinema
101669.2   World Literature in Translation
101670.3   Writing and Society
100895.4   Writing For Performance
101011.3   Writing Poetry
100582.2   Writing Portfolio
101796.1   19th Century American Literature
101880.1   The Space of Literature

Sub-major - Islamic Studies

SM1045.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at level 1

Level 2 unit pool

101464.3   Great Texts of Islam: Qur'an and Hadith
100273.3   New Ethnicities, Old Racisms

Level 3 unit pool

101688.2   Anthropology of Religion
400087.5   Applied Critical Methods
101466.2   Ethical Traditions in Islam
100961.4   Humanities Internship
101822.3   Islam in the West
101463.4   Islam in the Modern World
101467.2   Islam in Southeast Asia
101468.2   Islam, Media and Conflict
101465.2   Islamic Law in a Changing World
100877.3   Multicultural Studies
101359.5   Sociology of Religion
101792.2   Texts in Contemporary Arab Society and Culture
101783.2   The International Relations of the Middle East Since 1945
101471.2   Women in Arabic and Islamic Literature

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Sub-major - Linguistics

SM1046.1

Through study of what language is and how it works, students gain conceptual tools and knowledge relevant to the relationship of language and society as well linguistics-related disciplines, such as Sociolinguistics, Psycholinguistics, Developmental Linguistics, Bilingualism, and other applied linguistics areas. Understanding of the relationship between language learning, communicative competence and cultural practices, both in the Australian context and in a global context, provides a foundation for many careers including primary and secondary teaching, policy analysis, communication, social and welfare services in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	External

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100194.2	Introduction to Interpreting
100195.2	Introduction to Translation

Level 2 unit pool

101452.2	History of the English Language
100928.3	Linguistics
101873.1	The Sound of Language
101302.2	Translation Technologies

Level 3 unit pool

400087.5	Applied Critical Methods
101449.2	Bilingualism and Biculturalism
101441.2	English Semantics and Pragmatics
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101710.2	Languages and Grammatical Concepts 3A: Chinese
101711.2	Languages and Grammatical Concepts 3A: Italian
101712.2	Languages and Grammatical Concepts 3A: Japanese
101713.2	Languages and Grammatical Concepts 3A: Spanish
101451.2	Second Language Acquisition
101721.2	Second Language Learning and Teaching
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English

Sub-major - Indigenous Australian Studies

SM1049.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101751.2	Contextualising Indigenous Australia (Day Mode)
101752.1	Pigments of the Imagination

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)
101757.1	The Making of the `Aborigines'

Sub-major - Indigenous Economics

SM1050.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

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Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101751.2	Contextualising Indigenous Australia (Day Mode)
101753.2	Revaluing Indigenous Economics (Day Mode)
101757.1	The Making of the `Aborigines'

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Sub-major - Indigenous Australian Creative Expressions

SM1051.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101751.2	Contextualising Indigenous Australia (Day Mode)
101754.2	From Corroborees to Curtain Raisers (Day Mode)
101755.1	From Ochre to Acrylics to New Technologies

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Sub-major - Psychological Studies

SM1069.1

The Psychological Studies sub-major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies sub-major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to to enrol in an accredited Psychology sequence need to complete the Psychology key program of 200 credit points.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

This sub-major is restricted to students enrolled in 1604 - Bachelor of Arts, 1706 - Bachelor of Arts, 1652 - Bachelor of Arts (Pathway to Teaching Secondary) or 1655 - Bachelor of Arts (Dean''s Scholars).

Students must complete 40 credit points as follows

100013.3	Experimental Design and Analysis
101183.2	Psychology: Behavioural Science
101184.2	Psychology: Human Behaviour

Choose one of

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
101676.2	Human Learning
101680.3	Perception

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SCHOOL OF COMPUTING, ENGINEERING AND MATHEMATICS

Bachelor of Computer Science

3506.6

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2013 or later.

The Bachelor of Computer Science course is a three year course with two distinct majors which allow students to specialise in different applications of computer science and computer systems. The majors are: networked systems and systems programming. The course and the majors are all available on the Penrith Campus. Students may graduate without a major but where a major is completed it will appear on the student's transcript.

Networked Systems major: This major aims to develop graduates with sound skills in the discipline of networked computer systems. Recent advances in computer and telecommunications networked systems, particularly those based on TCP/IP, have increased the importance of network technologies in the discipline of computer science. This major covers a wide range of topics including computer communication network concepts and protocols, multimedia systems, Internet standards and technologies, network security, wireless and mobile computing, and distributed systems. The candidates are also introduced to some of the relevant current key research issues of the field.

Systems Programming major: This major aims to develop graduates with sound skills in the discipline of programming. The focus is on programming at the level of system calls to the underlying operating system and many of the units use the industry standard language for systems programming, namely C/C++, as the vehicle of instruction. There is a strong emphasis on the development of highly efficient and reliable code that can provide support services for higher level application oriented programs, as well as the development of programs suitable for systems administration and management. Practical work utilises both Unix and Microsoft environments. This major is appropriate where a career in systems programming or systems administration is planned, or where the student wishes to develop advanced systems programming skills.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Accreditation
The Bachelor of Computer Science is accredited with the Australian Computer Society (ACS) at Professional Level.

Admission
Assumed knowledge: HSC Mathematics

Recommended studies: HSC Mathematics Extension 1

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Full-time

Year 1

Autumn session

300700.5	Statistical Decision Making
300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
200025.2	Discrete Mathematics

Spring session

300096.5	Computer Organisation
300147.4	Object Oriented Programming
300104.4	Database Design and Development
300565.2	Computer Networking

Year 2

Autumn session

300167.3	Systems Programming 1
300103.3	Data Structures and Algorithms
300121.2	Formal Languages and Automata

And one elective

Spring session

300404.2	Formal Software Engineering

And two Computer Science alternate units
And one elective

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Year 3

Autumn session

300578.3   Professional Development

And two Computer Science alternate units
And one elective

Spring session

300579.3   Professional Experience

And two Computer Science alternate units
And one elective

Computer Science Alternate Units

300093.3	Computer Graphics
300095.4	Computer Networks and Internets
300115.2	Distributed Systems and Programming
300128.3	Information Security
300130.3	Internet Programming
300143.3	Network Security
300149.3	Operating Systems
300165.3	Systems Administration Programming
300166.2	Systems and Network Management
300799.1	Advanced Theoretical Computer Science
300368.2	Intelligent Systems
300447.2	Computer Forensics Workshop
300575.2	Networked Systems Design

Majors

The majors listed below were designed specifically for this course and are recommended for Bachelor of Computer Science students. Other majors, from the School of Computing and Mathematics or any other School may also be selected but may require more than the standard six semesters to complete depending on their affinity with this course.

M3044.1	Networked Systems
M3043.1	Systems Programming

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Computer Science (Advanced)

3634.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2013 or later.

Students in the Bachelor of Computer Science (Advanced) will follow the study program set out for the Bachelor of Computer Science. Each student will have an Academic Mentor and will participate in additional compulsory activities including research projects. To maintain their enrolment in the Bachelor of Computer Science (Advanced) students must maintain an overall above 5 Grade Point Average, otherwise they will be transferred to the standard 3506 - Bachelor of Computer Science course. At enrolment students will be required to sign a declaration acknowledging the requirement to maintain a >5 GPA.

For more information refer to the entry for 3506 Bachelor of Computer Science.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Accreditation
The Bachelor of Computer Science is accredited with the Australian Computer Society (ACS) at Professional Level.

Admission
Assumed knowledge required: HSC Mathematics

Recommended studies: HSC Mathematics Extension 1

This course is available to current school leavers only.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

In addition to the units outlined in the course structure for 3506 Bachelor of Computer Science, students in the advanced program must also complete the following three units.

Students must enrol in both 1H and 2H sessions.

Year 1

1H session

300586.2   Advanced Computer Science Activities 1

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2H session

300586.2   Advanced Computer Science Activities 1

Year 2

1H session

300587.2   Advanced Computer Science Activities 2

2H session

300587.2   Advanced Computer Science Activities 2

Year 3

1H session

300588.2   Advanced Computer Science Activities 3

2H session

300588.2   Advanced Computer Science Activities 3

Bachelor of Computer Science (Honours)

3614.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

The Honours program encourages independence in learning and research; further develops academic ability, provides the opportunity to pursue undergraduate studies to a more advanced level, deepen intellectual understanding in the major field of study and develop research skills. Honours is a recognised point of entry into postgraduate research studies at PhD and Masters levels. If a career in industry is sought, Honours enables study to a more advanced level with a higher qualification. The course has the opportunity for direct commercial and industrial involvement with a diverse range of organisations through the provision and joint supervision of research projects.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Bankstown Campus	Full Time	Internal
Bankstown Campus	Part Time	Internal
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Admission

Assumed Knowledge: Bachelor Degree

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International. International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Qualification for this award requires the successful completion of 80 credit points including the units listed below.

Recommended Sequence

Year 1

Note: Students must enrol in 300363 & 300364 in both 1H & 2H sessions.

1H & 2H

300364.3   Computing Honours Seminar Program

1H & 2H

300363.3   Computing Honours Thesis

1H or 2H

Elective (Level 3 or above) – To be selected after discussion with student supervisor

Bachelor of Computing

3633.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2009 or later.

The Bachelor of Computing is a professional Information Communication Technology (ICT) course that provides graduates with a skills and knowledge base in the IS/IT areas of ICT and the ability to apply IS/IT solutions to a wide area of ICT. It allows students to develop skills in program design, systems analysis, design and security,

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data analysis and modelling, networks, web-design and systems planning.

This degree develops the abilities to design, develop, deploy and manage a spectrum of ICT systems.

As an ICT specialist in the ICT world, these attributes enable graduates to work in software development companies, networking companies, banking companies, IT consulting companies, the health care industry and many other IS and business related roles.

The Bachelor of Computing course is accredited by the Australian Computer Society. The Key Program in Information Systems focuses on computing and information technology in the context of business. Majors and sub-majors may be chosen from a range of disciplines, subject to the approval of Academic Course Advisor and subject to the number of elective units available in the Key Program. Accreditation at Professional level will be sought with the Australian Computer Society.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Computing is accredited with the Australian Computer Society (ACS) at Professional Level.

Admission
Assumed knowledge required: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Non-recent school leavers who have not studied mathematics, or those students who have completed HSC General Mathematics, or some students who have

undertaken HSC Mathematics but have only achieved bands 2 or 3 may benefit from taking the following unit as an elective:

300691.2   Mathematical Reasoning

Please seek further advice from the Academic Course Advisor.

Bachelor of Computing (Information Systems)

KT3000.1   Information Systems

Electives for majors and sub-majors
Electives for majors and sub-majors may not be available on all campuses and may create timetable clashes (given the range of possible progression options). Where an elective cannot be taken, the Academic Course Advisor may approve equivalent units where there is considerable overlap. Such units might be found within the School at UWS or cross-institutional study.

Please note: Majors and sub-majors are optional.

Majors

M3001.1	Advanced Programming
M3023.1	Computational Decision Making
M3000.1	Computer Systems
M3005.1	Entertainment Computing
M3004.1	Health Informatics
M3002.1	Information Technology
M3024.1	Knowledge Discovery and Data Mining
M3021.1	Mathematics
M3025.1	Networking
M3022.1	Statistics
M3003.1	Web Systems Development

Sub-majors

SM3005.1	Applied Mathematics
SM3027.1	Computational Decision Making
SM3000.1	Computer Systems
SM3011.1	Entertainment Computing
SM3004.1	Formal Systems
SM3010.1	Health Information Applications
SM3009.1	Health Information Management
SM3028.1	Knowledge Discovery and Data Mining
SM3025.1	Mathematics
SM3008.1	Networking
SM3026.1	Statistics
SM3001.1	Systems Administration
SM3003.1	Systems Programming
SM3002.1	Systems Security
SM3006.1	Web Application Development (for Computing Students)
SM3007.1	Web Application Development (for Non-Computing Students)

Sub-major elective spaces
Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

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Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Computing (Honours)

3588.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

The Honours program encourages independence in learning and research; further develops academic ability, provides the opportunity to pursue undergraduate studies to a more advanced level, deepen intellectual understanding in the major field of study and develop research skills. Honours is a recognised point of entry into postgraduate research studies at PhD and Masters levels. If a career in industry is sought, Honours enables study to a more advanced level with a higher qualification. The course has the opportunity for direct commercial and industrial involvement with a diverse range of organisations through the provision and joint supervision of research projects.

Study Mode
One year full-time.

Location

Campus	Attendance	Mode
Bankstown Campus	Full Time	Internal
Bankstown Campus	Part Time	Internal
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Admission
Assumed Knowledge: Bachelor Degree

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International. International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills

Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure
Qualification for this award requires the successful completion of 80 credit points including the units listed below.

Recommended Sequence

Year 1

Note: Students must enrol in 300363 & 300364 in both 1H & 2H sessions.

1H & 2H

300364.3   Computing Honours Seminar Program

1H & 2H

300363.3   Computing Honours Thesis

1H or 2H

Elective (Level 3 or above) – To be selected after discussion with student supervisor

Bachelor of Computing (Information Systems) Advanced

3685.1

The Bachelor of Computing (Information Systems) Advanced is a professional three year course being accredited by the Australian Computer Society. The Key Program in Information Systems focuses on computing and information technology in the context of business. In addition to the generic content, this course utilises advanced activities, extension projects, research training and hands on work on real business projects.

To assure students continue to excel through the course they are given a mentor and are regularly coached and supervised by the academic staff and industry professionals. Furthermore, within this degree students are required to attend to real business problems and also engage in cutting edge research.

After completing Bachelor of Computing (Information Systems) Advanced, graduates will have the skills required for work in various Information Systems areas, including systems analysis and design, programming, system security, data analysis and modelling, networking, systems and web-development, deployment and management.

Study Mode
3 years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

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Accreditation

The Bachelor of Computing (Information Systems) Advanced accreditation with the Australian Computer Society (ACS) at Professional Level is being sought.

Admission

Assumed knowledge: HSC Mathematics and any two units of HSC English

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

International applicants must apply directly to the University of Western Sydney via UWS International.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Students within the Advanced degree are required to complete five (5) Advanced units.

Compulsory Advanced units

- 300942 Emerging Trends in Information Systems (Advanced)
- 300900 Professional Experience (Advanced)

A further three units to be chosen from

- 300946 Computer Networking (Advanced)
- 300941 Database Design and Development (Advanced)
- 300901 Human-Computer Interaction (Advanced)
- 300903 Programming Techniques (Advanced)
- 300902 Web Systems Development (Advanced)
- 300940 Commercial Applications Development (Advanced)

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design

300573.2	Information Systems in Context

Spring session

300144.4	Object Oriented Analysis

Choose one of

300565.2	Computer Networking
300946.1	Computer Networking (Advanced)

Choose one of

300104.4	Database Design and Development
300941.1	Database Design and Development (Advanced)

And one elective

Year 2

Autumn session

300582.2	Technologies for Web Applications
200032.5	Statistics for Business

Choose one of

300570.3	Human-Computer Interaction
300901.1	Human-Computer Interaction (Advanced)

Choose one of

300581.3	Programming Techniques
300903.1	Programming Techniques (Advanced)

Spring session

300569.2	Computer Security
300572.2	Information Systems Deployment and Management

Choose one of

300583.2	Web Systems Development
300902.1	Web Systems Development (Advanced)

Choose one of

300089.5	Commercial Applications Development
300940.1	Commercial Applications Development (Advanced)

Year 3

Autumn session

300578.3	Professional Development
300942.1	Emerging Trends in Information Systems (Advanced)

And two electives

Spring session

300900.1	Professional Experience (Advanced)

And three electives

Majors

All Majors available to course 3633.2 - Bachelor of Computing (Information Systems) are also available to

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those enrolled in course 3685.1 - Bachelor of Computing (Information Systems) Advanced.

Please see link below for Majors available.

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Construction Management

2607.5

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

This course is aimed at providing the skills and abilities necessary to perform competently at a professional level in the building industry, in one or more of the following roles: Construction Managers, Project Managers, Building Supervisors, Estimators, Quantity Surveyors and Building Researchers.

Students will develop specialised skills in construction management. The Construction Management program is widely recognised for delivering the full suite of theoretical, practical, and hands-on experience in the area of construction management. Students will study four concentrated areas related to the delivery of construction projects. These are construction technology; construction economics; construction law; and construction resource management. Additionally, students will be required to undertake a total of 1,200 hours approved practical experience during the course.

There are a number of opportunities during the course for obtaining a cadetship in the building industry in areas including building surveying, construction economics, and construction management.

Study Mode

Four years full-time or part-time equivalent.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Advanced Standing

Advanced standing is available to students who have completed the following courses at TAFE. Diploma of Building Studies, Diploma of Quantity Surveying, Diploma of Building Surveying, Diploma of Civil Engineering, Diploma of Structural Engineering, Diploma of Architectural Technology or relevant Diploma.

Accreditation

Graduates are eligible for Probationer membership with advancement to Associate membership of the Australian Institute of Quantity Surveyors (AIQS) after Assessment of Professional Competence.

Admission

Assumed knowledge required: HSC Mathematics, Physics and English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International. International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Academic Course Advisor

Qualification for this award requires the successful completion of 320 credit points which include units in the recommended sequence below. Electives within the sequence may be used towards obtaining an approved submajor for this award.

Recommended Sequence

Full-time

Year 1

Autumn session

300706.2	Building 1
300729.2	Graphic Communication and Design
300674.2	Engineering, Design and Construction Practice
300016.2	Design Science

Spring session

300707.2	Building 2
200184.3	Introduction to Business Law
200101.3	Accounting Information for Managers
MG102A.4	Management Foundations

Year 2

Autumn session

300720.2	Construction Technology 1 (Civil)
200486.2	Quantity Surveying 1
200472.3	Material Science in Construction
300723.2	Development Control

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Spring session

300721.3	Construction Technology 2 (Substructure)
200468.2	Estimating 1
300885.1	Building Regulations Studies

Elective 1

Year 3

Autumn session

200502.3	Construction Technology 3 (Concrete Construction)
200485.2	Decision Making for Construction Professionals
300727.2	Project Management
300728.2	Construction Planning

Spring session

200470.4	Construction Technology 4 (Steel Construction)
300886.1	Construction in Practice 1
300053.3	Professional Practice
200292.2	Building Law

Non-Honours Stream

Year 4

Autumn session

200471.3	Construction Technology 5 (Envelope)
200504.2	Construction Economics
300536.2	Major Project in Construction

Elective 3

Spring session

300725.2	Construction Technology 6 (Services)
200484.3	Construction in Practice 3

Elective 2

Elective 4

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3000)

Autumn session

200471.3	Construction Technology 5 (Envelope)
200504.2	Construction Economics
300675.2	Honours Thesis

Spring session

300725.2	Construction Technology 6 (Services)
200484.3	Construction in Practice 3
300675.2	Honours Thesis

Sub-major in Construction Economics

SM3029.1	Construction Economics

To graduate with a sub-major in Construction Economics students must successfully complete the following specialist units in place of elective units.

Specialist unit

200503.2	Construction Information Systems

Specialist unit

200487.3	Quantity Surveying 2

Specialist unit

300748.2	Quality and Value Management

Specialist unit

300726.2	Estimating 2

All students enrolled in Bachelor of Construction Management must obtain, through their own initiative, 1200 hours of construction management related employment prior to undertaking their final year of study.

To facilitate the recording of such experience it will be necessary to enrol in 300724 Industry Based Learning and have an Industry Experience Diary signed off by the Course Coordinator.

300724.2	Industry Based Learning

Examples of sub majors that students could complete

SM2020.1	Property Investment
SM1027.1	Geography and Urban Studies

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Design and Technology

3502.5

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was Spring 2010 or later.

This course prepares students for a career in industrial design and/or industrial graphics. This is achieved by providing a sound knowledge of units in a broad range of design disciplines, including design methodology, design innovation, product design, ergonomics, manufacturing technology and design, aesthetics, management 2D and 3D CAD. Students interested in a teaching career in Design and Technology may take the end-on Bachelor of Teaching degree or Graduate diploma in Education after completing their Design and Technology degree.

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Study Mode
Three years full-time. Combinations of full-time and part-time study or all part-time study are also permitted under the normal program.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Advanced Standing
Advanced Standing will be assessed in accordance with UWS policy.

Accreditation
Graduates are eligible for membership of the Design Institute of Australia (DIA).

Admission
There are no specific subject prerequisites for entry into the course. Preferably, students should have successfully completed the HSC at the 2U level or better in English and at least two of the following units: Design & Technology, Arts, Physics, and Mathematics. Alternative entry: Certificate, Associate Diploma or Advanced Diploma from TAFE or another recognized teaching institution or equivalent in the discipline area. In some cases, professional experience will be counted towards alternative entry.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Academic Course Advisor
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

To be eligible to graduate from this course, students are required to complete a sub-major. Refer to the 'note' after the sub-major listing, for further details.

Recommended Sequence

Full-time

Year 1

Autumn session

300674.2	Engineering, Design and Construction Practice
300016.2	Design Science
300776.2	Applied Ergonomics
200191.5	Fundamentals of Mathematics

Spring session

300462.2	Engineering and Design Concepts
300302.2	Industrial Graphics 1: Presentation
300304.3	Sustainable Design: Materials Technology
200083.2	Marketing Principles

Year 2

Autumn session

300305.3	Design Studio 1: Themes and Variations
300282.2	Industrial Graphics 2: Transition
300309.3	Sustainable Design: Life Cycle Analysis

Note: Unit 300309 Sustainable Design: Life Cycle Analysis to be replaced by unit 300570 Human-Computer Interaction from 2013.

Choose one of

One sub-major alternate unit

Or one elective

Spring session

300308.3	Design Studio 2: The Design Proposal
300306.3	Sustainable Design: Sustainable Futures
300310.3	Industrial Graphics 3: 3D Solids

Choose one of

One sub-major alternate unit

Or one elective

Year 3

Autumn session

300311.3	Design Studio 3: Product Realisation
300014.3	Design Management 3: Organisational Skills for Designers

Choose one of

Two sub-major alternate units

Or two electives

Spring session

300313.3	Design Studio 4: Simulate to Innovate
300314.2	Designed Inquiry

Choose one of

Two sub-major alternate units

Or two electives

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Industrial Experience

300775.2   Industrial Experience

Majors

There are three Majors available, composed of units from the program, however these are not compulsory.

M3503IDM.1   Innovation Design Management
M3503IIG2.1   Interactive Industrial Graphics
M3503INTDM.1   International Design Management

Sub-majors

There are three sub-majors, composed of units from the program.

S3502DM.1   Design Management
S3502IG.1   Industrial Graphics
S3502SD.1   Sustainable Design

Note: In addition to the sub-major streams/electives offered from within Industrial Design (as listed above) students may choose other sub-major streams/electives within the School of Computing, Engineering and Mathematics or the University of Western Sydney or other universities (as cross institutional studies).

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Engineering

3621.7

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

This course has two intakes - Start year (Autumn) and Mid year (Spring). Students will need to check the entry relevant to their intake

The Bachelor of Engineering course is a four year course. It has a common first year program for all engineering disciplines and it also shares two units with the Bachelor of Industrial Design and three units with the Bachelor of Construction Management, exposing students to a wide range of experiences in the first year. Students have the opportunity to focus on an area of speciality by undertaking a key program in the disciplines of Civil, Computer, Construction, Electrical, Environmental, Mechanical, Robotics & Mechatronics, and Telecommunications. Sub-majors can be chosen from a range that will compliment their specialist discipline. Students also have an opportunity to broaden their experience by choosing sub-majors from other disciplines or alternately outside the School. An honours stream is offered, based on meritorious performance over the first three years of the course.

Study Mode

Four years full-time or part-time equivalent.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Accreditation

The course has been designed to meet the requirements of Engineers Australia.

Admission

Assumed knowledge required: Mathematics at Band 5 or higher, any two units of Science and any two units of English.

Recommended studies: Physics and HSC Mathematics extension 1 or HSC Mathematics Extension 2.

Background knowledge on calculus and physics is desirable.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International. International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Academic Course Advisor

Dr Fidelis Mashiri is the Academic Course Advisor for Key Programs in Civil, Construction and Environmental.

Dr Qi Cheng is the Academic Course Advisor for Key Programs in Electrical, Computer and Telecommunications.

Dr Jonathan Vincent is the Academic Course Advisor for Key Programs in Robotics & Mechatronics and Mechanical.

Recommended Sequence

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequences below.

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Full-time - Autumn intake

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2 - Year 4

Students must then select one of the following key programs:

KT3043.1	Civil
KT3046.1	Computer
KT3026.1	Construction
KT3102.1	Electrical
KT3089.1	Environmental
KT3042.1	Mechanical
KT3045.1	Robotics and Mechatronics
KT3103.1	Telecommunications

Recommended Sequence

Full-time - Spring Intake

The sequence of units for Year 1 Spring Intake is different for each Key Program. Please see details under each Key Program link above.

Sub-majors

The following sub-majors are available to all UWS students apart from students studying the same Key Program discipline. However, some of the units in the sub-majors may need prerequisites, which could restrict their selection to Engineering students. Please seek advice from the Academic Course Advisor.

SM3621CIVE.1	Civil Engineering
SM3032.1	Computer Engineering
SM3033.1	Construction
SM3621ECOE.1	Ecological Engineering
SM3034.1	Electrical Engineering
SM3035.1	Environmental Engineering
SM3621R&M.1	Robotics and Mechatronics
SM3621SOE.1	Soil Engineering
SM3621STRE.1	Structural Engineering
SM3621WATE.1	Water Engineering

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Engineering (Advanced)

3666.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

The Bachelor of Engineering (Advanced) is a four year course and is designed for high achieving students to undertake advanced engineering topics and gain substantial research experience. This course is in parallel with the Bachelor of Engineering which has a common first year program for all engineering disciplines and shares two units with the Bachelor of Industrial Design and three units with Bachelor of Construction Management, exposing students to a wide range of experiences in the first year. Students have the opportunity to focus on an area of speciality by undertaking a key program in the disciplines of Civil, Computer, Construction, Electrical, Environmental, Mechanical, Robotics & Mechatronics or Telecommunications. Students in this course will be challenged with special projects and assignments to realise their full potential. Students need to maintain a Grade Point Average (GPA) of 5.5 or above in this course and will carry out an honours thesis of 60 credit points in their fourth year of study.

Study Mode
Four years full-time study or part-time equivalent.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Accreditation
The course has been designed to meet the requirements of Engineers Australia.

Admission
Assumed knowledge required: HSC Mathematics Extension 1, Physics and any two units of English.

Recommended studies: HSC Mathematics Extension 2.

Background knowledge on calculus and physics is desirable.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

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International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Academic Course Advisor

Dr Fidelis Mashiri is the Academic Course Advisor for Key Programs in Civil, Construction and Environmental.

Dr Qi Cheng is the Academic Course Advisor for Key Programs in Electrical, Computer and Telecommunications.

Dr Jonathan Vincent is the Academic Course Advisor for Key Programs in Robotics & Mechatronics and Mechanical.

Recommended Sequence

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2 - Year 4

Students must then select one of the following key programs

KT3048.1	Civil
KT3051.1	Computer
KT3037.1	Construction
KT3087.1	Environmental
KT3100.1	Electrical
KT3047.1	Mechanical
KT3050.1	Robotics and Mechatronics
KT3101.1	Telecommunications

Bachelor of Engineering Science

3664.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

This course has two intakes - Start year (Autumn) and Mid year (Spring). Students will need to check the entry relevant to their intake.

The Bachelor of Engineering Science course is offered as an entry program. It is also a three-year exit program for the following courses: four year Bachelor of Engineering (BE) and BE (Adv). The course is identical to the first three years of the BE course with the common first year for all engineering disciplines and it also shares two units with the Bachelor of Industrial Design and two units with the Bachelor of Construction Management, exposing students to a wide range of experiences. Students have the opportunity to focus on an area of speciality by undertaking one of the following key programs: Civil, Computer, Construction, Electrical, Environmental, Mechanical, Robotics & Mechatronics or Telecommunications.

Study Mode
Three years full time or part-time equivalent.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Admission

Assumed knowledge: Mathematics band 4 or higher, any two units of science and any two units of English.

Recommended studies: Physics and HSC Mathematics Extension 1 or HSC Mathematics Extension 2.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

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Special Requirements

Background knowledge on calculus and physics is desirable.

Course Structure

Academic Course Advisor

Dr Fidelis Mashiri is the Academic Course Advisor for Key Programs in Civil, Construction and Environmental.

Dr Qi Cheng is the Academic Course Advisor for Key Programs in Electrical, Computer and Telecommunications.

Dr Jonathan Vincent is the Academic Course Advisor for Key Programs in Robotics & Mechatronics and Mechanical.

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Full-time - Autumn Intake

Year 1

Autumn session

| 300743.2 | Mathematics for Engineers Preliminary |

or Elective*

300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

* Students without Mathematics at Band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective.

Year 2 - Year 3

Students must then select one of the following key programs:

KT3075.1	Civil
KT3076.1	Computer
KT3077.1	Construction
KT3079.1	Environmental
KT3104.1	Electrical
KT3080.1	Mechanical
KT3081.1	Robotics and Mechatronics
KT3105.1	Telecommunications

Recommended Sequence

Full-time - Spring Intake

The sequence of units for Year 1 Spring Intake is different for each Key Program. Please see details under each Key Program link above.

Bachelor of Engineering Science (UWSC First Year Program)

7030.1

The Bachelor of Engineering Science (UWSC First Year Program) is designed to prepare students for tertiary study in Engineering Science and in so doing address any perceived deficiencies in the students' mathematical and physics knowledge and skills. This course presents students with units from the first year of the Bachelor of Engineering Science degree and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering Science degree. This course is completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs and is designed to develop students to have greater ability in self-directed study and have the self efficacy that comes from prior achievement in a tertiary environment.

Study Mode

One year full-time

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Engineering Science. This course is accredited by the University, as principal, to enable its agent (UWSCollege) to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.
- Passed the UWSCollege Foundation Studies Mathematics unit at C grade level or higher for which advanced standing can be applied for.

Assumed to have a background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Engineering Science), OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

Course Structure

Students must pass the following units

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700044.2	Mathematics (UWSCFS)
700026.2	Physics (UWSCFS)
700100.1	Mathematics for Engineers Preliminary (UWSC)
700019.4	Mathematics for Engineers 1 (UWSC)
700024.1	Electrical Fundamentals (UWSC)
700021.1	Engineering and Design Concepts (UWSC)
700018.1	Engineering Computing (UWSC)
700038.2	Engineering Design and Construction Practice (UWSC)
700023.1	Fundamentals of Mechanics (UWSC)
700020.1	Physics and Materials (UWSC)

Students must also complete the non-award unit Tertiary Study Skills.

Bachelor of Housing

3635.5

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

This course is aimed at providing the skills and abilities necessary to perform competently at a professional level in the building industry, in one or more of the following roles: Construction Managers, Project Managers, Building Supervisors, Estimators, Quantity Surveyors and Building Researchers. Students will develop specialised skills in construction management. The Construction Management program is widely recognised for delivering the full suite of theoretical, practical, and hands-on experience in the area of construction management. Students will study four concentrated areas related to the delivery of construction projects. These are construction technology; construction economics; construction law; and construction resource management. Additionally, students will be required to undertake a total of 1,200 hours approved practical experience during the course. There are a number of opportunities during the course for obtaining a cadetship in the building industry in areas including building surveying, construction economics, and construction management.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Admission

Assumed knowledge required - Normal UWS UAI score with HSC 2 unit Mathematics, Physics and English for entry into first year.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable

proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC websit

International applicants must apply directly to the University of Western Sydney via UWS International.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Details of minimum English proficiency requirements and acceptable proof can be found on the Universities Admissions Centre website (UAC).

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Academic Course Advisor

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below. Students should have no more than 100 credit points of Level 1 units and no fewer than 60 credit points of Level 3 Units.

In some instances due to resource and demand considerations, there may be a need to rearrange the pattern set down below.

Electives within the sequence may be used towards obtaining an approved major or sub-major for this award.

Recommended Sequence

Full-time

Year 1

Autumn session

300706.2	Building 1
300729.2	Graphic Communication and Design
300674.2	Engineering, Design and Construction Practice
300016.2	Design Science

Spring session

200184.3	Introduction to Business Law
200101.3	Accounting Information for Managers
300707.2	Building 2
MG102A.4	Management Foundations

Year 2

Autumn session

300720.2	Construction Technology 1 (Civil)
200486.2	Quantity Surveying 1
200472.3	Material Science in Construction
300723.2	Development Control

Spring session

300721.3	Construction Technology 2 (Substructure)
200468.2	Estimating 1
300885.1	Building Regulations Studies

And Elective 1

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Year 3

Autumn session

200485.2	Decision Making for Construction Professionals
300727.2	Project Management
300728.2	Construction Planning

And Elective 2

Spring session

300886.1	Construction in Practice 1
300053.3	Professional Practice
200292.2	Building Law

And Elective 3

Please note

Students may choose electives from any course at UWS including the following:

Elective 1 options

Choose one of the following

200503.2	Construction Information Systems
200502.3	Construction Technology 3 (Concrete Construction)

Elective 2 option

300748.2	Quality and Value Management

Elective 3 options

Choose one of

200487.3	Quantity Surveying 2
200470.4	Construction Technology 4 (Steel Construction)

Bachelor of Housing students wishing to continue on to gain Bachelor of Construction Management are required to undertake the following electives: 200502 - Construction Technology 3 and 200470 - Construction Technology 4.

Bachelor of Industrial Design

3503.5

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was Spring 2010 or later.

The industrial design program prepares students to be flexible and innovative, with the emphasis placed on design, and its place in and effect on society and people. The Bachelor of Industrial Design program takes account of the rapid transformation of communication and industrial technologies, and recognizes the need for designers to resolve increasingly complex issues. It provides students with the knowledge and skills to enable them to respond with flexibility to the challenges of industrial design.

Study Mode

Four years full-time. Reduced loads are available with consultation during Years 1 to 3 of the program.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Advanced Standing

Where tertiary studies have been undertaken previously, credit transfer may be approved, reducing the overall study time.

Accreditation

Graduates are eligible for membership of the Design Institute of Australia (DIA).

Admission

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Academic Course Advisor

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below. To be eligible to graduate from this course, students are required to complete a sub-major. Refer to the 'note' after the sub-major listing, for further details.

Recommended Sequence

Full-time

Year 1

Autumn session

300674.2	Engineering, Design and Construction Practice
300016.2	Design Science
300776.2	Applied Ergonomics
200191.5	Fundamentals of Mathematics

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Spring session

300462.2	Engineering and Design Concepts
300302.2	Industrial Graphics 1: Presentation
300304.3	Sustainable Design: Materials Technology
200083.2	Marketing Principles

Year 2

Autumn session

300305.3	Design Studio 1: Themes and Variations
300282.2	Industrial Graphics 2: Transition
300309.3	Sustainable Design: Life Cycle Analysis

Note: Unit 300309 Sustainable Design: Life Cycle Analysis to be replaced by unit 300570 Human-Computer Interaction from 2013.

And one sub-major alternate unit or one elective

Spring session

300308.3	Design Studio 2: The Design Proposal
300306.3	Sustainable Design: Sustainable Futures
300310.3	Industrial Graphics 3: 3D Solids

And one sub-major alternate unit or one elective

Year 3

Autumn session

300311.3	Design Studio 3: Product Realisation
300014.3	Design Management 3: Organisational Skills for Designers

And two sub-major alternate units or two electives

Spring session

300313.3	Design Studio 4: Simulate to Innovate
300314.2	Designed Inquiry

And two sub-major alternate units or two electives

Students enrolled in the 3503 - Bachelor of Industrial Design may exit the course with the 3502 - Bachelor of Design and Technology at the completion of Year 3.

Year 4 (Honours stream - H3002)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Autumn session

300773.2	Industrial Design Project (Commencement)

Co-requisite: One alternate unit - selected based on final year theme/issue in consultation with the Unit Coordinator.

Spring session

300774.2	Industrial Design Project (Completion)

Industrial Experience

300775.2	Industrial Experience

Year 4

Coursework Stream

Autumn session

300459.2	Major Project Commencement

Co-requisite: One alternate unit - selected based on final year theme/issue in consultation with the Unit Coordinator.

Choose one of

300012.3	Design Management 1: Product Design Audit
300312.3	Industrial Graphics 4: Surface

Spring session

300460.2	Major Project Completion

Choose one of

300013.3	Design Management 2: Corporate Image and Identity
300015.3	Design Management 4: Design Process
300735.2	Automated Manufacturing
300315.3	Industrial Graphics 5: Integrated

From 2013 unit 300315 Industrial Graphics 5: Integrated will no longer be offered.

Industrial Experience

300775.2	Industrial Experience

Majors

M3503IDM.1	Innovation Design Management
M3503IIG2.1	Interactive Industrial Graphics
M3503INTDM.1	International Design Management

Sub-majors

S3502DM.1	Design Management
S3502IG.1	Industrial Graphics
S3502SD.1	Sustainable Design

Note: In addition to the sub-major streams/electives offered from within Industrial Design (as listed above) students may choose other sub-major streams/electives within the School of Computing, Engineering and Mathematics at the University of Western Sydney or other universities (as cross-institutional studies).

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

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Bachelor of Information and Communications Technology

3639.1

The Bachelor of Information and Communications Technology is a professional ICT course that provides graduates with a skills and knowledge base in networking and IT applications areas of ICT and the ability to apply practical solutions across ICT. It allows students to develop skills in application development, program design, systems analysis & design, networks, web-design, and the implementation of technology.

Their attributes can be conceptually grouped into the knowledge and skills necessary to: •investigate - the ability to draw on a solid technological and software core of ICT knowledge and practice in analysing and developing applications;

The Bachelor of Information and Communications Technology is a three year course accredited by the Australian Computer Society. It provides a solid foundation in Networks, Databases, Systems Analysis & Design, Programming, Web Technologies, Project Management, Professional Communications and Operating Systems and associated Computer Security. It also covers the necessary mathematical and statistical skills as needed by an ICT practitioner. The foundation core provides a basis for electives, sub-majors or majors in further studies including the areas of networks, web, interactive technologies, Mathematics, Statistics, Computational Decision Making, Knowledge Discovery and Data Mining, and health informatics. Some of these majors and electives may be offered at particular campuses and subject to the approval of the Director, Academic Programs.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal
Penrith Campus	Full Time	Internal

Accreditation
The Bachelor of Information and Communications Technology is accredited with the Australian Computer Society (ACS) at Professional level.

Admission
Assumed knowledge required: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Full-time - Start Year Intake

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300700.5	Statistical Decision Making

Spring session

300565.2	Computer Networking
300581.3	Programming Techniques
300104.4	Database Design and Development

And one elective

Year 2

Autumn session

300582.2	Technologies for Web Applications
300144.4	Object Oriented Analysis
300095.4	Computer Networks and Internets

And one elective

Spring session

300583.2	Web Systems Development
300699.2	Discrete Structures and Complexity

And two electives

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.3	Operating Systems Programming

And one elective

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Spring session

300579.3   Professional Experience

And three electives

Full-Time Mid Year Intake

Spring session 1

300565.2   Computer Networking
300144.4   Object Oriented Analysis
300104.4   Database Design and Development
300580.2   Programming Fundamentals

Autumn session 2

300582.2   Technologies for Web Applications
300585.2   Systems Analysis and Design
300700.5   Statistical Decision Making

And one elective

Spring session 3

300583.2   Web Systems Development
300699.2   Discrete Structures and Complexity

And two electives

Autumn session 4

300570.3   Human-Computer Interaction
300581.3   Programming Techniques
100483.2   Principles of Professional Communication 1
300095.4   Computer Networks and Internets

Spring session 5

300579.3   Professional Experience

And three electives

Autumn session 6

300578.3   Professional Development
300698.3   Operating Systems Programming

And two electives

Electives for majors and sub-majors

Electives for majors and sub-majors may not be available on all campuses and may create timetable clashes (given the range of possible progression options). Where an elective cannot be taken, the Course Advisor may approve equivalent units where there is considerable overlap. Such units might be found within the School at UWS or cross-institutional study.

Please note: Majors and sub-majors are optional.

Majors

M3001.1   Advanced Programming
M3023.1   Computational Decision Making
M3000.1   Computer Systems
M3005.1   Entertainment Computing
M3004.1   Health Informatics
M3002.1   Information Technology
M3024.1   Knowledge Discovery and Data Mining

M3021.1   Mathematics
M3025.1   Networking
M3022.1   Statistics
M3003.1   Web Systems Development

Sub-majors

SM3005.1   Applied Mathematics
SM3027.1   Computational Decision Making
SM3000.1   Computer Systems
SM3011.1   Entertainment Computing
SM3004.1   Formal Systems
SM3010.1   Health Information Applications
SM3009.1   Health Information Management
SM3031.1   IT Support
SM3028.1   Knowledge Discovery and Data Mining
SM3025.1   Mathematics
SM3008.1   Networking
SM3026.1   Statistics
SM3001.1   Systems Administration
SM3003.1   Systems Programming
SM3002.1   Systems Security
SM3006.1   Web Application Development (for Computing Students)
SM3007.1   Web Application Development (for Non-Computing Students)

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Information and Communications Technology (Advanced)

3684.1

The Bachelor of Information and Communications Technology (Advanced) is a challenging course that includes advanced coursework, extension project and basic research training. A mentoring program will link the student with experienced academic staff and research groups within UWS. This professional ICT course cultivates capable ICT graduates for the high end of ICT professions. This course provides graduates with comprehensive skills and knowledge base in networking and IT applications areas of ICT and the ability to apply practical solutions across ICT. It allows students to develop considerable skills in application development, program design, systems analysis & design, networks, web-design, and the implementation of technology. Their attributes can be conceptually grouped into the knowledge and skills necessary to:

The Bachelor of Information and Communications Technology (Advanced) is a three year ICT course with accreditation by the Australian Computer Society being sought. It provides a solid foundation in Networks, Databases, Systems Analysis & Design, Programming,

Web Technologies, Project Management, Professional Communications and Operating Systems and associated Computer Security. It also covers the necessary mathematical and statistical skills, and basic research training as needed by a high end ICT practitioner.

Study Mode
Three years full time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal
Penrith Campus	Full Time	Internal

Admission

Assumed knowledge - HSC Mathematics and any two units of HSC English.

Minimum ATAR of 90. Students must maintain a Grade Point Average (GPA) greater the 5.0 to continue their enrolment in this course.

International applicants must have a overall IELTS score of 6.5 with a minimum 6.0 in each subtest

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Students within the Advanced degree are required to complete five (5) Advanced units.

Compulsory Advanced units

- 300903 Programming Techniques (Advanced)

- 300902 Web Systems Development (Advanced)

- 300900 Professional Experience (Advanced)

A further two units to be chosen from

- 300946 Computer Networking (Advanced)

- 300888 Object Oriented Analysis (Advanced)

- 300941 Database Design and Development (Advanced)

- 300901 Human-Computer Interaction (Advanced)

- 300943 Operating Systems Programming (Advanced)

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300700.5	Statistical Decision Making

Spring session

Choose one of

300565.2	Computer Networking
300946.1	Computer Networking (Advanced)

Choose one of

300144.4	Object Oriented Analysis
300888.1	Object Oriented Analysis (Advanced)

Choose one of

300104.4	Database Design and Development
300941.1	Database Design and Development (Advanced)

And one elective

Year 2

Autumn session

300582.2	Technologies for Web Applications
300903.1	Programming Techniques (Advanced)
300095.4	Computer Networks and Internets

And one elective

Spring session

300699.2	Discrete Structures and Complexity
300902.1	Web Systems Development (Advanced)

And two electives

Year 3

Autumn session

300578.3	Professional Development

Choose one of

300698.3	Operating Systems Programming

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300943.1 Operating Systems Programming (Advanced)

Choose one of

300570.3 Human-Computer Interaction
300901.1 Human-Computer Interaction (Advanced)

And one elective

Spring session

300900.1 Professional Experience (Advanced)

And three electives

Majors and Sub-majors

Students please be advised that all Majors and Sub-majors available to course 3639.1 - Bachelor of Information and Communications Technology are also available to those enrolled in course 3684.1 - Bachelor of Information and Communications Technology (Advanced).

Please see link below for Majors and Sub-majors available.

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Information and Communications Technology/Bachelor of Arts

3654.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

This double degree program is designed in recognition of the globalising nature of the information technology industry. In addition to providing a strong technical background in IT, the course also provides students the necessary knowledge in majors in the Bachelor of Arts: International Relations and Asian Studies; Cultural and Social Analysis; English; History and Political Thought; Philosophy; Chinese; Japanese.

In the IT area, the program allows students to develop skills in application development, program design, systems analysis and design, networks, web-design, and the implementation of technology.

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Information and Communications Technology is currently accredited with the Australian Computer Society (ACS) at Professional level.

Admission
Assumed knowledge required: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure
Qualification for this award requires the successful completion of 320 credit points as specified in the structure below.

Students who complete this award will graduate with a Bachelor of Information and Communications Technology and a Bachelor of Arts.

The conceptual design of this BICT/BA double degree is as follows.

Years 1 to 3 - Students will complete 160cp of Bachelor of Information and Communications Technology units as listed in the course structure below.

In Years 1 to 4 they will complete the 4 BA core units, an 8 unit BA major and a 4 unit BA sub-major from the majors and sub-majors in the Bachelor of Arts as offered on Parramatta campus only.

BA Majors

- M1060 Chinese
- M1052 Cultural and Social Analysis
- M1053 English
- M1054 History and Policical Thought
- M1055 International Relations and Asian Studies
- M1062 Japanese

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- M1058 Philosphy

BA Sub-majors

- SM1078 Chinese

- SM1070 Cultural and Social Analysis

- SM1071 Engligh

- SM1072 History and Political Thought

- SM1073 International Relations and Asian Studies

- SM1080 Japanese

- SM1076 Philosophy

Arts Units

For details of the relevant Arts units, refer to the current listing of Bachelor of Arts, course code 1706.

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300700.5	Statistical Decision Making

Spring session

300565.2	Computer Networking
300144.4	Object Oriented Analysis
300104.4	Database Design and Development

BA Core unit

Year 2

Autumn session

300582.2	Technologies for Web Applications
300581.3	Programming Techniques
300095.4	Computer Networks and Internets

BA Core unit

Spring session

300583.2	Web Systems Development
300699.2	Discrete Structures and Complexity

BA Core unit
BA Major unit

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.3	Operating Systems Programming

BA Core unit

Spring session

300579.3	Professional Experience

BA Major unit
BA Major unit
BA Sub-major unit

Year 4

Autumn session
BA Major unit
BA Major unit
BA Sub-major unit
BA Sub-major unit

Spring session
BA Major unit
BA Major unit
BA Major unit
BA Sub-major unit

Bachelor of Information and Communications Technology/Bachelor of Business and Commerce

3655.3

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students who commenced study in this course in 2012 or later.

This double degree program targets the wide application of information technology in Business and Commerce. It provides students with a strong technical background in IT and Business and Commerce. It allows students to develop skills in application development, program design, systems analysis & design, networks, web-design, and the implementation of technology.

This degree combines information technology with one of seven Majors in:

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Information and Communications Technology is currently accredited with the Australian Computer Society (ACS) at Professional level.

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Admission

Eligibility for admission to the Bachelor of Information and Communications Technology/Bachelor of Business and Commerce is based on the following requirements:

Assumed knowledge required: HSC Mathematics and two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Qualification for this award requires the successful completion of 320 credit points as per the structure below.

Students are eligible to graduate with a Bachelor of Information and Communications Technology, on completion of all the 24 units listed in the first three years of the relevant sequence below.

The conceptual design of this Bachelor of Information and Communications Technology/Bachelor of Business and Commerce double degree is as follows.

1) Years 1 to 3 students complete their BICT (16 units) and two elective units;

2) Also, in Years 1 to 3 students complete five common BBC core units and one BBC Major unit. Students may also elect to take two alternate BBC units in Year 1 which will be deemed equivalent to two BICT units. In Year 4 they complete eight BBC Major units.

3) Students within this course will only be permitted to undertake the following majors within 2753 Bachelor Business and Commerce.

*MT2001 Applied Finance

*MT2002 Hospitality Management

*MT2003 Human Resource Management and Industrial Relations

*MT2004 International Business

*MT2004 International Business

*MT2005 Management

*MT2006 Marketing

*MT2008 Sport Management

Please note that the Sport Management major is only offered at Campbelltown campus.

Bachelor of Information and Communications Technology/ Bachelor of Business and Commerce (Applied Finance)

Parramatta and Campbelltown campus

Year 1

Autumn session

300585.2	Systems Analysis and Design
300580.2	Programming Fundamentals

Choose one of

200336.3	Business Academic Skills
100483.2	Principles of Professional Communication 1

Choose one of

300700.5	Statistical Decision Making
200032.5	Statistics for Business

Spring session

200083.2	Marketing Principles
300144.4	Object Oriented Analysis
300565.2	Computer Networking
300104.4	Database Design and Development

Year 2

Autumn session

200571.3	Management Dynamics
300582.2	Technologies for Web Applications
300581.3	Programming Techniques
300095.4	Computer Networks and Internets

Spring session

300583.2	Web Systems Development
300699.2	Discrete Structures and Complexity
200184.3	Introduction to Business Law
200525.2	Principles of Economics

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.3	Operating Systems Programming
200101.3	Accounting Information for Managers

Spring session

300579.3	Professional Experience
200488.3	Corporate Financial Management

And two electives

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Year 4

Autumn session

200549.2	The Australian Macroeconomy
200048.2	Financial Institutions and Markets
200537.3	Economics and Finance Engagement Project

And one alternate unit

Spring session

200053.3	Economic Modelling
200057.3	Investment Management

And two alternate units

Alternate units

200078.2	Portfolio Management
200055.4	International Finance
200077.2	The Superannuation Industry
200079.2	Derivatives
200518.2	Behavioural Finance
200059.2	Financial Economics

Bachelor of Information and Communications Technology/ Bachelor of Business and Commerce (Hospitality Management)

Parramatta campus

Year 1

Autumn session

300585.2	Systems Analysis and Design
300580.2	Programming Fundamentals

Choose one of

100483.2	Principles of Professional Communication 1
200336.3	Business Academic Skills

Choose one of

200032.5	Statistics for Business
300700.5	Statistical Decision Making

Spring session

200083.2	Marketing Principles
300144.4	Object Oriented Analysis
300565.2	Computer Networking
300104.4	Database Design and Development

Year 2

Autumn session

200571.3	Management Dynamics
300582.2	Technologies for Web Applications
300581.3	Programming Techniques
300095.4	Computer Networks and Internets

Spring session

300583.2	Web Systems Development
300699.2	Discrete Structures and Complexity

200184.3	Introduction to Business Law
200525.2	Principles of Economics

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.3	Operating Systems Programming
200273.4	Managing Service and Experience

Spring session

300579.3	Professional Experience
200101.3	Accounting Information for Managers

And two electives

Year 4

Autumn session

200709.2	Managing the Accommodation Experience
200710.2	Managing the Food and Beverage Experience
200708.2	Hospitality Industry
200707.2	Service Industry Studies

Spring session

200584.3	Hospitality Management Operations
200742.2	Sport and Hospitality Event Management
200148.2	Planning and Design of Hospitality Facilities
200561.3	Hospitality Management Applied Project

Bachelor of Information and Communications Technology/ Bachelor of Business and Commerce (Human Resource Management and Industrial Relations)

Parramatta and Campbelltown campus

Year 1

Autumn session

300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design

Choose one of

200336.3	Business Academic Skills
100483.2	Principles of Professional Communication 1

Choose one of

300700.5	Statistical Decision Making
200032.5	Statistics for Business

Spring session

200083.2	Marketing Principles
300144.4	Object Oriented Analysis
300565.2	Computer Networking
300104.4	Database Design and Development

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Year 2

Autumn session

200571.3	Management Dynamics
300582.2	Technologies for Web Applications
300581.3	Programming Techniques
300095.4	Computer Networks and Internets

Spring session

300583.2	Web Systems Development
300699.2	Discrete Structures and Complexity
200184.3	Introduction to Business Law
200525.2	Principles of Economics

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.3	Operating Systems Programming
200101.3	Accounting Information for Managers

Spring session

300579.3	Professional Experience
200300.2	Managing People at Work

And two electives

Year 4

Autumn session

200614.2	Enterprise Industrial Relations
200621.3	International Human Resource Management
200616.3	Workplace Behaviour
200613.2	Negotiation, Bargaining and Advocacy

Spring session

200739.2	Reward and Performance Management
200740.3	Human Resource and Industrial Relations Strategy
200575.3	Processes and Evaluation in Employment Relations

Choose one of

200610.2	Employee Training and Development
200150.2	Managing Diversity
200753.2	Occupational Health and Safety

Bachelor of Information and Communications Technology/ Bachelor of Business and Commerce (International Business)

Parramatta campus

Year 1

Autumn session

300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design

Choose one of

100483.2	Principles of Professional Communication 1
200336.3	Business Academic Skills

Choose one of

200032.5	Statistics for Business
300700.5	Statistical Decision Making

Spring session

200083.2	Marketing Principles
300144.4	Object Oriented Analysis
300565.2	Computer Networking
300104.4	Database Design and Development

Year 2

Autumn session

200571.3	Management Dynamics
300582.2	Technologies for Web Applications
300581.3	Programming Techniques
300095.4	Computer Networks and Internets

Spring session

300583.2	Web Systems Development
300699.2	Discrete Structures and Complexity
200184.3	Introduction to Business Law
200525.2	Principles of Economics

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.3	Operating Systems Programming
200101.3	Accounting Information for Managers

Spring session

300579.3	Professional Experience
200591.2	Introduction to International Business

And two electives

Year 4

Autumn session

200541.3	Globalisation and Trade
200094.2	International Marketing
200626.2	International Business Strategy
200595.3	International Business Finance

Spring session

200590.2	International Business Project
200374.3	International Marketing Research
200589.2	Export Strategy and Applications

Choose one of

200098.2	The Markets of Asia
200099.3	The Markets of Europe

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Bachelor of Information and Communications Technology/ Bachelor of Business and Commerce (Management)

Parramatta and Campbelltown campus

Year 1

Autumn session

300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design

Choose one of

200336.3	Business Academic Skills
100483.2	Principles of Professional Communication 1

Choose one of

200032.5	Statistics for Business
300700.5	Statistical Decision Making

Spring session

200083.2	Marketing Principles
300144.4	Object Oriented Analysis
300565.2	Computer Networking
300104.4	Database Design and Development

Year 2

Autumn session

200571.3	Management Dynamics
300582.2	Technologies for Web Applications
300581.3	Programming Techniques
300095.4	Computer Networks and Internets

Spring session

300583.2	Web Systems Development
300699.2	Discrete Structures and Complexity
200184.3	Introduction to Business Law
200525.2	Principles of Economics

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.3	Operating Systems Programming
200101.3	Accounting Information for Managers

Spring session

300579.3	Professional Experience
200585.2	Organisational Behaviour

And two electives

Year 4

Autumn session

200158.3	Business, Society and Policy
200586.2	Cross Cultural Management
200570.3	Management of Change

200752.2	Power, Politics and Knowledge

Spring session

200588.2	Global Operations and Logistics Management
200159.4	Organisation Analysis and Design
200568.3	Contemporary Management Issues
200587.2	Strategic Management

Bachelor of Information and Communications Technology/ Bachelor of Business and Commerce (Marketing)

Parramatta and Campbelltown campus

Year 1

Autumn session

300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design

Choose one of

200336.3	Business Academic Skills
100483.2	Principles of Professional Communication 1

Choose one of

200032.5	Statistics for Business
300700.5	Statistical Decision Making

Spring session

200083.2	Marketing Principles
300144.4	Object Oriented Analysis
300565.2	Computer Networking
300104.4	Database Design and Development

Year 2

Autumn session

200571.3	Management Dynamics
300582.2	Technologies for Web Applications
300581.3	Programming Techniques
300095.4	Computer Networks and Internets

Spring session

300583.2	Web Systems Development
300699.2	Discrete Structures and Complexity
200184.3	Introduction to Business Law
200525.2	Principles of Economics

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.3	Operating Systems Programming
200101.3	Accounting Information for Managers

Spring session

300579.3	Professional Experience

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200084.2   Consumer Behaviour

And two electives

Year 4

Autumn session

200086.3   Marketing Communications
200592.2   Marketing Research
200087.3   Strategic Marketing Management
200094.2   International Marketing

Spring session

200090.3   Marketing of Services
200088.2   Brand and Product Management
200091.3   Business to Business Marketing
200096.3   Marketing Planning Project

Bachelor of Information and Communications Technology/ Bachelor of Business and Commerce (Sport Management)

Campbelltown campus

Year 1

Autumn session

300585.2   Systems Analysis and Design
300580.2   Programming Fundamentals

Choose one of

200336.3   Business Academic Skills
100483.2   Principles of Professional Communication 1

Choose one of

300700.5   Statistical Decision Making
200032.5   Statistics for Business

Spring session

200083.2   Marketing Principles
300144.4   Object Oriented Analysis
300565.2   Computer Networking
300104.4   Database Design and Development

Year 2

Autumn session

200571.3   Management Dynamics
300582.2   Technologies for Web Applications
300581.3   Programming Techniques
300095.4   Computer Networks and Internets

Spring session

300583.2   Web Systems Development
300699.2   Discrete Structures and Complexity
200184.3   Introduction to Business Law
200525.2   Principles of Economics

Year 3

Autumn session

300570.3   Human-Computer Interaction
300578.3   Professional Development
300698.3   Operating Systems Programming
200705.2   The World of Sport Management

Spring session

300579.3   Professional Experience
200101.3   Accounting Information for Managers

And two electives

Year 4

Autumn session

200665.2   Strategic Communication in Sport
200273.4   Managing Service and Experience
200754.2   Sports Management - Planning and Development
200707.2   Service Industry Studies

Spring session

200664.2   Sport Management Internship
200742.2   Sport and Hospitality Event Management
200751.2   Sport Management Applied Project
400335.3   Contemporary Issues in Sport Management

Bachelor of Information and Communications Technology/Bachelor of Business and Commerce (Accounting)

3656.2

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students who commenced study in this course in 2012 or later.

This double degree program targets the wide application of information technology in Business and Commerce in Accounting. It provides students with a strong technical background in IT and Business and Commerce in Accounting. It allows students to develop skills in application development, program design, systems analysis & design, networks, web-design, and the implementation of technology.

This degree combines information technology with knowledge required by professional Accountants.

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

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Accreditation

The Bachelor of Information and Communications Technology is accredited with the Australian Computer Society (ACS) at Professional level. The Bachelor of Business and Commerce (Accounting) has accreditation with CPA Australia and The Institute of Chartered Accountants in Australia.

Inherent requirements

There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission

Eligibility for admission to the Bachelor of Information and Communications Technology/Bachelor of Business and Commerce (Accounting) is based on the following requirements:

Assumed knowledge required: HSC Mathematics and two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Qualification for this award requires the successful completion of 320 credit points as per the structure below.

Students are eligible to graduate with a Bachelor of Information and Communications Technology, on completion of all the 24 units listed in the first three years of the relevant sequence below.

The conceptual design of this Bachelor of Information and Communications Technology/Bachelor of Business and Commerce (Accounting) double degree is as follows.

1) Years 1 to 3 students complete their Bachelor of Information and Communications Technology (16 units);

2) Also, in Years 1 to 3 students complete two common core units of the Bachelor of Business and Commerce and six of the Bachelor of Business and Commerce Accounting Major units. Students may also elect to take two alternate Bachelor of Business and Commerce units (as suggested in the course document) in Year 1 which will be deemed equivalent to two Bachelor of Information and

Communications Technology units. In Year 4 they complete three Bachelor of Business and Commerce common core units and five Bachelor of Business and Commerce Accounting Major units.

Year 1

Autumn session

300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design

Choose one of

100483.2	Principles of Professional Communication 1
200336.3	Business Academic Skills

Choose one of

300700.5	Statistical Decision Making
200032.5	Statistics for Business

Spring session

300565.2	Computer Networking
300144.4	Object Oriented Analysis
300104.4	Database Design and Development
200101.3	Accounting Information for Managers

Year 2

Autumn session

300582.2	Technologies for Web Applications
300581.3	Programming Techniques
300095.4	Computer Networks and Internets
200111.2	Financial Accounting Applications

Spring session

300583.2	Web Systems Development
300699.2	Discrete Structures and Complexity
200116.4	Management Accounting Fundamentals
200488.3	Corporate Financial Management

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.3	Operating Systems Programming
200536.3	Intermediate Financial Accounting

Spring session

300579.3	Professional Experience
200534.3	Accounting Information Systems
200109.4	Corporate Accounting Systems
200571.3	Management Dynamics

Year 4

Autumn session

200535.2	Auditing and Assurance Services
200108.2	Contemporary Management Accounting
200183.4	Law of Business Organisations
200525.2	Principles of Economics

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Spring session

200184.3	Introduction to Business Law
200083.2	Marketing Principles
200267.2	Advanced Accounting
200118.3	The Accountant as a Consultant

Note: This course will satisfy membership requirements of the CPA professional accounting body. However, students will be required to complete a postgraduate unit in Taxation Law to be eligible for membership to Chartered Accountants accounting body.

Bachelor of Information and Communications Technology (Honours)

3668.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

The Honours program encourages independence in learning and research; further develops academic ability, provides the opportunity to pursue undergraduate studies to a more advanced level, deepen intellectual understanding in the major field of study and develop research skills. Honours is a recognised point of entry into postgraduate research studies at PhD and Masters levels. If a career in industry is sought, Honours enables study to a more advanced level with a higher qualification. The course has the opportunity for direct commercial and industrial involvement with a diverse range of organisations through the provision and joint supervision of research projects.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Admission

Assumed Knowledge: Bachelor Degree

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International. International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Qualification for this award requires the successful completion of 80 credit points including the units listed below.

Recommended Sequence

Year 1

Note: Students must enrol in 300363 & 300364 in both 1H & 2H sessions.

1H & 2H

300364.3	Computing Honours Seminar Program

1H & 2H

300363.3	Computing Honours Thesis

1H or 2H

Elective (Level 3 or above) – To be selected after discussion with student supervisor

Bachelor of Science (Honours) Mathematics

2711.1

The honours program encourages independence in learning and research, further develops academic ability, provides the opportunity to pursue undergraduate studies to a more advanced level, deepen intellectual understanding in the major field of study and develop research skills. An Honours degree is a recognised point of entry into postgraduate research studies at PhD level. If a career in industry is sought, Honours enables study to a more advanced level with a higher qualification. The course has the opportunity for direct commercial and industrial involvement with a diverse range of organisations through the provision of and joint supervision of research projects.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal

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Admission

Admission requirements follow the recommendations and guidelines in the UWS Honours Policy. The basic requirement is completion of a bachelors pass degree in which the advanced level units in a relevant field of study were completed at a grade point average of 5.0 or better.

Course Structure

Qualification for this award requires the successful completion of 80 credit points which includes three core units made up of an advanced topic unit in mathematics, a research proposal and seminar plus a thesis in mathematics.

Core Units

200411.2	Advanced Topics in Mathematics
200412.5	Research Proposal and Seminar
200413.3	Mathematics Honours Thesis

Associate Degree in Engineering

7022.1

The Associate Degree in Engineering is a two year program in Engineering designed for people who are currently working in engineering or related areas with a trade or Certificate IV qualification or higher who wish to upgrade their qualifications in Engineering and possibly continue to the full degree program. The Associate Degree in Engineering has a common first year program for all engineering disciplines, exposing students to a wide range of experiences in the first year. In the second year students may choose units from the elective pool that will allow them to follow their interests in the various Engineering disciplines. If students choose to apply to study in the Bachelor of Engineering after graduating from the Associate Degree in Engineering they will have completed at least 12 units in eight of the current key programs.

Study Mode
Four sessions

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

Applicants may be regarded as eligible for admission if they have completed the NSW HSC and attained the required ATAR (Australian Tertiary Admission Rank), or have completed other equivalent qualifications such as a recognised Certificate III or Certificate IV and vocational experience and attained the required entrance standard set for entry to the course. This may include bridging/ preparatory courses, para-professional and other post-secondary qualifications. Admission to the Associate Degree in Engineering also requires an applicant to have at least five years relevant industry experience.

Course Structure

Session 1:

700112.1	Fundamentals for Engineering Studies (UWSC Assoc Deg)
700106.1	Engineering Computing (UWSC Assoc Deg)

Session 2:

700114.1	Introduction to Engineering Business Management (UWSC Assoc Deg)
700107.1	Engineering, Design and Construction Practice (UWSC Assoc Deg)

Session 3:

700103.1	Mathematics for Engineers Preliminary (UWSC Assoc Deg)
700109.1	Engineering Management for Engineer Associates (UWSC Assoc Deg)

Session 4:

700113.1	Fundamentals of Mechanics (UWSC Assoc Deg)
700105.1	Engineering and Design Concepts (UWSC Assoc Deg)

Session 5:

700101.1	Mathematics for Engineers 1 (UWSC Assoc Deg)
700117.1	Physics and Materials (UWSC Assoc Deg)

Session 6:

700118.1	Professional Practice for Engineer Associates (UWSC Assoc Deg)

One Alternate unit

Session 7:

700104.1	Electrical Fundamentals (UWSC Assoc Deg)

One Alternate unit

Session 8:

700110.1	Engineering Project (UWSC Assoc Deg)

One Alternate unit

Alternate Units

700116.1	Mechanics of Materials (UWSC Assoc Deg)
700102.1	Mathematics for Engineers 2 (UWSC Assoc Deg)
700120.1	Surveying for Engineers (UWSC Assoc Deg)
700111.1	Fluid Mechanics (UWSC Assoc Deg)
700119.1	Soil Engineering (UWSC Assoc Deg)
700115.1	Introduction to Structural Engineering (UWSC Assoc Deg)

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Diploma in Construction Management

7015.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2012 or later.

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Construction Management is designed to provide students with the first year units included in the Bachelor of Construction Management course. The Diploma presents students with a range of subjects covering the science, building and management aspects of construction management. Transition to Tertiary study is assisted by the inclusion of Foundation level Mathematics and Physics. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Construction Management degree. The Diploma in Construction Management, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
One year full-time (three sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Construction Management. The Diploma is accredited by the University, as principal, to enable its agent, UWSCollege, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Construction Management), OR

- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have a background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

Special Requirements
All students must complete Tertiary Study Skills with UWSCollege prior to completion of the Diploma.

Course Structure
Qualification for this award requires the successful completion of the units listed below.

Students are required to successfully complete the following units

700126.1	Design Science (UWSC)
700021.1	Engineering and Design Concepts (UWSC)
700038.2	Engineering Design and Construction Practice (UWSC)
700070.1	Building 1 (UWSC)
700071.1	Building 2 (UWSC)
700003.2	Management Dynamics (UWSC)
700004.1	Introduction to Business Law (UWSC)
700005.1	Accounting Information for Managers (UWSC)

Students are required to achieve a Satisfactory grade for the following units

700026.2	Physics (UWSCFS)
700069.2	Mathematics B (UWSCFS)

Students also complete a special requirement unit, Tertiary Study Skills, although this does not count for credit towards the Diploma.

Diploma in Construction Management Fast Track

7016.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2012 or later.

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This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Construction Management (Fast Track) is designed to provide students with the first year units included in the Bachelor of Construction Management course. The Diploma presents students with a range of subjects covering the science, building and management aspects of construction management. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Construction Management degree. The Diploma in Construction Management, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
Eight months full-time (two sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Construction Management. The Diploma is accredited by the University, as principal, to enable its agent, UWSCollege, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.
- Passed a UWSCollege Foundation Studies Mathematics unit at C grade level or higher.

Students are also assumed to have background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Construction Management), OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.

- Passed a UWSCollege Foundation Studies Mathematics unit at C grade level or higher.

Students are also assumed to have a background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

Special Requirements
All students must complete Tertiary Study Skills with UWS College prior to completion of the Diploma.

Course Structure
To be awarded the Diploma in Construction Management, student must pass the following units

700126.1	Design Science (UWSC)
700021.1	Engineering and Design Concepts (UWSC)
700038.2	Engineering Design and Construction Practice (UWSC)
700070.1	Building 1 (UWSC)
700071.1	Building 2 (UWSC)
700003.2	Management Dynamics (UWSC)
700004.1	Introduction to Business Law (UWSC)
700005.1	Accounting Information for Managers (UWSC)

Students also complete a special requirement unit, Tertiary Study Skills, although this does not count for credit towards the Diploma.

Diploma in Engineering

7006.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2011 or later.

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Engineering is designed to prepare students for tertiary study in Engineering and in doing so address any perceived deficiencies in the students' mathematical and physics knowledge and skills. The Diploma presents students with units from the first year of the Bachelor of Engineering Degree. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering degree. The Diploma in Engineering, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
One year full-time (three sessions)

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Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the Diploma is to prepare students for tertiary study in Engineering. The Diploma is accredited by the University, as principal, to enable its agent, UWSCollege, to offer to its students who are fully prepared for study beyond the first year of a tertiary award.

International students entering this Diploma are required to have met the following.

1. English Entry Requirements

- IELTS 6.0 with a minimum of 5.5 in all areas, or
- Completion of UWS College EAPIII course with a 50% pass, or
- A pass in the Foundation Academic English course, or
- A pass in the UWS College English Entrance test at IELTS 6.0 with a minimum of 5.5 in all areas.

2. Academic Entry Requirements

Vary according to country of origin. However, in general, completion of Year 12 or its equivalent is the minimum entry requirement OR to have passed the UWSCollege Foundation Certificate, offered by UWSCollege, with a Grade Point Average of 5.5 or higher.

Local students entering this Diploma are required to have met the following.

1. Completed an English subject in the NSW Higher School Certificate, or to have competency in English at IELTS 6.0 with a minimum of 5.5 in all areas (unless a native speaker) or have completed the UWSCollege English test at IELTS 6.0 equivalent with a minimum of 5.5 in all areas; or to have passed the UWSCollege Foundation English unit.

2. Other entry requirements such as an ATAR identified prior to the offer of a place, or to have completed the UWSCollege Foundation Studies course, with a Grade Point Average of 5.5 or better, and a pass in Foundation level Mathematics Extension.

3. Assumed to have background in mathematics at Senior High School level and assumed background Science knowledge, preferably in Physics.

Special Requirements

All students must complete Tertiary Study Skills with UWSCollege prior to completion of the diploma.

Course Structure

Qualification for this award requires the successful completion of the units listed in the recommended sequence below.

Students who have completed an HSC equivalent qualification with study in the relevant areas will be eligible for advanced standing for Mathematics C and Physics and therefore need to complete the remaining 8 units.

Students are required to achieve a Satisfactory grade for the following units

700025.1	Mathematics C (UWSCFS)
700026.2	Physics (UWSCFS)

Students are required to successfully complete the following units

700038.2	Engineering Design and Construction Practice (UWSC)
700019.4	Mathematics for Engineers 1 (UWSC)
700020.1	Physics and Materials (UWSC)
700018.1	Engineering Computing (UWSC)
700022.2	Mathematics for Engineers 2 (UWSC)
700023.1	Fundamentals of Mechanics (UWSC)
700024.1	Electrical Fundamentals (UWSC)
700021.1	Engineering and Design Concepts (UWSC)

Students also complete a mandatory special requirement unit, Tertiary Study Skills, although this does not count for credit towards the Diploma.

Diploma in Engineering Fast Track

7010.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is Term N 2010 or later.

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Engineering is designed to prepare students for tertiary study in Engineering. The Diploma presents students with subjects from the first year of subjects in the Bachelor of Engineering Degree. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering degree. The Diploma in Engineering, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode

Eight months full-time (two sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Engineering. The Diploma is accredited by the University, as principal, to enable its agent, UWSCollege, to prepare students for study beyond the first year of a tertiary award.

International students entering this Diploma are required to have met the following.

1. English Entry Requirements

- IELTS 6.0 with a minimum of 5.5 in all areas, or
- Completion of UWS College EAPIII course with a 50% pass, or

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- A pass in the Foundation Academic English course, or
- A pass in the UWSCollege English Entrance test at IELTS 6.0 with a minimum of 5.5 in all areas.

2. Academic Entry Requirements

Vary according to country of origin. However, in general, completion of Year 12 or its equivalent is the minimum entry requirement OR to have passed the UWS College Foundation Certificate, offered by UWS College, with a Grade Point Average of 6.0 or higher.

Students are also assumed to have background in Mathematics at senior high school level and assumed background Science knowledge, preferably in Physics.

Local students entering this Diploma are required to have met the following.

1. Completed an English subject in the NSW Higher School Certificate; or to have competency in English at IELTS 6.0 with a minimum of 5.5 in all areas (unless a native speaker); or have completed the UWSCollege English test at IELTS 6.0 equivalent with a minimum of 5.5 in all areas; or to have passed the UWSCollege Foundation English unit.

2. Other entry requirements such as an ATAR identified prior to the offer of a place, or to have completed the UWSCollege Foundation Studies course, with a GPA of 6.0 or better and a pass in Foundation level Mathematics Extension.

3. Assumed to have background in Mathematics at senior high school level and assumed background Science knowledge, preferably in Physics.

Special Requirements

All students must complete Tertiary Study Skills with UWSCollege prior to completion of the Diploma.

Course Structure

Qualification for this award requires the successful completion of the units listed below.

700018.1	Engineering Computing (UWSC)
700019.4	Mathematics for Engineers 1 (UWSC)
700020.1	Physics and Materials (UWSC)
700021.1	Engineering and Design Concepts (UWSC)
700022.2	Mathematics for Engineers 2 (UWSC)
700023.1	Fundamentals of Mechanics (UWSC)
700024.1	Electrical Fundamentals (UWSC)
700038.2	Engineering Design and Construction Practice (UWSC)

Students also complete a mandatory special requirement unit, Tertiary Study Skills, although this does not count for credit towards the Diploma.

Diploma in Engineering Science

7023.1

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Engineering Science is designed to prepare students for tertiary study in Engineering Science and in so doing address any perceived deficiencies in the students' mathematical and physics knowledge and skills. The Diploma presents students with units from the first year of

the Bachelor of Engineering Science degree. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering Science degree. The Diploma, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode

One year full-time (three sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Engineering. The Diploma is accredited by the University, as principal, to enable its agent (UWSCollege) to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.
- Passed the UWSCollege Foundation Studies Mathematics unit at C grade level or higher for which advanced standing can be applied for.

Assumed to have a background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Engineering Science), OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

English Entry Requirements. International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum of 5.5 in all areas, or
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.
- Passed the UWSCollege Foundation Studies Mathematics unit at C grade level or higher for which advanced standing can be applied for.

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Assumed to have background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

Special Requirements
All students must complete Tertiary Study Skills with UWSCollege prior to completion of the diploma.

Course Structure
Students must pass the following units

700044.2	Mathematics (UWSCFS)
700026.2	Physics (UWSCFS)
700100.1	Mathematics for Engineers Preliminary (UWSC)
700019.4	Mathematics for Engineers 1 (UWSC)
700024.1	Electrical Fundamentals (UWSC)
700021.1	Engineering and Design Concepts (UWSC)
700018.1	Engineering Computing (UWSC)
700038.2	Engineering Design and Construction Practice (UWSC)
700023.1	Fundamentals of Mechanics (UWSC)
700020.1	Physics and Materials (UWSC)

Students must also complete the non-award unit Tertiary Study Skills.

Diploma in Engineering Science Fast Track

7024.1

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Engineering Science Fast Track is designed to prepare students for tertiary study in Engineering Science and in so doing address any perceived deficiencies in the students' mathematical and physics knowledge and skills. The Diploma presents students with units from the first year of the Bachelor of Engineering Science degree. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering Science degree. The Diploma, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
Eight months full-time (two sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission
The aim of the Diploma is to prepare students for tertiary study in Engineering. The Diploma is accredited by the University, as principal, to enable its agent, UWSCollege, to offer to its students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.
- Passed the UWSCollege Foundation Studies Mathematics unit at B grade level or higher.

Assumed to have a background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Engineering Science), OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.
- Passed the UWSCollege Foundation Studies Mathematics unit at B grade level or higher.

Assumed to have background in mathematics at senior high school level and assumed background Science knowledge, preferably in Physics. Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

Special Requirements
All students must complete Tertiary Study Skills with UWSCollege prior to completion of the diploma.

Course Structure
Students must pass the following units

700100.1	Mathematics for Engineers Preliminary (UWSC)
700019.4	Mathematics for Engineers 1 (UWSC)
700024.1	Electrical Fundamentals (UWSC)
700021.1	Engineering and Design Concepts (UWSC)
700018.1	Engineering Computing (UWSC)

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700038.2   Engineering Design and Construction Practice (UWSC)
700023.1   Fundamentals of Mechanics (UWSC)
700020.1   Physics and Materials (UWSC)

Students must also complete the non-award unit Tertiary Study Skills.

Diploma in Information and Communications Technology

7005.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2011 or later.

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Information and Communications Technology is designed to provide a generalist tertiary level foundation for further study in undergraduate Information and Communications Technology program. It has been constructed to provide students with a sample of ICT units and university experiences to allow for well informed choices to be made in selecting their professional focus.

The Diploma aims to produce students who are fully prepared for study beyond the first year of an undergraduate degree. The Diploma in Information and Communications Technology, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students who are more aware of their roles and responsibilities within a university, have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
One year full-time (three sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Information and Communications Technology or Computing. The Diploma is accredited by the University, as principal, to enable its agent, UWSCollege, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR

- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed a Mathematics subject, equivalent to the Mathematics subject in the NSW Higher School Certificate.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Information Communications Technology or Computing), OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed a Mathematics subject, equivalent to the Mathematics subject in the NSW Higher School Certificate.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

Special Requirements
Students must complete Tertiary Study Skills with UWSCollege prior to completion of the diploma.

Course Structure
To be awarded a Diploma in Information and Communications Technology students will successfully complete with at least a pass (50% or more) the eight units listed below.

Students who wish to enter the Bachelor of Computing on completion of this Diploma course will, subject to student numbers, study 700007 Statistics for Business (UWSC). Students intending to enter the Bachelor of Information and Communications Technology will study 700041 Statistical Decision Making (UWSC).

All other units are compulsory core units of the course.

Choose one of

700007.3   Statistics for Business (UWSC)
700041.3   Statistical Decision Making (UWSC)

Students must successfully complete the following units

700040.2   Principles of Professional Communication 1 (UWSC)
700008.1   Programming Fundamentals (UWSC)
700000.2   Information Systems in Context (UWSC)
700011.2   Database Design and Development (UWSC)
700012.1   Computer Networking (UWSC)
700013.1   Systems Analysis and Design (UWSC)
700039.1   Object Oriented Analysis (UWSC)

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Students are also required to achieve a Satisfactory grade for the following two units for which no advanced standing is granted in the degree program.

700045.2   Statistics for Academic Purposes (UWSCFS)
700047.2   Programming Design (UWSCFS)

Students also complete a mandatory unit Tertiary Study Skills, although this does not count for credit towards the Diploma.

Diploma in Information and Communications Technology Fast Track

7004.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is Term N 2010.

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Information and Communications Technology is designed to provide a generalist tertiary level foundation for further study in undergraduate Information and Communications Technology and Computing programs. It has been constructed to provide students with a sample of computing units and university experiences to allow for well informed choices to be made in selecting their professional focus.

The Diploma aims to produce students who are fully prepared for study beyond the first year of an undergraduate degree. The Diploma in Information and Communications Technology, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students who are more aware of their roles and responsibilities within a university, have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
Eight months full-time (two sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Information and Communications Technology or Computing. The Diploma is accredited by the University, as principal, to enable its agent, UWSCollege, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR

- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.
- Passed either the UWSCollege Foundation Studies Commercial Mathematics or Mathematics B unit at C grade level or higher.

Students are also assumed to have completed a Mathematics subject, equivalent to the Mathematics subject in the NSW Higher School Certificate.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Information Communications Technology or Computing), OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.
- Passed either the UWSCollege Foundation Studies Commercial Mathematics or Mathematics B unit at C grade level or higher.

Students are also assumed to have completed a Mathematics subject, equivalent to the Mathematics subject in the NSW Higher School Certificate.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

Special Requirements
Students must complete Tertiary Study Skills with UWSCollege prior to completion of the diploma.

Course Structure

To be awarded a Diploma in Information and Communications Technology Fast Track, students will successfully complete with at least a pass (50% or more) eight units as listed below.

Students who wish to enter the B Computing on completion of this Diploma course will, subject to student numbers, study 700007 Statistics for Business (UWSC). Students intending to enter the Bachelor of Information and Communications Technology will, subject to student numbers, study 700041 Statistical Decision Making (UWSC).

All other units are compulsory core units of the course.

Choose one of

700007.3   Statistics for Business (UWSC)
700041.3   Statistical Decision Making (UWSC)

Students must also complete the following seven units:

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700040.2	Principles of Professional Communication 1 (UWSC)
700008.1	Programming Fundamentals (UWSC)
700000.2	Information Systems in Context (UWSC)
700011.2	Database Design and Development (UWSC)
700012.1	Computer Networking (UWSC)
700013.1	Systems Analysis and Design (UWSC)
700039.1	Object Oriented Analysis (UWSC)

Students also complete a mandatory unit Tertiary Study Skills, although this does not count for credit towards the Diploma.

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Unit Sets

Key Program - Information Systems

KT3000.1

The Key Program in Information Systems focuses on computing and information technology in the context of business.

Location

Campus	Mode
Parramatta Campus	Internal

Unit Set Structure

Start of Year Intake

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300573.2	Information Systems in Context

Spring session

300565.2	Computer Networking
300104.4	Database Design and Development
300144.4	Object Oriented Analysis

And one elective

Year 2

Autumn session

300582.2	Technologies for Web Applications
300570.3	Human-Computer Interaction
300581.3	Programming Techniques
200032.5	Statistics for Business

Spring session

300583.2	Web Systems Development
300569.2	Computer Security
300572.2	Information Systems Deployment and Management
300089.5	Commercial Applications Development

Year 3

Autumn session

300578.3	Professional Development
300584.3	Emerging Trends in Information Systems

And two electives

Spring session

300579.3	Professional Experience

And three electives

Mid Year Intake

Year 1

Spring session

300565.2	Computer Networking
300104.4	Database Design and Development
300144.4	Object Oriented Analysis

And one elective

Year 2

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300573.2	Information Systems in Context

Spring session

300569.2	Computer Security
300572.2	Information Systems Deployment and Management
300089.5	Commercial Applications Development

And one elective

Year 3

Autumn session

300582.2	Technologies for Web Applications
300570.3	Human-Computer Interaction
300581.3	Programming Techniques
200032.5	Statistics for Business

Spring session

300579.3	Professional Experience
300583.2	Web Systems Development

And two electives

Year 4

Autumn session

300578.3	Professional Development
300584.3	Emerging Trends in Information Systems

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

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Key Program - Construction

KT3026.1

The Construction Key Program consisits of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, project management, quantity surveying and estimation. Career opportunities include those in the private or public sector on projects covering roads, bridges, airports, and residential and commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full time - Autumn intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
200486.2	Quantity Surveying 1
300482.2	Engineering Geology and Concrete Materials

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
200468.2	Estimating 1

Year 3

Autumn session

300732.2	Structural Analysis
300727.2	Project Management
300728.2	Construction Planning

And one elective

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

200471.3	Construction Technology 5 (Envelope)
300488.3	Numerical Methods in Engineering

And one elective

Spring session

300483.4	Engineering Project
300725.2	Construction Technology 6 (Services)
300485.3	Foundation Engineering

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis
300488.3	Numerical Methods in Engineering

And one elective

Spring session

300675.2	Honours Thesis
300485.3	Foundation Engineering

And one elective

Full-time - Spring intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300674.2	Engineering, Design and Construction Practice

Year 2

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
200468.2	Estimating 1

Autumn session

300731.2	Soil Engineering

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300027.2	Engineering Computing
200486.2	Quantity Surveying 1
300482.2	Engineering Geology and Concrete Materials

Year 3

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Autumn session

300732.2	Structural Analysis
300727.2	Project Management
300728.2	Construction Planning

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

300725.2	Construction Technology 6 (Services)
300485.3	Foundation Engineering

And one elective

Autumn session

300483.4	Engineering Project
200471.3	Construction Technology 5 (Envelope)
300488.3	Numerical Methods in Engineering

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

300675.2	Honours Thesis
300485.3	Foundation Engineering

And one elective

Autumn session

300675.2	Honours Thesis
300488.3	Numerical Methods in Engineering

And one elective

Although students may choose any unit offered by the University as an elective, it is recommended that electives are chosen from the following list.

300706.2	Building 1
300707.2	Building 2
300748.2	Quality and Value Management
300723.2	Development Control
300722.2	Building Regulations Studies
200482.2	Construction in Practice 1
200484.3	Construction in Practice 3
300762.2	Fluid Mechanics
300486.2	Infrastructure Engineering
200471.3	Construction Technology 5 (Envelope)
300725.2	Construction Technology 6 (Services)

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Construction

KT3037.1

The Construction Key Program consisits of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, project management, quantity surveying and estimation. Career opportunities include those in the private or public sector on projects covering roads, bridges, airports, and residential and commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals

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| 300462.2 | Engineering and Design Concepts |

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
200486.2	Quantity Surveying 1
300482.2	Engineering Geology and Concrete Materials

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
200468.2	Estimating 1

Year 3

Autumn session

300732.2	Structural Analysis
300488.3	Numerical Methods in Engineering
300728.2	Construction Planning
300666.2	Advanced Engineering Topic 1

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)
300485.3	Foundation Engineering

Industrial experience

| 300741.2 | Industrial Experience (Engineering) |

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3010)

Autumn session

| 300668.2 | Advanced Engineering Thesis |
| 300727.2 | Project Management |

Spring session

| 300668.2 | Advanced Engineering Thesis |
| 300667.2 | Advanced Engineering Topic 2 |

Key Program - Mechanical

KT3042.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Examples include mechanical and machinery design; manufacturing; energy production; and marketing and management activities. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

| Campus | Mode |
| Penrith Campus | Internal |

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

300282.2	Industrial Graphics 2: Transition
300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Spring session

300044.2	Microcontrollers and PLCs
300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing

Choose one of

| 300760.1 | Thermodynamics and Heat Transfer |
| 300761.1 | Advanced Mechanics of Materials |

Year 3

Autumn session

| 300056.3 | Robotics |
| 300764.1 | Mechanical Design |

Choose one of

| 300763.1 | Advanced Dynamics |
| 300759.1 | Thermal and Fluid Engineering |

And one elective

Spring session

| 300043.3 | Mobile Robotics |
| 300053.3 | Professional Practice |

Choose one of

| 300760.1 | Thermodynamics and Heat Transfer |
| 300761.1 | Advanced Mechanics of Materials |

And one elective

Industrial Experience

| 300741.2 | Industrial Experience (Engineering) |

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Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300025.3	Electronics

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Spring session

300483.4	Engineering Project
300304.3	Sustainable Design: Materials Technology
300487.3	Mechatronic Design

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Spring session

300675.2	Honours Thesis
300487.3	Mechatronic Design

And one elective

Full-time - Spring Intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Year 2

Spring session

300735.2	Automated Manufacturing
300044.2	Microcontrollers and PLCs

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

And one elective

Autumn session

300282.2	Industrial Graphics 2: Transition
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300035.3	Kinematics and Kinetics of Machines

Year 3

Spring session

300053.3	Professional Practice
300480.2	Dynamics of Mechanical Systems
300043.3	Mobile Robotics

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Autumn session

300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

300304.3	Sustainable Design: Materials Technology
300487.3	Mechatronic Design

And one elective

Autumn session

300483.4	Engineering Project
300025.3	Electronics

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Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

300675.2	Honours Thesis
300487.3	Mechatronic Design

And one elective

Autumn session

300675.2	Honours Thesis

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Although students may choose any unit offered by the University as an elective, students are recommended to choose their electives from the following list.

300725.2	Construction Technology 6 (Services)
300733.2	Introduction to Structural Engineering
300052.2	Power and Machines
300005.2	Circuit Theory
300071.2	Electrical Machines 1
300075.4	Instrumentation and Measurement
300732.2	Structural Analysis

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Civil

KT3043.1

Civil engineering covers the fields of structural design, construction management and water engineering, together with quality assurance and environmental engineering. Graduates will work in the fields of design, construction and management. Projects may cover roads, airports, water supply and sewerage schemes, and large buildings. You may be an engineer in private industry, government departments, or in city, municipal or shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300482.2	Engineering Geology and Concrete Materials

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
300765.2	Hydraulics

Year 3

Autumn session

300732.2	Structural Analysis
300486.2	Infrastructure Engineering
300766.2	Hydrology

And one elective

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300739.2	Timber Structures (UG)
300488.3	Numerical Methods in Engineering

And one elective

Spring session

300483.4	Engineering Project
300737.3	Environmental Engineering
300485.3	Foundation Engineering

And one elective

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Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis
300488.3	Numerical Methods in Engineering

And one elective

Spring session

300675.2	Honours Thesis
300485.3	Foundation Engineering

And one elective

Full-time - Spring Intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Year 2

Spring session

300733.2	Introduction to Structural Engineering
300765.2	Hydraulics
300738.3	Surveying for Engineers
MG102A.4	Management Foundations

Autumn session

300731.2	Soil Engineering
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300482.2	Engineering Geology and Concrete Materials

Year 3

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Autumn session

300732.2	Structural Analysis
300486.2	Infrastructure Engineering
300766.2	Hydrology

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

300737.3	Environmental Engineering
300485.3	Foundation Engineering

And one elective

Autumn session

300483.4	Engineering Project
300739.2	Timber Structures (UG)
300488.3	Numerical Methods in Engineering

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

300675.2	Honours Thesis
300485.3	Foundation Engineering

And one elective

Autumn session

300675.2	Honours Thesis
300488.3	Numerical Methods in Engineering

And one elective

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

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Key Program - Robotics and Mechatronics

KT3045.1

This program provides the skills necessary for the design of smart machines of all types: cruise control in automobiles, pilotless spacecraft, automated factories and medical telerobotics. The course, accompanied by an extensive and integrated hands-on laboratory program, is essentially concerned with the design of intelligent mechanical systems and automation, and includes the study of robotics, computer control, automated manufacturing, microprocessor applications and machine design. Graduates in the program acquire the combined skills of mechanical and computer/electrical engineering that are needed in leading-edge industries such as aerospace systems, the car industry, automation and robotic applications, biomedical engineering, laser systems, and building materials manufacture.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn intake

Year 2

Autumn session

300025.3	Electronics
300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300005.2	Circuit Theory

Spring session

300044.2	Microcontrollers and PLCs
300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300052.2	Power and Machines

Year 3

Autumn session

300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Or one elective

Spring session

300043.3	Mobile Robotics
300053.3	Professional Practice
300487.3	Mechatronic Design

And one elective

Industrial Experience:

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300075.4	Instrumentation and Measurement
300071.2	Electrical Machines 1

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Spring session

300483.4	Engineering Project
300304.3	Sustainable Design: Materials Technology

And two electives

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis
300071.2	Electrical Machines 1

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Spring session

300675.2	Honours Thesis

And two electives

Full-time - Spring Intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials

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300040.2	Mechanics of Materials
300005.2	Circuit Theory

Year 2

Spring session

300735.2	Automated Manufacturing
300044.2	Microcontrollers and PLCs
300052.2	Power and Machines

And one elective

Autumn session

300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300035.3	Kinematics and Kinetics of Machines

And one elective

Year 3

Spring session

300053.3	Professional Practice
300480.2	Dynamics of Mechanical Systems
300487.3	Mechatronic Design
300043.3	Mobile Robotics

Autumn session

300025.3	Electronics
300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

300304.3	Sustainable Design: Materials Technology

And two electives

Autumn session

300483.4	Engineering Project
300075.4	Instrumentation and Measurement
300071.2	Electrical Machines 1

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

300675.2	Honours Thesis

And two electives

Autumn session

300675.2	Honours Thesis
300071.2	Electrical Machines 1

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Although students may choose any unit offered by the University as an elective, students are recommended to choose their electives from the following:

300761.1	Advanced Mechanics of Materials
300762.2	Fluid Mechanics
300760.1	Thermodynamics and Heat Transfer
300759.1	Thermal and Fluid Engineering

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Computer

KT3046.1

Computer engineering is a specialist area that relates to computers and communication systems that process information and control physical processes and to designing faster computers. Subjects include computer networks, digital systems and communications, microprocessors and embedded micro-controllers. Graduates will work in hardware and software development, in supervisory and data acquisition systems, in industrial applications of computer controlled equipment, in networking and data communications and in developing networking technologies. You will primarily be a problem-solver and organiser, with specialist knowledge of computer hardware, software, communications, computer networking, computer control and real-time computer systems.

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Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn session

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

Year 3

Autumn session

300167.3	Systems Programming 1
300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective

Spring session

300149.3	Operating Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300095.4	Computer Networks and Internets
300010.3	Data Networks

Choose one of

300019.3	Digital Systems 2
300029.3	Engineering Visualization

Please note: Even years students choose 300019 Digital Systems 2. Odd years students choose 300029 Engineering Visualization.

Spring session

300483.4	Engineering Project

Choose one of

300370.1	Digital Control Systems
300044.2	Microcontrollers and PLCs

Please note: Even years students choose 300370 Digital Control Systems. Odd years students choose 300044 - Microcontrollers and PLCs.

And two electives

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3022)

Autumn session

300675.2	Honours Thesis
300095.4	Computer Networks and Internets
300010.3	Data Networks

Spring session

300675.2	Honours Thesis

And two electives

Full-time - Spring intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300027.2	Engineering Computing
300005.2	Circuit Theory

Year 2

Spring session

200242.3	Mathematics for Engineers 3
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

Autumn session

300167.3	Systems Programming 1
300018.2	Digital Systems 1
300674.2	Engineering, Design and Construction Practice
300025.3	Electronics

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Year 3

Spring session

300069.3	Digital Signal Processing
300053.3	Professional Practice
300149.3	Operating Systems
300076.3	Microprocessor Systems

Autumn session

300075.4	Instrumentation and Measurement
300009.3	Control Systems

And two electives

Industrial Experience:

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

And choose one of

300370.1	Digital Control Systems
300044.2	Microcontrollers and PLCs

Please note: Even years students choose 300370 Digital Control Systems. Odd years students choose 300044 Microcontrollers and PLCs.

And two electives

Autumn session

300483.4	Engineering Project
300095.4	Computer Networks and Internets
300010.3	Data Networks

Choose one of

300019.3	Digital Systems 2
300029.3	Engineering Visualization

Please note: Even years students choose 300019 Digital Systems 2. Odd years students choose 300029 Engineering Visualization.

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3022)

Spring session

300675.2	Honours Thesis

And two electives

Autumn session

300675.2	Honours Thesis
300095.4	Computer Networks and Internets
300010.3	Data Networks

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Mechanical

KT3047.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

300040.2	Mechanics of Materials
300035.3	Kinematics and Kinetics of Machines
300282.2	Industrial Graphics 2: Transition
300762.2	Fluid Mechanics

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Spring session

300735.2	Automated Manufacturing
300480.2	Dynamics of Mechanical Systems
300044.2	Microcontrollers and PLCs

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Year 3

Autumn session

300056.3	Robotics
300666.2	Advanced Engineering Topic 1
300764.1	Mechanical Design

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

Spring session

300053.3	Professional Practice
300043.3	Mobile Robotics
300487.3	Mechatronic Design

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Industrial experience

300741.2	Industrial Experience (Engineering)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3021)

Autumn session

300668.2	Advanced Engineering Thesis

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

Spring session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Key Program - Civil

KT3048.1

Civil engineering covers the fields of structural design, construction management and water engineering, together with quality assurance and environmental engineering. Graduates will work in the fields of design, construction and management. Projects may cover roads, airports, water supply and sewerage schemes, and large buildings. You may be an engineer in private industry, government departments, or in city, municipal or shire councils.

Location

Campus	**Mode**
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
300482.2	Engineering Geology and Concrete Materials
300762.2	Fluid Mechanics

Spring session

300733.2	Introduction to Structural Engineering
300738.3	Surveying for Engineers
300737.3	Environmental Engineering
300765.2	Hydraulics

Year 3

Autumn session

300732.2	Structural Analysis
300488.3	Numerical Methods in Engineering
300666.2	Advanced Engineering Topic 1

Choose one of

300486.2	Infrastructure Engineering
300766.2	Hydrology

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

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300485.3   Foundation Engineering

Industrial experience:

300741.2   Industrial Experience (Engineering)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3018)

Autumn session

300668.2   Advanced Engineering Thesis

Choose one of

300739.2   Timber Structures (UG)
MG102A.4   Management Foundations

Spring session

300668.2   Advanced Engineering Thesis
300667.2   Advanced Engineering Topic 2

Key Program - Robotics and Mechatronics

KT3050.1

An intensive hands-on laboratory program is an essential part of the course. Mechatronics provides skills necessary for the design of smart machines of all types: from cruise control in automobiles to pilotless spacecraft, from automated factories to medical telerobotics. It is especially concerned with design of intelligent mechanical systems. Examples include design and development of automated machinery and their control; design of mechanical equipment and integrated systems; and marketing and management activities. Skills gained are required in all sections of industry, including manufacturing, packaging, materials handling, aerospace and mining.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3   Mathematics for Engineers 1
300464.2   Physics and Materials
300027.2   Engineering Computing
300674.2   Engineering, Design and Construction Practice

Spring session

200238.2   Mathematics for Engineers 2
300463.2   Fundamentals of Mechanics
300021.2   Electrical Fundamentals
300462.2   Engineering and Design Concepts

Year 2

Autumn session

300040.2   Mechanics of Materials
300035.3   Kinematics and Kinetics of Machines
300025.3   Electronics
300005.2   Circuit Theory

Spring session

300735.2   Automated Manufacturing
300480.2   Dynamics of Mechanical Systems
300044.2   Microcontrollers and PLCs
300052.2   Power and Machines

Year 3

Autumn session

300071.2   Electrical Machines 1
300056.3   Robotics
300764.1   Mechanical Design

Choose one of

300763.1   Advanced Dynamics
300018.2   Digital Systems 1

Spring session

300053.3   Professional Practice
300666.2   Advanced Engineering Topic 1
300487.3   Mechatronic Design
300043.3   Mobile Robotics

Industrial experience

300741.2   Industrial Experience (Engineering)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3020)

Autumn session

300668.2   Advanced Engineering Thesis

Choose one of

300763.1   Advanced Dynamics
300018.2   Digital Systems 1

Spring session

300668.2   Advanced Engineering Thesis
300667.2   Advanced Engineering Topic 2

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Key Program - Computer

KT3051.1

Computer engineering is a specialist area that relates to computers and communication systems that process information and control physical processes and to designing faster computers. Subjects include computer networks, digital systems and communications, microprocessors and embedded micro-controllers. Graduates will work in hardware and software development, in supervisory and data acquisition systems, in industrial applications of computer controlled equipment, in networking and data communications and in developing networking technologies. You will primarily be a problem-solver and organiser, with specialist knowledge of computer hardware, software, communications, computer networking, computer control and real-time computer systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

Year 3

Autumn session

300167.3	Systems Programming 1
300010.3	Data Networks
300075.4	Instrumentation and Measurement
300009.3	Control Systems

Spring session

300149.3	Operating Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing
300666.2	Advanced Engineering Topic 1

Industrial experience:

300741.2	Industrial Experience (Engineering)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3019)

Autumn session

300668.2	Advanced Engineering Thesis
300095.4	Computer Networks and Internets

Spring session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Key Program - Civil

KT3075.1

Civil engineering covers the fields of structural design, construction management and water engineering, together with quality assurance and environmental engineering. Graduates will work in the fields of design, construction and management. Projects may cover roads, airports, water supply and sewerage schemes, and large buildings. You may be an engineering technologist in private industry, government departments, or in city, municipal or shire councils.

Location

Campus	Mode
Penrith Campus	Internal

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Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
200238.2	Mathematics for Engineers 2

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
300765.2	Hydraulics

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300732.2	Structural Analysis
300486.2	Infrastructure Engineering
300766.2	Hydrology
300482.2	Engineering Geology and Concrete Materials

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Year 2

Spring session

300733.2	Introduction to Structural Engineering
300765.2	Hydraulics
300738.3	Surveying for Engineers
200238.2	Mathematics for Engineers 2

Autumn session

300731.2	Soil Engineering
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300482.2	Engineering Geology and Concrete Materials

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)
MG102A.4	Management Foundations

Autumn session

300732.2	Structural Analysis
300486.2	Infrastructure Engineering
300766.2	Hydrology

And one elective

Key Program - Computer

KT3076.1

Computer engineering is a specialist area that relates to computers and communication systems that process information and control physical processes and to designing faster computers. Subjects include computer networks, digital systems and communications, microprocessors and embedded micro-controllers. Graduates will work in hardware and software development, in supervisory and data acquisition systems, in industrial applications of computer controlled equipment, in networking and data communications and in developing networking technologies. You will primarily be a problem-solver and organiser, with specialist knowledge of computer hardware, software, communications, computer networking, computer control and real-time computer systems.

Location

Campus	Mode
Penrith Campus	Internal

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Unit Set Structure

Full Time Autumn Intake

Year 2

Autumn session

200238.2	Mathematics for Engineers 2
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

200242.3	Mathematics for Engineers 3
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

Year 3

Autumn session

300167.3	Systems Programming 1
300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective

Spring session

300149.3	Operating Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing
300076.3	Microprocessor Systems

Industrial Experience

300741.2	Industrial Experience (Engineering)

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300005.2	Circuit Theory

Year 2

Spring session

200238.2	Mathematics for Engineers 2
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

Autumn session

300167.3	Systems Programming 1
300018.2	Digital Systems 1
300674.2	Engineering, Design and Construction Practice
300025.3	Electronics

Year 3

Spring session

300069.3	Digital Signal Processing
300053.3	Professional Practice
300149.3	Operating Systems
300076.3	Microprocessor Systems

Autumn session

200242.3	Mathematics for Engineers 3
300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Key Program - Construction

KT3077.1

The Construction Key Program consists of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, project management, quantity surveying and estimation. Career opportunities include those in the private or public sector on projects covering roads, bridges, airports, and residential and commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

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300731.2	Soil Engineering
300040.2	Mechanics of Materials
200486.2	Quantity Surveying 1
200238.2	Mathematics for Engineers 2

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
200468.2	Estimating 1

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300732.2	Structural Analysis
300727.2	Project Management
300728.2	Construction Planning
300482.2	Engineering Geology and Concrete Materials

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300674.2	Engineering, Design and Construction Practice

Year 2

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
200238.2	Mathematics for Engineers 2

Autumn session

300731.2	Soil Engineering
300027.2	Engineering Computing
200486.2	Quantity Surveying 1
300482.2	Engineering Geology and Concrete Materials

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)
200468.2	Estimating 1

Autumn session

300732.2	Structural Analysis
300727.2	Project Management
300728.2	Construction Planning

And one elective

Key Program - Environmental

KT3079.1

This program provides an essential grounding in ecology, civil engineering and environmental management. Environmental engineers are concerned with ensuring a sustainable and better future for the community by developing and managing systems that integrate with and protect our environment. Graduates will work as environmental engineering technologists in private, industrial, and mining companies; government departments; and city, municipal and shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300469.2	Introductory Chemistry

Spring session

300733.2	Introduction to Structural Engineering
300738.3	Surveying for Engineers

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200238.2	Mathematics for Engineers 2
300765.2	Hydraulics

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300777.2	Air Quality and Climate Change
300482.2	Engineering Geology and Concrete Materials
300486.2	Infrastructure Engineering
300766.2	Hydrology

Spring session

300737.3	Environmental Engineering
300663.2	Resource Sustainability
300053.3	Professional Practice

And one elective (elective must be at least a Level 3 unit)

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Year 2

Spring session

300733.2	Introduction to Structural Engineering
300738.3	Surveying for Engineers
200238.2	Mathematics for Engineers 2
300765.2	Hydraulics

Autumn session

300731.2	Soil Engineering
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300469.2	Introductory Chemistry

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300737.3	Environmental Engineering
300663.2	Resource Sustainability
300053.3	Professional Practice

And one elective (elective must be at least a Level 3 unit)

Autumn session

300777.2	Air Quality and Climate Change
300482.2	Engineering Geology and Concrete Materials
300486.2	Infrastructure Engineering
300766.2	Hydrology

Key Program - Mechanical

KT3080.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Examples include mechanical and machinery design; manufacturing; energy production; and marketing and management activities. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

200238.2	Mathematics for Engineers 2
300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Spring session

300044.2	Microcontrollers and PLCs
300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

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Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300282.2	Industrial Graphics 2: Transition
300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

Spring session

300043.3	Mobile Robotics
300053.3	Professional Practice

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

And one elective

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Year 2

Spring session

200238.2	Mathematics for Engineers 2
300735.2	Automated Manufacturing
300044.2	Microcontrollers and PLCs

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Autumn session

300282.2	Industrial Graphics 2: Transition

300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300035.3	Kinematics and Kinetics of Machines

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300053.3	Professional Practice
300480.2	Dynamics of Mechanical Systems
300043.3	Mobile Robotics

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Autumn session

300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Key Program - Robotics and Mechatronics

KT3081.1

This program provides the skills necessary for the design of smart machines of all types: cruise control in automobiles, pilotless spacecraft, automated factories and medical telerobotics. The course, accompanied by an extensive and integrated hands-on laboratory program, is essentially concerned with the design of intelligent mechanical systems and automation, and includes the study of robotics, computer control, automated manufacturing, microprocessor applications and machine design. Graduates in the program acquire the combined skills of mechanical and computer/electrical engineering that are needed in leading-edge industries such as aerospace systems, the car industry, automation and robotic applications, biomedical engineering, laser systems, and building materials manufacture.

Location

Campus	Mode
Penrith Campus	Internal

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Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

200238.2	Mathematics for Engineers 2
300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300005.2	Circuit Theory

Spring session

300044.2	Microcontrollers and PLCs
300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300052.2	Power and Machines

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300025.3	Electronics
300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Spring session

300043.3	Mobile Robotics
300053.3	Professional Practice
300487.3	Mechatronic Design

And one elective

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300040.2	Mechanics of Materials

300005.2	Circuit Theory

Year 2

Spring session

200238.2	Mathematics for Engineers 2
300735.2	Automated Manufacturing
300044.2	Microcontrollers and PLCs
300052.2	Power and Machines

Autumn session

300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300035.3	Kinematics and Kinetics of Machines

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300053.3	Professional Practice
300480.2	Dynamics of Mechanical Systems
300487.3	Mechatronic Design
300043.3	Mobile Robotics

Autumn session

300025.3	Electronics
300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Key Program - Environmental

KT3087.1

This program provides an essential grounding in ecology, civil engineering and environmental management. Environmental engineers are concerned with ensuring a sustainable and better future for the community by developing and managing systems that integrate with and protect our environment. Graduates will work as environmental engineers in private, industrial, and mining companies; government departments; and city, municipal and shire councils.

Location

Campus	Mode
Penrith Campus	Internal

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Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300469.2	Introductory Chemistry

Spring session

300733.2	Introduction to Structural Engineering
300738.3	Surveying for Engineers
300663.2	Resource Sustainability
300765.2	Hydraulics

Year 3

Autumn session

300633.1	Management of Aquatic Environments
300482.2	Engineering Geology and Concrete Materials
300766.2	Hydrology
300284.4	Environmental Risk Management

Spring session

300737.3	Environmental Engineering
300666.2	Advanced Engineering Topic 1
300053.3	Professional Practice
MG102A.4	Management Foundations

Industrial experience

300741.2	Industrial Experience (Engineering)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3023)

Autumn session

300668.2	Advanced Engineering Thesis
300777.2	Air Quality and Climate Change

Spring session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Key Program - Environmental

KT3089.1

This program provides an essential grounding in ecology, civil engineering and environmental management. Environmental engineers are concerned with ensuring a sustainable and better future for the community by developing and managing systems that integrate with and protect our environment. Graduates will work as environmental engineers in private, industrial, and mining companies; government departments; and city, municipal and shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300469.2	Introductory Chemistry

Spring session

300733.2	Introduction to Structural Engineering
300738.3	Surveying for Engineers
300663.2	Resource Sustainability
300765.2	Hydraulics

Year 3

Autumn session

300777.2	Air Quality and Climate Change
300482.2	Engineering Geology and Concrete Materials
300486.2	Infrastructure Engineering
300766.2	Hydrology

Spring session

300737.3	Environmental Engineering
300053.3	Professional Practice

And two electives

Note: one of the Year 3 Electives must be at least a Level 3 unit.

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Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4   Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300633.1   Management of Aquatic Environments
300284.4   Environmental Risk Management
300488.3   Numerical Methods in Engineering

Spring session

300483.4   Engineering Project
MG102A.4   Management Foundations

And two electives

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2   Honours Thesis
300633.1   Management of Aquatic Environments

And one elective

Spring session

300675.2   Honours Thesis
MG102A.4   Management Foundations

And one elective

Full-time - Spring Intake

Year 1

Spring session

200237.3   Mathematics for Engineers 1
300463.2   Fundamentals of Mechanics
300021.2   Electrical Fundamentals
300462.2   Engineering and Design Concepts

Autumn session

200238.2   Mathematics for Engineers 2
300464.2   Physics and Materials
300040.2   Mechanics of Materials
300762.2   Fluid Mechanics

Year 2

Spring session

300733.2   Introduction to Structural Engineering
300738.3   Surveying for Engineers
300663.2   Resource Sustainability
300765.2   Hydraulics

Autumn session

300731.2   Soil Engineering
300027.2   Engineering Computing
300674.2   Engineering, Design and Construction Practice
300469.2   Introductory Chemistry

Year 3

Spring session

300737.3   Environmental Engineering
300053.3   Professional Practice

And two electives

Note: one of the Year 3 Electives must be at least a Level 3 unit.

Autumn session

300777.2   Air Quality and Climate Change
300482.2   Engineering Geology and Concrete Materials
300486.2   Infrastructure Engineering
300766.2   Hydrology

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4   Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

MG102A.4   Management Foundations

And two electives

Autumn session

300483.4   Engineering Project
300633.1   Management of Aquatic Environments
300284.4   Environmental Risk Management
300488.3   Numerical Methods in Engineering

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

300675.2   Honours Thesis
MG102A.4   Management Foundations

And one elective

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Autumn session

300675.2	Honours Thesis
300633.1	Management of Aquatic Environments

And one elective

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Electrical

KT3100.1

This program includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control in public utilities, telecommunications, manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Year 3

Autumn session

300007.2	Communication Systems
300666.2	Advanced Engineering Topic 1
300071.2	Electrical Machines 1
300009.3	Control Systems

Spring session

300053.3	Professional Practice
300771.1	Power Systems
300070.4	Electrical Drives
300069.3	Digital Signal Processing

Industrial experience

300741.2	Industrial Experience (Engineering)

Honours Stream

Refer to the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3024)

Autumn session

300668.2	Advanced Engineering Thesis
300772.1	Power Electronics

Spring session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Key Program - Telecommunications

KT3101.1

This program emphasises the hardware issues related to telecommunications, including digital systems, antenna design, communication hardware, data transfer and management and signal processing. Graduates will work in a variety of situations, such as communications in offices, communications between machines, and intercontinental communication issues. There is a high demand for telecommunications engineers as providers struggle to meet the rapid increase demand for both personal and business use of different modes of communications, including the mobile telephone and Internet.

Location

Campus	Mode
Penrith Campus	Internal

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Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Year 3

Autumn session

300007.2	Communication Systems
300010.3	Data Networks
300029.3	Engineering Visualization
300666.2	Advanced Engineering Topic 1

Spring session

300053.3	Professional Practice
300069.3	Digital Signal Processing

Choose one of

300065.4	Wireless Communications
300887.1	Digital Communication and Coding

Choose one of

300068.3	Communication Electronics
300489.2	Radio and Satellite Communication

Industrial experience

300741.2	Industrial Experience (Engineering)

Honours Stream

Refer to the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3015)

Autumn session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Spring session

300668.2	Advanced Engineering Thesis

Choose one of

300887.1	Digital Communication and Coding
300065.4	Wireless Communications

Key Program - Electrical

KT3102.1

This program includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control in public utilities, telecommunications, manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn intake

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Year 3

Autumn session

300007.2	Communication Systems
300071.2	Electrical Machines 1
300009.3	Control Systems

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And one elective

Spring session

300771.1	Power Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300075.4	Instrumentation and Measurement
300010.3	Data Networks
300772.1	Power Electronics

Spring session

300483.4	Engineering Project
300070.4	Electrical Drives

And two electives

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3006)

Autumn session

300675.2	Honours Thesis
300772.1	Power Electronics

And one elective

Spring session

300675.2	Honours Thesis
300070.4	Electrical Drives

And one elective

Full-time - Spring intake

Year 1

Spring intake

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2

300464.2	Physics and Materials
300027.2	Engineering Computing
300005.2	Circuit Theory

Year 2

Spring session

200242.3	Mathematics for Engineers 3
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Autumn session

300071.2	Electrical Machines 1
300018.2	Digital Systems 1
300674.2	Engineering, Design and Construction Practice
300025.3	Electronics

Year 3

Spring session

300053.3	Professional Practice
300771.1	Power Systems
300069.3	Digital Signal Processing
300076.3	Microprocessor Systems

Autumn session

300007.2	Communication Systems
300009.3	Control Systems

And two electives

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

300070.4	Electrical Drives

And two electives

Autumn session

300483.4	Engineering Project
300010.3	Data Networks
300772.1	Power Electronics
300075.3	Instrumentation and Measurement

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

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Year 4 (Honours stream - H3006)

Spring session

300675.2	Honours Thesis
300070.4	Electrical Drives

And one elective

Autumn session

300675.2	Honours Thesis
300772.1	Power Electronics

And one elective

Key Program - Telecommunications

KT3103.1

This program emphasises the hardware issues related to telecommunications, including digital systems, antenna design, communication hardware, data transfer and management and signal processing. Graduates will work in a variety of situations, such as communications in offices, communications between machines, and intercontinental communication issues. There is a high demand for telecommunications engineers as providers struggle to meet the rapid increase demand for both personal and business use of different modes of communications, including the mobile telephone and Internet.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn intake

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Year 3

Autumn session

300007.2	Communication Systems
300029.3	Engineering Visualization

Choose one of

300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective

Spring session

300053.3	Professional Practice
300069.3	Digital Signal Processing

Choose one of

300065.4	Wireless Communications
300887.1	Digital Communication and Coding

And one elective (unit must be a Level 3 unit)

Industrial Experience:

300741.2	Industrial Experience (Engineering)

Year 4 (Non-honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300010.3	Data Networks

Choose one of

300019.3	Digital Systems 2
300046.2	Multimedia Signal Processing

And one elective

Spring session

300483.4	Engineering Project

Choose one of

300068.3	Communication Electronics
300489.2	Radio and Satellite Communication

Choose one of

300887.1	Digital Communication and Coding
300065.4	Wireless Communications

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis
300010.3	Data Networks

And one elective

Spring session

300675.2	Honours Thesis

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Choose one of

300887.1	Digital Communication and Coding
300065.4	Wireless Communications

And one elective

Full-time - Spring intake

Year 1

Spring intake

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300027.2	Engineering Computing
300005.2	Circuit Theory

Year 2

Spring session

200242.3	Mathematics for Engineers 3
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Autumn session

300007.2	Communication Systems
300018.2	Digital Systems 1
300674.2	Engineering, Design and Construction Practice
300025.3	Electronics

Year 3

Spring session

300076.3	Microprocessor Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing

Choose one of

300065.4	Wireless Communications
300887.1	Digital Communication and Coding

Autumn session

300029.3	Engineering Visualization

Choose one of

300009.3	Control Systems
300075.4	Instrumentation and Measurement

And two electives
One elective in Year 3 must be at least a Level 3 unit

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.
And choose one of

300068.3	Communication Electronics
300489.2	Radio and Satellite Communication

Choose one of

300887.1	Digital Communication and Coding
300065.4	Wireless Communications

And one elective

Autumn session

300483.4	Engineering Project
300010.3	Data Networks

Choose one of

300019.3	Digital Systems 2
300046.2	Multimedia Signal Processing

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

300675.2	Honours Thesis

And choose one of

300887.1	Digital Communication and Coding
300065.4	Wireless Communications

And one elective

Autumn session

300675.2	Honours Thesis
300010.3	Data Networks

And one elective

Key Program - Electrical

KT3104.1

This program includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and

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control in public utilities, telecommunications, manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

200238.2	Mathematics for Engineers 2
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

200242.3	Mathematics for Engineers 3
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300007.2	Communication Systems
300071.2	Electrical Machines 1
300009.3	Control Systems

And one elective

Spring session

300771.1	Power Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing
300076.3	Microprocessor Systems

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing

300005.2	Circuit Theory

Year 2

Spring session

200238.2	Mathematics for Engineers 2
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300674.2	Engineering, Design and Construction Practice
300025.3	Electronics

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300771.1	Power Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing
300076.3	Microprocessor Systems

Autumn session

300007.2	Communication Systems
300071.2	Electrical Machines 1
300009.3	Control Systems

And one elective

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Key Program - Telecommunications

KT3105.1

This program emphasises the hardware issues related to telecommunications, including digital systems, antenna design, communication hardware, data transfer and management and signal processing. Graduates will work in a variety of situations, such as communications in offices, communications between machines, and intercontinental communication issues. There is a high demand for telecommunications engineering technologists as providers struggle to meet the rapid increase demand for both personal and business use of different modes of communications, including the mobile telephone and Internet.

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Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

200238.2	Mathematics for Engineers 2
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

200242.3	Mathematics for Engineers 3
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300007.2	Communication Systems
300029.3	Engineering Visualization

Choose one of

300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective (elective must be at least a Level 3 unit)

Spring session

300053.3	Professional Practice
300069.3	Digital Signal Processing
300076.3	Microprocessor Systems

Choose one of

300065.4	Wireless Communications
300887.1	Digital Communication and Coding

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300005.2	Circuit Theory

Year 2

Spring session

200238.2	Mathematics for Engineers 2
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Autumn session

300007.2	Communication Systems
300018.2	Digital Systems 1
300674.2	Engineering, Design and Construction Practice
300025.3	Electronics

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300076.3	Microprocessor Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing

Choose one of

300065.4	Wireless Communications
300887.1	Digital Communication and Coding

Autumn session

200242.3	Mathematics for Engineers 3
300029.3	Engineering Visualization

Choose one of

300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective (elective must be at least a Level 3 unit)

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Major - Religion, Anthropology and Philosophy

M1024.1

This multidisciplinary major pursues critical and rational analysis of questions about individuals and societies; about human knowledge, culture and existence. It inquires into issues about human nature; the scope and limits of

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knowledge and belief; God and ethics; conflict and
violence; ritual and myth; and religion, politics and culture.
The major provides students with rigorous training in
analytic and creative thinking, intellectual independence
and cultural and ethical awareness.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

101686.2	Anthropology and Philosophy Look at Religion

and seven units from the following pools with no less than
three units at Level 3

Note: Not all units will be offered each year. Units will be
offered on a rotational basis.

Level 1 Unit Pool

101462.2	Understanding Islam and Muslim Societies

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100850.2	Buddhism in the Contemporary World
100852.2	Classics of Modern Philosophy
101856.1	Film and Philosophy
101464.3	Great Texts of Islam: Qur'an and Hadith
101843.2	Philosophy and Environment
101881.1	Philosophy and the Good Life
101867.1	The Ethical Life
101294.3	The Western Philosophical Tradition

Level 3 Unit Pool

101295.2	Aesthetics
101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
100863.3	Ethical Cultures
100998.4	Evolutionary Thinking
100961.4	Humanities Internship
101467.2	Islam in Southeast Asia
101463.4	Islam in the Modern World
101465.2	Islamic Law in a Changing World
101724.2	Literary Animals
100875.4	Literature and Philosophy
100275.4	Philosophies of Love and Death
101761.2	Philosophy and the Visual
100879.2	Philosophy Today
101665.3	Politics and Religion
101003.2	Religion and Culture
101359.5	Sociology of Religion
100969.2	Theories of Conflict and Violence
101880.1	The Space of Literature
101798.2	Understanding Freedom
101010.3	What is the Human?
101471.2	Women in Arabic and Islamic Literature

Major - Media and Visual Cultures

M1025.1

The rapid flow of visual images with which we
communicate today – on the internet, by web and moblogs
– is a contemporary manifestation of the importance of
visual cultures in everyday life. The Media and Visual
Cultures major area equips students with multidisciplinary
knowledge and skills in critical art history and theory, digital
media, film and television studies, philosophy, and cultural
studies. It aims to create career ready graduates with the
skills necessary to interpret the production and
dissemination of visual images and their meanings in a
variety of media as well as cultural and institutional contexts.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

101734.2	Media and Visual Cultures: Case Studies

and the Level 3 unit

101295.2	Aesthetics

Students must also complete six of the Level 2/3 units from
the following pools with no less than two at Level 3:

Note: Not all units will be offered each year. Units will be
offered on a rotational basis.

Level 2 Unit Pool

100245.2	Asian Cinema
101248.3	Australian Art 1
101626.4	Children's Literature: Image and Text
101250.3	Digital Futures
101856.1	Film and Philosophy
10157.2	History and Theory of the Avant-Garde
100964.2	Introduction to Film Studies
101254.3	The Animated Image: Histories and Theories
10371.3	The Art Museum - from the Prince to the Public
100890.2	The Art of Landscape
101795.2	The Musical
10158.2	Writings on Art

Level 3 Unit Pool

400087.5	Applied Critical Methods
100959.2	Australian Art II
100989.2	Cinema and Realism
100990.2	Cinema, Culture, Memory
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict

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101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
101001.3	Modernity and Cinema
101761.2	Philosophy and the Visual
101253.3	Public Memory and Commemoration
101006.2	Social Semiotics
101738.2	The Art Game: Fraud, Forgery, Theft and Perfidy
101266.2	The Art of Modern Life
101717.2	The Italian Renaissance Unpacked
101668.2	World Cinema

Major - Arabic

M1026.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Arabic comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100041.2	Arabic 101
100042.2	Arabic 102

Level 2 unit pool

101699.2	Language and Communication Skills 2A: Arabic
101704.2	Language and Communication Skills 2B: Arabic

Level 3 unit pool

400087.5	Applied Critical Methods

100048.2	Arabic 302 - Arabic Advanced Language and Grammar
100049.2	Arabic 303: Advanced Writing Skills
100050.2	Arabic 304: Arabic Advanced Speaking
100052.2	Arabic 306: Arabic Novel and Short Story
100054.2	Arabic 308:Language Past and Present
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101792.2	Texts in Contemporary Arab Society and Culture
101668.2	World Cinema

Major - Chinese

M1027.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Chinese comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100056.2	Chinese 101
100057.2	Chinese 102

Level 2 unit pool

101700.2	Language and Communication Skills 2A: Chinese
101705.2	Language and Communication Skills 2B: Chinese

Level 3 unit pool

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400087.5	Applied Critical Methods		**100961.4**	Humanities Internship
100063.2	Chinese 302		**101454.2**	Intercultural Pragmatics
100064.2	Chinese 303: Twentieth-Century Chinese Literature		**100092.3**	Japanese 302
100065.2	Chinese 304: Chinese Classical Literature		**100093.2**	Japanese 303: Contemporary Culture and Society
100066.2	Chinese 305: Chinese Cinema		**100094.1**	Japanese 304: Discourse in Japanese
100067.2	Chinese 307: The Cultural Context of China		**100096.2**	Japanese 306: Japanese for Business
100961.4	Humanities Internship		**100098.1**	Japanese 308: Japanese Textual Studies
101454.2	Intercultural Pragmatics		**101712.2**	Languages and Grammatical Concepts 3A: Japanese
101710.2	Languages and Grammatical Concepts 3A: Chinese		**101668.2**	World Cinema
101668.2	World Cinema		**101669.2**	World Literature in Translation

Major - Japanese

M1028.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Japanese comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100085.2	Japanese 101
100086.2	Japanese 102

Level 2 unit pool

101702.2	Language and Communication Skills 2A: Japanese
101707.2	Language and Communication Skills 2B: Japanese

Level 3 unit pool

400087.5	Applied Critical Methods

Major - Italian

M1029.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Italian comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100130.2	Italian 101
100131.2	Italian 102

Level 2 unit pool

101701.2	Language and Communication Skills 2A: Italian
101706.2	Language and Communication Skills 2B: Italian

Level 3 unit pool

400087.5	Applied Critical Methods

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100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
100138.2	Italian 303: Contemporary Italy in European and International Contexts
100140.1	Italian 305: Modern Literature
100141.2	Italian 306: Classical Literature
100143.2	Italian 308: Italian Cinema
101711.2	Languages and Grammatical Concepts 3A: Italian
101668.2	World Cinema
101669.2	World Literature in Translation

Major - Spanish

M1030.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Spanish comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100145.2	Spanish 101
100146.2	Spanish 102

Level 2 unit pool

101703.2	Language and Communication Skills 2A: Spanish
101708.2	Language and Communication Skills 2B: Spanish

Level 3 unit pool

400087.5	Applied Critical Methods
100961.4	Humanities Internship

101454.2	Intercultural Pragmatics
101713.2	Languages and Grammatical Concepts 3A: Spanish
101791.2	Short Fiction in the Americas
100153.2	Spanish 303: Advanced Writing Skills
100154.2	Spanish 304: Advanced Speaking Skills
100155.2	Spanish 305: Contemporary Literature
100156.2	Spanish 306: Contemporary History
100157.2	Spanish 307: Classical Literature
100158.2	Spanish 308: Spanish Sociolinguistics
101668.2	World Cinema
101669.2	World Literature in Translation

Major - Global Studies

M1031.1

What does it mean to live in an increasingly globalised world? Global Studies offers students the opportunity to acquire key competencies in cross-cultural communication and global issues to act as socially aware global citizens in international settings. Global Studies addresses issues such as consumer and popular culture, global histories of food and technology, the interconnection of race, identity and transnational migration and intercultural pragmatics. Students have the opportunity to complete a semester of study abroad.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the Level 1 unit

101673.2	The First Globalisation

And seven units from the following pools with no less than three Level 3 units in order to complete the major.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

101737.2	World Politics: An Introduction

Level 2 unit pool

101857.2	Doing Business in China
101543.2	India: Global Contexts
100871.3	International Texts and Contexts
101797.2	Political Terror

Level 3 unit pool

400087.5	Applied Critical Methods
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100994.2	Consumer Culture
100858.3	Culture and Globalisation
101674.2	Global Histories of Food

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101735.2	Global Politics
101736.2	Governing the Globe
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101468.2	Islam, Media and Conflict
101733.2	Looking at Global Politics Through Film
101732.2	Media, The Everyday and Uneven Modernities
101666.2	Race, Identity and Globalisation
101717.2	The Italian Renaissance Unpacked
101848.1	Transnationalism and Migration
101831.2	Transport and the Making of the Modern World
101668.2	World Cinema
101669.2	World Literature in Translation
101830.2	WWII in Asia and the Pacific

Major - Asian Studies and International Relations

M1032.1

This major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study modern and contemporary Asia, the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The major area includes a range of units concerned with the United States, Europe and Australia as well as with Asia itself, and units in international relations. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Students are encouraged to undertake a submajor in an Asian language in conjunction with the major. Employment opportunities may be found in the State and Commonwealth public service, overseas organisations, trade and tourist organisations, business and industry, education and research.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

101442.2	Asia in the World

and seven units from the following pools with no less than three Level 3 units in order to pass the major:

Level 1 Unit Pool

101737.2	World Politics: An Introduction

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100245.2	Asian Cinema
100847.2	Asia and the West: The Imperial Encounter
100850.2	Buddhism in the Contemporary World
100855.2	Contemporary Japan: Culture and Society
101857.2	Doing Business in China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101543.2	India: Global Contexts
100872.2	International Politics of North Asia
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
63111.3	Special Topics in Asian and International Studies
101404.3	The History of Modern Indonesia
101871.1	War

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
400087.5	Applied Critical Methods
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100962.2	International Politics of the Southeast Asian Region
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Major - History and Political Thought

M1033.1

Since the revival of humanist studies in Renaissance Europe in the 15th century, universities have placed history and political thought at the heart of studies in the humanities. Through study of the political thought and social, political and cultural history of Australian, Asian and European societies, students gain knowledge and critical skills relevant to a variety of careers in education, government and non-governmental organizations. Study of the writings of political thinkers from ancient Greece and Rome, such as Plato and Cicero, and the early modern

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period, such as Hobbes and Machiavelli, to noted 19th century figures, such as Hegel and Marx, prepare students to engage with contemporary issues of governance, such as sovereignty, power, opportunity, property, civic freedom and social justice.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students would be eligible for this major having successfully completed 80 credit points with no less than three Level 3 units.

Students must complete the compulsory Level 1 unit

100873.3	Inventing Modernity

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100848.2	Australian Politics
100868.2	Foundations of Modern Australia
101737.2	World Politics: An Introduction

Level 2 unit pool

101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100869.2	Foundations of Modern Europe 1500-1800
101543.2	India: Global Contexts
100001.3	Keeping the Past
101843.2	Philosophy and Environment
101797.2	Political Terror
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
100882.3	Politics of Sex and Gender
63111.3	Special Topics in Asian and International Studies
101867.1	The Ethical Life
101404.3	The History of Modern Indonesia
101294.3	The Western Philosophical Tradition
101871.1	War
100293.3	War and Society: 20th Century Australia

Level 3 unit pool

400087.5	Applied Critical Methods
100966.3	American History, 1898-1945
100986.2	Australian History 1860-1920
100987.3	Australian History Since 1920
101685.3	Australian Indigenous History
101872.1	Australian Indigenous History from Federation to Reconciliation
100991.2	Citizenship Ancient and Modern
100852.2	Classics of Modern Philosophy
101799.2	Convicts and Settlers - Australian History 1788 - 1840

101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100863.3	Ethical Cultures
100254.3	Exploring Local History
100864.2	Europe in the Twentieth Century
101844.2	Feminist Theories
101674.2	Global Histories of Food
101735.2	Global Politics
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100963.3	Interpreting Australia: Australian Historians and Historiography
101801.2	Interpreting Fascism
101823.2	Lay Participation in Justice Processes
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
101665.3	Politics and Religion
100278.2	Politics of Post-War Japan
100908.2	Race Politics
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
100969.2	Theories of Conflict and Violence
101831.2	Transport and the Making of the Modern World
101798.2	Understanding Freedom
101731.3	Understanding Power
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Major - Cultural and Social Analysis

M1034.1

Cultural and Social Analysis is an interdisciplinary major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic

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productions, and education, communication, welfare or health services, in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

100897.2	Everyday Life

and seven units from the following pools with no less than three Level 3 units in order to complete the major.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101409.2	Aboriginal Cultural Texts
100854.3	Contemporary Popular Cultures
100871.3	International Texts and Contexts
101251.2	Introduction to Psychoanalysis
100273.3	New Ethnicities, Old Racisms
100882.3	Politics of Sex and Gender
100281.3	Sexual Culture/s
100884.2	Social Inequalities
100886.2	Special Topics in Cultural and Social Analysis
100889.2	Technocultures
101867.1	The Ethical Life
100291.5	Urban Life/Urban Culture
100298.2	Youth Cultures and Moral Panics
101879.1	Women with Muslim Identity

Level 3 Unit Pool

400087.5	Applied Critical Methods
101265.2	Children's Culture
100990.2	Cinema, Culture, Memory
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100858.3	Culture and Globalisation
100996.3	Death and Culture
100860.3	Emotions, Culture and Community
100998.4	Evolutionary Thinking
101844.2	Feminist Theories
101716.3	Healing and Culture
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101739.3	Literature and Trauma
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
100877.3	Multicultural Studies
101252.2	Psychoanalytic Criticism
101253.3	Public Memory and Commemoration
101003.2	Religion and Culture
101005.4	Representing Crime
101006.2	Social Semiotics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101008.2	Technologies of Racism

101009.3	The Body in Culture
101848.1	Transnationalism and Migration
101798.2	Understanding Freedom
101731.3	Understanding Power
101898.1	Violence in Everyday Life
101010.3	What is the Human?

Major - English, Text and Writing

M1035.1

The English, Text and Writing major invites students to explore contemporary approaches to language, literary study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. English, Text and Writing focuses on the imaginative workings of language, and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points with no less than three Level 3 units.

Students must complete the compulsory Level 1 unit

100862.2	English, Text & Writing

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100641.3	Approaches to Text

Level 2 unit pool

101626.4	Children's Literature: Image and Text
100900.3	Comedy and Tragedy
101408.2	Critical Discourse Analysis
101452.2	History of the English Language
100870.2	Hypertext Fictions
100871.3	International Texts and Contexts
100964.2	Introduction to Film Studies
100505.2	Special Topics in English, Text and Writing
101795.2	The Musical
100893.4	The Novel
101455.3	The Structure of English
100896.3	Writing Fiction
101869.1	Studies in Postcolonial Literature
101873.1	The Sound of Language

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Level 3 unit pool

400087.5	Applied Critical Methods
100845.3	American Literature
100849.4	Australian Textual Studies
101242.3	Children's Literature
100856.4	Creative Non-Fiction
100859.3	Creative Writing Project
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101724.2	Literary Animals
100875.4	Literature and Philosophy
101739.3	Literature and Trauma
100874.4	Literature, History and Culture
101033.4	Modernism
101001.3	Modernity and Cinema
101406.2	Queering Text
101650.3	Race in Literature
101005.4	Representing Crime
101791.2	Short Fiction in the Americas
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English
101471.2	Women in Arabic and Islamic Literature
101668.2	World Cinema
101669.2	World Literature in Translation
101670.3	Writing and Society
100895.4	Writing For Performance
101011.3	Writing Poetry
100582.2	Writing Portfolio
101796.1	19th Century American Literature
101880.1	The Space of Literature

Major - Islamic Studies

M1036.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches. Students are encouraged to undertake a sub-major in Arabic to complement the Islamic Studies major.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

An Islamic Studies major must include the following Level 1 unit

101462.2	Understanding Islam and Muslim Societies

The remaining seven units must include at least three Level 3 units drawn from the following pools:

Level 2 unit pool

101464.3	Great Texts of Islam: Qur'an and Hadith
100273.3	New Ethnicities, Old Racisms

Level 3 unit pool

101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
101466.2	Ethical Traditions in Islam
100961.4	Humanities Internship
101822.3	Islam in the West
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101468.2	Islam, Media and Conflict
101465.2	Islamic Law in a Changing World
100877.3	Multicultural Studies
101359.5	Sociology of Religion
101792.2	Texts in Contemporary Arab Society and Culture
101783.2	The International Relations of the Middle East Since 1945
101471.2	Women in Arabic and Islamic Literature

Major - Linguistics

M1037.1

Through study of what language is and how it works, students gain conceptual tools and knowledge relevant to the relationship of language and society as well linguistics-related disciplines, such as Sociolinguistics, Psycholinguistics, Developmental Linguistics, Bilingualism, and other applied linguistics areas. Understanding of the relationship between language learning, communicative competence and cultural practices, both in the Australian context and in a global context, provides a foundation for many careers including primary and secondary teaching, policy analysis, communication, social and welfare services in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete eight units from the following pools, with no less than three units at Level 3.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100194.2	Introduction to Interpreting
100195.2	Introduction to Translation

Level 2 unit pool

101452.2	History of the English Language

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100928.3	Linguistics
101873.1	The Sound of Language
101302.2	Translation Technologies

Level 3 unit pool

400087.5	Applied Critical Methods
101449.2	Bilingualism and Biculturalism
101441.2	English Semantics and Pragmatics
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101710.2	Languages and Grammatical Concepts 3A: Chinese
101711.2	Languages and Grammatical Concepts 3A: Italian
101712.2	Languages and Grammatical Concepts 3A: Japanese
101713.2	Languages and Grammatical Concepts 3A: Spanish
101451.2	Second Language Acquisition
101721.2	Second Language Learning and Teaching
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English

Major - Indigenous Australian Studies

M1041.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

Students must complete the following level one unit

| 101751.2 | Contextualising Indigenous Australia (Day Mode) |

Choose seven of the following units including three Level 3 units

Level 1 units

| 101878.1 | Indigenous Landscapes |
| 101762.1 | Who do you think you are? (Day Mode) |

Level 2 units

101754.2	From Corroborees to Curtain Raisers (Day Mode)
101755.1	From Ochre to Acrylics to New Technologies
101752.1	Pigments of the Imagination
101753.2	Revaluing Indigenous Economics (Day Mode)

Level 3 units - choose three of

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101757.1	The Making of the `Aborigines'
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Major - Psychological Studies

M1050.1

The Psychological Studies major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to to enrol in an accredited Psychology sequence need to complete the Psychology key program of 200 credit points.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
100013.3	Experimental Design and Analysis
101676.2	Human Learning
101680.3	Perception
101184.2	Psychology: Human Behaviour
101183.2	Psychology: Behavioural Science

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Major - Computer Systems

M3000.1

This major is available to students who commenced prior to 2013. This major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300103.3	Data Structures and Algorithms
300096.5	Computer Organisation
300092.1	Computer Architecture
300167.3	Systems Programming 1
300149.3	Operating Systems
300121.2	Formal Languages and Automata

Choose two of

300128.3	Information Security
300165.3	Systems Administration Programming
300368.2	Intelligent Systems
300093.3	Computer Graphics

Major - Advanced Programming

M3001.1

This major is available to students who commenced prior to 2013. This major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300096.5	Computer Organisation
300103.3	Data Structures and Algorithms
300404.2	Formal Software Engineering
300149.3	Operating Systems
300167.3	Systems Programming 1
300168.2	Systems Programming 2

Choose two of

300115.2	Distributed Systems and Programming
300130.3	Internet Programming
300165.3	Systems Administration Programming

Major - Information Technology

M3002.1

This major is available to all students except those enrolled in the Networks or Information Systems Key Programs within the Bachelor of Computing course, and the Bachelor of Information and Communications Technology course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300565.2	Computer Networking
300095.4	Computer Networks and Internets
300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design
300582.2	Technologies for Web Applications
300583.2	Web Systems Development

Choose one of

300575.2	Networked Systems Design
300166.2	Systems and Network Management

Choose one of

300569.2	Computer Security
300104.4	Database Design and Development
300570.3	Human-Computer Interaction

Major - Web Systems Development

M3003.1

This major is available to all students except those enrolled in the Bachelor of Computing, Bachelor of Computer Science or the Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units

300104.4	Database Design and Development
300111.2	Developing Web Applications with XML
300570.3	Human-Computer Interaction
300572.2	Information Systems Deployment and Management
300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design
300582.2	Technologies for Web Applications
300583.2	Web Systems Development

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Major - Health Informatics

M3004.1

This major is available to all students except those enrolled in the Health Informatics key program within the Bachelor of Computing course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300104.4	Database Design and Development
300567.3	e-Health
300566.2	Introduction to Health Informatics
300580.2	Programming Fundamentals
300568.2	Services Computing in Healthcare
300582.2	Technologies for Web Applications

Choose one of

300700.5	Statistical Decision Making
300585.2	Systems Analysis and Design

Choose one of

200036.3	Data Mining and Visualisation
300570.3	Human-Computer Interaction

Note: Students in the Bachelor of Computing (Information Systems) are required to select 300585 Systems Analysis and Design in order to comply with course major guidelines.

Major - Entertainment Computing

M3005.1

This major is available to all students

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300093.3	Computer Graphics
300565.2	Computer Networking
300104.4	Database Design and Development
300491.2	Games Technology
300578.3	Professional Development
300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design

Choose one of

300492.2	Games Theory and Design
300862.1	Video Games Development

Please note 300492 Games Theory and Design will be replaced by 300862 Video Games Development from 2012.

Major - Mathematics

M3021.1

This major is available to students who commenced prior to 2012. M3021 Mathematics replaced by M3054 Mathematics from 2012. This major may meet the NSW Institute of Teachers accreditation requirements for teaching Mathematics as a first subject in NSW state high schools.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

200028.3	Advanced Calculus
200025.2	Discrete Mathematics
300672.2	Mathematics 1A
300673.2	Mathematics 1B

Choose two of

200030.4	Differential Equations
200027.2	Linear Algebra
200029.2	Numerical Analysis

Choose two of

200193.2	Abstract Algebra
200023.3	Analysis
200022.3	Mathematical Modelling

Students enrolled in the Bachelor of Information and Communications Technology may replace 200025 Discrete Mathematics with Discrete Structures and Complexity.

Note: For students who want to complete the Mathematics Major but may not necessarily want to quality for NSW Institute of Teachers accreditation, 200024 Mathematical Finance would be added to the list of Level 3 units.

Major - Statistics

M3022.1

This major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

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Unit Set Structure

Students must complete 80 credit points as follows

200033.5	Applied Statistics
300606.2	Foundations of Statistical Modelling and Decision Making
200036.3	Data Mining and Visualisation
300104.4	Database Design and Development
200037.4	Regression Analysis & Experimental Design
200039.2	Surveys and Multivariate Analysis
200038.3	Time Series and Forecasting

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Major - Computational Decision Making

M3023.1

This major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300606.2	Foundations of Statistical Modelling and Decision Making
200042.3	Introduction to Operations Research
200027.2	Linear Algebra
300670.2	Optimisation Techniques
300671.2	Principles and Practice of Decision Making
200044.1	Simulation Techniques

Choose one of

200263.3	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Choose one of

200025.2	Discrete Mathematics
300672.2	Mathematics 1A

Major - Knowledge Discovery and Data Mining

M3024.1

This major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

200033.5	Applied Statistics
200036.3	Data Mining and Visualisation
300104.4	Database Design and Development
300117.3	Enterprise Database
300606.2	Foundations of Statistical Modelling and Decision Making
300585.2	Systems Analysis and Design

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Choose one of

200042.3	Introduction to Operations Research
300670.2	Optimisation Techniques
300671.2	Principles and Practice of Decision Making
200037.4	Regression Analysis & Experimental Design
200039.2	Surveys and Multivariate Analysis
200038.3	Time Series and Forecasting

Major - Networking

M3025.1

This major is only available to students enrolled in 3633 Bachelor of Computing, 3639 Bachelor of Information and Communications Technology and 3685 Bachelor of Computing (Information Systems) Advanced courses.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300565.2	Computer Networking
300095.4	Computer Networks and Internets
300143.3	Network Security
300575.2	Networked Systems Design
300576.2	Networking Workshop
300166.2	Systems and Network Management
300582.2	Technologies for Web Applications

Choose one of

300088.1	Broadband Networking
300112.1	Digital Communication Technology
300583.2	Web Systems Development

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Major - Systems Programming

M3043.1

This major aims to develop graduates with sound skills in the discipline of programming. The focus is on programming at the level of system calls to the underlying operating system and many of the units use the industry standard language for systems programming, namely C/C++, as the vehicle of instruction. There is a strong emphasis on the development of highly efficient and reliable code that can provide support services for higher level application oriented programs, as well as the development of programs suitable for systems administration and management. Practical work utilises the Unix environment. This major is appropriate where a career in systems programming or systems administration is planned, or where the student wishes to develop advanced systems programming skills.

Unit Set Structure

Students must complete the following eight units

300569.2	Computer Security
300115.2	Distributed Systems and Programming
300128.3	Information Security
300368.2	Intelligent Systems
300130.3	Internet Programming
300143.3	Network Security
300149.3	Operating Systems
300165.3	Systems Administration Programming

Major - Networked Systems

M3044.1

This major aims to develop graduates with sound skills in the discipline of networked computer systems. Recent advances in computer and telecommunications networked systems, particularly those based on TCP/IP, have increased the importance of network technologies in the discipline of computer science. This major covers a wide range of topics including computer communication network concepts and protocols, multimedia systems, Internet standards and technologies, network security, wireless and mobile computing, and distributed systems. The candidates are also introduced to some of the relevant current key research issues of the field.

Unit Set Structure

Students must complete the following eight units

300095.4	Computer Networks and Internets
300115.2	Distributed Systems and Programming
300128.3	Information Security
300138.3	LAN Workshop
300143.3	Network Security
300575.2	Networked Systems Design
300149.3	Operating Systems
300166.2	Systems and Network Management

Major - Innovation Design Management

M3503IDM.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

The following are core units.

300014.3	Design Management 3: Organisational Skills for Designers
200083.2	Marketing Principles

The following are drawn from alternate Industrial Design units.

100800.2	Consumer Psychology
300012.3	Design Management 1: Product Design Audit
300013.3	Design Management 2: Corporate Image and Identity
300015.3	Design Management 4: Design Process
200154.3	Entrepreneurial Management and Innovation
200163.1	Innovation and Product Development

Major - Interactive Industrial Graphics

M3503IIG2.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units

The following are core units.

300302.2	Industrial Graphics 1: Presentation
300282.2	Industrial Graphics 2: Transition
300310.3	Industrial Graphics 3: 3D Solids

The following are drawn from alternative/elective units

300312.3	Industrial Graphics 4: Surface
300315.3	Industrial Graphics 5: Integrated
100789.3	Interactive Design I
100949.3	Interactive Design II
101180.3	Web and Time Based Design

From 2013 unit 300315 Industrial Graphics 5: Integrated will no longer be offered.

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Major - International Design Management

M3503INTDM.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units.

The following are core units.

300014.3	Design Management 3: Organisational Skills for Designers
200083.2	Marketing Principles

The following are drawn from alternate Industrial Design units.

200088.2	Brand and Product Management
300012.3	Design Management 1: Product Design Audit
300013.3	Design Management 2: Corporate Image and Identity
300015.3	Design Management 4: Design Process
200154.3	Entrepreneurial Management and Innovation
61671.1	International Management

Sub-major - Design Management

S3502DM.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units.

The following is a core unit.

300014.3	Design Management 3: Organisational Skills for Designers

The following are drawn from alternate Industrial Design units.

300012.3	Design Management 1: Product Design Audit
300013.3	Design Management 2: Corporate Image and Identity
300015.3	Design Management 4: Design Process

Sub-major - Industrial Graphics

S3502IG.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following five units

The following are core units.

300302.2	Industrial Graphics 1: Presentation
300282.2	Industrial Graphics 2: Transition
300310.3	Industrial Graphics 3: 3D Solids

The following are drawn from alternate Industrial Design units.

300312.3	Industrial Graphics 4: Surface
300315.3	Industrial Graphics 5: Integrated

From 2013 unit 300315 Industrial Graphics 5: Integrated will no longer be offered.

Sub-major - Sustainable Design

S3502SD.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units.

The following are core units.

300309.3	Sustainable Design: Life Cycle Analysis
300304.3	Sustainable Design: Materials Technology
300306.3	Sustainable Design: Sustainable Futures

Note: Unit 300309 Sustainable Design: Life Cycle Analysis to be replaced by unit 300570 Human-Computer Interaction from 2013.

The following unit is drawn from alternate Industrial Design units.

300735.2	Automated Manufacturing

Sub-major - Geography and Urban Studies

SM1027.1

Students in this Sub-major examine the geography of contemporary Australian cities and regions. Geography is the integrated study of people, places and environments. The cutting edge interests of today's Geographers include

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post-colonialism, the emergence of global information economies, indigenous issues, class and cultural disparities, population movement, sexuality and space, and the global diffusion of popular culture. Urban Studies is a newer discipline focused on social justice within the city, through its critical assessments of peoples' access to scarce urban resources, such as housing, transport, education and employment. The political, economic, and cultural forces that shape cities and urban policy are the key concerns of the Urban Studies curriculum.These applied interests in urban well-being and city structure are the intellectual basis for the Urban Planning profession. The Geography and Urban Studies Sub-major is a compulsory component of the University's accredited Planning course.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete four of the following units

Autumn session

101589.2	Cities: Introduction to Urban Studies
101590.2	Cultural and Social Geographies
101593.2	Planning the City: Development, Community and Systems
101645.2	Transport, Access and Equity

Spring session

101646.2	Analysis of Spatial Data
101694.2	Geographies of Migration
101592.2	Housing Markets and Policy
101591.2	The Economics of Cities and Regions

Sub-major - Religion, Anthropology and Philosophy

SM1032.1

This multidisciplinary sub-major pursues critical and rational analysis of questions about individuals and societies; about human knowledge, culture and existence. It inquires into issues about human nature; the scope and limits of knowledge and belief; God and ethics; conflict and violence; ritual and myth; and religion, politics and culture. The sub-major provides students with rigorous training in analytic and creative thinking, intellectual independence and cultural and ethical awareness.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pool with no more than one unit at Level 1

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

101462.2	Understanding Islam and Muslim Societies

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100850.2	Buddhism in the Contemporary World
100852.2	Classics of Modern Philosophy
101856.1	Film and Philosophy
101464.3	Great Texts of Islam: Qur'an and Hadith
101843.2	Philosophy and Environment
101881.1	Philosophy and the Good Life
101867.1	The Ethical Life
101294.3	The Western Philosophical Tradition

Level 3 Unit Pool

101295.2	Aesthetics
101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
100863.3	Ethical Cultures
100998.4	Evolutionary Thinking
100961.4	Humanities Internship
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101465.2	Islamic Law in a Changing World
101724.2	Literary Animals
100875.4	Literature and Philosophy
100275.4	Philosophies of Love and Death
101761.2	Philosophy and the Visual
100879.2	Philosophy Today
101665.3	Politics and Religion
101003.2	Religion and Culture
101359.5	Sociology of Religion
100969.2	Theories of Conflict and Violence
101880.1	The Space of Literature
101798.2	Understanding Freedom
101010.3	What is the Human?
101471.2	Women in Arabic and Islamic Literature

Sub-major - Media and Visual Cultures

SM1033.1

The rapid flow of visual images with which we communicate today – on the internet, by web and moblogs – is a contemporary manifestation of the importance of visual cultures in everyday life. The Media and Visual Cultures sub-major area equips students with multidisciplinary knowledge and skills in critical art history and theory, digital media, film and television studies, philosophy, and cultural studies. It aims to create career ready graduates with the skills necessary to interpret the production and dissemination of visual images and their

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meanings in a variety of media as well as cultural and institutional contexts.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100245.2	Asian Cinema
101248.3	Australian Art 1
101626.4	Children's Literature: Image and Text
101250.3	Digital Futures
101856.1	Film and Philosophy
10157.2	History and Theory of the Avant-Garde
100964.2	Introduction to Film Studies
101254.3	The Animated Image: Histories and Theories
10371.3	The Art Museum - from the Prince to the Public
100890.2	The Art of Landscape
101795.2	The Musical
10158.2	Writings on Art

Level 3 Unit Pool

400087.5	Applied Critical Methods
100959.2	Australian Art II
100989.2	Cinema and Realism
100990.2	Cinema, Culture, Memory
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
101001.3	Modernity and Cinema
101761.2	Philosophy and the Visual
101253.3	Public Memory and Commemoration
101006.2	Social Semiotics
101738.2	The Art Game: Fraud, Forgery, Theft and Perfidy
101266.2	The Art of Modern Life
101717.2	The Italian Renaissance Unpacked
101668.2	World Cinema

Sub-major - Chinese

SM1035.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major

area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

A sub-major in Chinese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100056.2	Chinese 101
100057.2	Chinese 102

Level 2 unit pool

101700.2	Language and Communication Skills 2A: Chinese
101705.2	Language and Communication Skills 2B: Chinese

Level 3 unit pool

100063.2	Chinese 302
100064.2	Chinese 303: Twentieth-Century Chinese Literature
100065.2	Chinese 304: Chinese Classical Literature
100066.2	Chinese 305: Chinese Cinema
100067.2	Chinese 307: The Cultural Context of China
101454.2	Intercultural Pragmatics
101710.2	Languages and Grammatical Concepts 3A: Chinese
101668.2	World Cinema

Sub-major - Italian

SM1036.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers

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in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A sub-major in Italian is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100130.2	Italian 101
100131.2	Italian 102

Level 2 unit pool

101701.2	Language and Communication Skills 2A: Italian
101706.2	Language and Communication Skills 2B: Italian

Level 3 unit pool

101454.2	Intercultural Pragmatics
100138.2	Italian 303: Contemporary Italy in European and International Contexts
100140.1	Italian 305: Modern Literature
100141.2	Italian 306: Classical Literature
100143.2	Italian 308: Italian Cinema
101711.2	Languages and Grammatical Concepts 3A: Italian
101668.2	World Cinema
101669.2	World Literature in Translation

Sub-major - Japanese

SM1037.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

A sub-major in Japanese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100085.2	Japanese 101
100086.2	Japanese 102

Level 2 unit pool

101702.2	Language and Communication Skills 2A: Japanese
101707.2	Language and Communication Skills 2B: Japanese

Level 3 unit pool

101454.2	Intercultural Pragmatics
100093.2	Japanese 303: Contemporary Culture and Society
100094.1	Japanese 304: Discourse in Japanese
100096.2	Japanese 306: Japanese for Business
100098.1	Japanese 308: Japanese Textual Studies
101712.2	Languages and Grammatical Concepts 3A: Japanese
101668.2	World Cinema
101669.2	World Literature in Translation

Sub-major - Spanish

SM1038.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

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Unit Set Structure

A sub-major in Spanish is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100145.2	Spanish 101
100146.2	Spanish 102

Level 2 unit pool

101703.2	Language and Communication Skills 2A: Spanish
101708.2	Language and Communication Skills 2B: Spanish

Level 3 unit pool

400087.5	Applied Critical Methods
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101713.2	Languages and Grammatical Concepts 3A: Spanish
101791.2	Short Fiction in the Americas
100153.2	Spanish 303: Advanced Writing Skills
100154.2	Spanish 304: Advanced Speaking Skills
100155.2	Spanish 305: Contemporary Literature
100156.2	Spanish 306: Contemporary History
100157.2	Spanish 307: Classical Literature
100158.2	Spanish 308: Spanish Sociolinguistics
101668.2	World Cinema
101669.2	World Literature in Translation

Sub-major - Global Studies

SM1040.1

What does it mean to live in an increasingly globalised world? Global Studies offers students the opportunity to acquire key competencies in cross-cultural communication and global issues to act as socially aware global citizens in international settings. Global Studies addresses issues such as consumer and popular culture, global histories of food and technology, the interconnection of race, identity and transnational migration and intercultural pragmatics. Students have the opportunity to complete a semester of study abroad.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at Level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

101737.2	World Politics: An Introduction

Level 2 unit pool

101857.2	Doing Business in China
101543.2	India: Global Contexts
100871.3	International Texts and Contexts
101797.2	Political Terror

Level 3 unit pool

400087.5	Applied Critical Methods
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100994.2	Consumer Culture
100858.3	Culture and Globalisation
101674.2	Global Histories of Food
101735.2	Global Politics
101736.2	Governing the Globe
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101468.2	Islam, Media and Conflict
101733.2	Looking at Global Politics Through Film
101732.2	Media, The Everyday and Uneven Modernities
101666.2	Race, Identity and Globalisation
101717.2	The Italian Renaissance Unpacked
101848.1	Transnationalism and Migration
101831.2	Transport and the Making of the Modern World
101668.2	World Cinema
101669.2	World Literature in Translation
101830.2	WWII in Asia and the Pacific

Sub-major - History and Political Thought

SM1041.1

Since the revival of humanist studies in Renaissance Europe in the 15th century, universities have placed history and political thought at the heart of studies in the humanities. Through study of the political thought and social, political and cultural history of Australian, Asian and European societies, students gain knowledge and critical skills relevant to a variety of careers in education, government and non-governmental organizations. Study of the writings of political thinkers from ancient Greece and Rome, such as Plato and Cicero, and the early modern period, such as Hobbes and Machiavelli, to noted 19th century figures, such as Hegel and Marx, prepare students to engage with contemporary issues of governance, such as sovereignty, power, opportunity, property, civic freedom and social justice.

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Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100848.2	Australian Politics
100868.2	Foundations of Modern Australia
100873.3	Inventing Modernity
101737.2	World Politics: An Introduction

Level 2 unit pool

101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100869.2	Foundations of Modern Europe 1500-1800
101543.2	India: Global Contexts
100001.3	Keeping the Past
101843.2	Philosophy and Environment
101797.2	Political Terror
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
100882.3	Politics of Sex and Gender
63111.3	Special Topics in Asian and International Studies
101867.1	The Ethical Life
101404.3	The History of Modern Indonesia
101294.3	The Western Philosophical Tradition
101871.1	War
100293.3	War and Society: 20th Century Australia

Level 3 unit pool

400087.5	Applied Critical Methods
100966.3	American History, 1898-1945
100986.2	Australian History 1860-1920
100987.3	Australian History Since 1920
101685.3	Australian Indigenous History
101872.1	Australian Indigenous History from Federation to Reconciliation
100991.2	Citizenship Ancient and Modern
100852.2	Classics of Modern Philosophy
101799.2	Convicts and Settlers - Australian History 1788 - 1840
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100863.3	Ethical Cultures
100864.2	Europe in the Twentieth Century
100254.3	Exploring Local History
101844.2	Feminist Theories
101674.2	Global Histories of Food
101735.2	Global Politics

100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100963.3	Interpreting Australia: Australian Historians and Historiography
101801.2	Interpreting Fascism
101823.2	Lay Participation in Justice Processes
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
101665.3	Politics and Religion
100278.2	Politics of Post-War Japan
100908.2	Race Politics
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
100969.2	Theories of Conflict and Violence
101831.2	Transport and the Making of the Modern World
101798.2	Understanding Freedom
101731.3	Understanding Power
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Sub-major - Asian Studies and International Relations

SM1042.1

This sub-major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study modern and contemporary Asia, the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The sub-major area includes a range of units concerned with the United States, Europe and Australia as well as with Asia itself, and units in international relations. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Students are encouraged to undertake a sub-major in an Asian language in conjunction with the major. Employment opportunities may be found in the State and Commonwealth public service, overseas organisations, trade and tourist organisations, business and industry, education and research

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Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

101737.2	World Politics: An Introduction

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100847.2	Asia and the West: The Imperial Encounter
100245.2	Asian Cinema
100850.2	Buddhism in the Contemporary World
100855.2	Contemporary Japan: Culture and Society
101857.2	Doing Business in China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101543.2	India: Global Contexts
100872.2	International Politics of North Asia
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
63111.3	Special Topics in Asian and International Studies
101404.3	The History of Modern Indonesia
101871.1	War

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
400087.5	Applied Critical Methods
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100962.2	International Politics of the Southeast Asian Region
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Sub-major - Cultural and Social Analysis

SM1043.1

Cultural and Social Analysis is an interdisciplinary sub-major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This sub-major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic productions, and education, communication, welfare or health services, in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the Level 2/3 units from the following pools

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101409.2	Aboriginal Cultural Texts
100854.3	Contemporary Popular Cultures
100871.3	International Texts and Contexts
101251.2	Introduction to Psychoanalysis
100273.3	New Ethnicities, Old Racisms
100882.3	Politics of Sex and Gender
100281.3	Sexual Culture/s
100884.2	Social Inequalities
100886.2	Special Topics in Cultural and Social Analysis
100889.2	Technocultures
101867.1	The Ethical Life
100291.5	Urban Life/Urban Culture
101879.1	Women with Muslim Identity
100298.2	Youth Cultures and Moral Panics

Level 3 Unit Pool

400087.5	Applied Critical Methods
101265.2	Children's Culture
100990.2	Cinema, Culture, Memory
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100858.3	Culture and Globalisation
100996.3	Death and Culture

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100860.3	Emotions, Culture and Community
100998.4	Evolutionary Thinking
101844.2	Feminist Theories
101716.3	Healing and Culture
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101739.3	Literature and Trauma
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
100877.3	Multicultural Studies
101252.2	Psychoanalytic Criticism
101253.3	Public Memory and Commemoration
101003.2	Religion and Culture
101005.4	Representing Crime
101006.2	Social Semiotics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101008.2	Technologies of Racism
101009.3	The Body in Culture
101848.1	Transnationalism and Migration
101798.2	Understanding Freedom
101731.3	Understanding Power
101010.3	What is the Human?

Sub-major - English, Text and Writing

SM1044.1

The English, Text and Writing sub-major invites students to explore contemporary approaches to language, literary study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. English, Text and Writing focuses on the imaginative workings of language, and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at Level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100641.3	Approaches to Text

Level 2 unit pool

101626.4	Children's Literature: Image and Text

100900.3	Comedy and Tragedy
101408.2	Critical Discourse Analysis
101452.2	History of the English Language
100870.2	Hypertext Fictions
100871.3	International Texts and Contexts
100964.2	Introduction to Film Studies
100505.2	Special Topics in English, Text and Writing
101869.1	Studies in Postcolonial Literature
101795.2	The Musical
100893.4	The Novel
101873.1	The Sound of Language
101455.3	The Structure of English
100896.3	Writing Fiction

Level 3 unit pool

400087.5	Applied Critical Methods
100845.3	American Literature
100849.4	Australian Textual Studies
101242.3	Children's Literature
100856.4	Creative Non-Fiction
100859.3	Creative Writing Project
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101724.2	Literary Animals
100875.4	Literature and Philosophy
101739.3	Literature and Trauma
100874.4	Literature, History and Culture
101033.4	Modernism
101001.3	Modernity and Cinema
101406.2	Queering Text
101650.3	Race in Literature
101005.4	Representing Crime
101791.2	Short Fiction in the Americas
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English
101471.2	Women in Arabic and Islamic Literature
101668.2	World Cinema
101669.2	World Literature in Translation
101670.3	Writing and Society
100895.4	Writing For Performance
101011.3	Writing Poetry
100582.2	Writing Portfolio
101796.1	19th Century American Literature
101880.1	The Space of Literature

Sub-major - Islamic Studies

SM1045.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches.

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Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at level 1

Level 2 unit pool

101464.3	Great Texts of Islam: Qur'an and Hadith
100273.3	New Ethnicities, Old Racisms

Level 3 unit pool

101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
101466.2	Ethical Traditions in Islam
100961.4	Humanities Internship
101822.3	Islam in the West
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101468.2	Islam, Media and Conflict
101465.2	Islamic Law in a Changing World
100877.3	Multicultural Studies
101359.5	Sociology of Religion
101792.2	Texts in Contemporary Arab Society and Culture
101783.2	The International Relations of the Middle East Since 1945
101471.2	Women in Arabic and Islamic Literature

Sub-major - Linguistics

SM1046.1

Through study of what language is and how it works, students gain conceptual tools and knowledge relevant to the relationship of language and society as well linguistics-related disciplines, such as Sociolinguistics, Psycholinguistics, Developmental Linguistics, Bilingualism, and other applied linguistics areas. Understanding of the relationship between language learning, communicative competence and cultural practices, both in the Australian context and in a global context, provides a foundation for many careers including primary and secondary teaching, policy analysis, communication, social and welfare services in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	External

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100194.2	Introduction to Interpreting
100195.2	Introduction to Translation

Level 2 unit pool

101452.2	History of the English Language
100928.3	Linguistics
101873.1	The Sound of Language
101302.2	Translation Technologies

Level 3 unit pool

400087.5	Applied Critical Methods
101449.2	Bilingualism and Biculturalism
101441.2	English Semantics and Pragmatics
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101710.2	Languages and Grammatical Concepts 3A: Chinese
101711.2	Languages and Grammatical Concepts 3A: Italian
101712.2	Languages and Grammatical Concepts 3A: Japanese
101713.2	Languages and Grammatical Concepts 3A: Spanish
101451.2	Second Language Acquisition
101721.2	Second Language Learning and Teaching
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English

Sub-major - Indigenous Australian Studies

SM1049.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

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Unit Set Structure

Students must complete 40 credit points as follows

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101751.2	Contextualising Indigenous Australia (Day Mode)
101752.1	Pigments of the Imagination

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)
101757.1	The Making of the `Aborigines'

Sub-major - Indigenous Economics

SM1050.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101751.2	Contextualising Indigenous Australia (Day Mode)
101753.2	Revaluing Indigenous Economics (Day Mode)
101757.1	The Making of the `Aborigines'

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Sub-major - Indigenous Australian Creative Expressions

SM1051.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101751.2	Contextualising Indigenous Australia (Day Mode)
101754.2	From Corroborees to Curtain Raisers (Day Mode)
101755.1	From Ochre to Acrylics to New Technologies

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Sub-major - Psychological Studies

SM1069.1

The Psychological Studies sub-major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies sub-major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to to enrol in an accredited Psychology sequence need to complete the Psychology key program of 200 credit points.

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Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

This sub-major is restricted to students enrolled in 1604 - Bachelor of Arts, 1706 - Bachelor of Arts, 1652 - Bachelor of Arts (Pathway to Teaching Secondary) or 1655 - Bachelor of Arts (Dean''s Scholars).

Students must complete 40 credit points as follows

100013.3	Experimental Design and Analysis
101183.2	Psychology: Behavioural Science
101184.2	Psychology: Human Behaviour

Choose one of

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
101676.2	Human Learning
101680.3	Perception

Sub-major - Property Investment

SM2020.1

The Property Investment sub-major is available to all undergraduate students other than those completing the Property Key Program or Major. This sub-major is useful to students in the finance and related areas who want to expand their expertise in property investment.

Location

Campus	Mode
Parramatta Campus	External
Parramatta Campus	Internal

Unit Set Structure

Students must complete the following four units.

200598.2	Property Development
200597.2	Property Finance and Tax
200749.2	Property Investment
200750.2	Property Portfolio Analysis (V2)

Sub-major - Computer Systems

SM3000.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300092.1	Computer Architecture
300096.5	Computer Organisation
300149.3	Operating Systems
300167.3	Systems Programming 1

Sub-major - Systems Administration

SM3001.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300103.3	Data Structures and Algorithms
300149.3	Operating Systems
300165.3	Systems Administration Programming
300167.3	Systems Programming 1

Sub-major - Systems Security

SM3002.1

This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300128.3	Information Security
300143.3	Network Security
300149.3	Operating Systems
300167.3	Systems Programming 1

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Sub-major - Systems Programming

SM3003.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300103.3	Data Structures and Algorithms
300149.3	Operating Systems
300167.3	Systems Programming 1

Choose one of

300115.2	Distributed Systems and Programming
300168.2	Systems Programming 2

Sub-major - Formal Systems

SM3004.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300103.3	Data Structures and Algorithms
300121.2	Formal Languages and Automata
300404.2	Formal Software Engineering

Choose one of

200193.2	Abstract Algebra
200033.5	Applied Statistics
300093.3	Computer Graphics
300368.2	Intelligent Systems
200042.3	Introduction to Operations Research
200237.3	Mathematics for Engineers 1

Sub-major - Applied Mathematics

SM3005.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

200237.3	Mathematics for Engineers 1

Choose three of

200193.2	Abstract Algebra
200023.3	Analysis
200033.5	Applied Statistics
200042.3	Introduction to Operations Research
200027.2	Linear Algebra
200238.2	Mathematics for Engineers 2
200242.3	Mathematics for Engineers 3

Sub-major - Web Application Development (for Computing Students)

SM3006.1

Note: Unit 300574 Internet Structures and Web Servers will no longer be available from 2013 and students are advised to enrol in unit 300130 Internet Programming in its place. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300111.2	Developing Web Applications with XML
300574.2	Internet Structures and Web Servers
300582.2	Technologies for Web Applications
300583.2	Web Systems Development

Note: Unit 300574 Internet Structures and Web Servers will no longer be available from 2013 and students are advised to enrol in unit 300130 Internet Programming in its place.

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Sub-major - Web Application Development (for Non-Computing Students)

SM3007.1

This sub-major is available to all UWS students except those enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300580.2	Programming Fundamentals
300582.2	Technologies for Web Applications
300583.2	Web Systems Development

Choose one of

300569.2	Computer Security
300104.4	Database Design and Development
300111.2	Developing Web Applications with XML
300570.3	Human-Computer Interaction
300574.2	Internet Structures and Web Servers

Sub-major - Networking

SM3008.1

This sub-major is available to all students except those enrolled in the Bachelor of Computing (Networks).

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300565.2	Computer Networking
300095.4	Computer Networks and Internets
300575.2	Networked Systems Design

Choose one of

300088.1	Broadband Networking
300143.3	Network Security
300166.2	Systems and Network Management

Sub-major - Health Information Management

SM3009.1

This sub-major deals with the management of Health Information and the management and analysis of that data via databases. This sub-major is available to all students except those enrolled in the Health Informatics key program within the Bachelor of Computing course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

200036.3	Data Mining and Visualisation
300104.4	Database Design and Development
300567.3	e-Health
300566.2	Introduction to Health Informatics

Sub-major - Health Information Applications

SM3010.1

This sub-major will deal with the application of approaches, tools and techniques and the development of programs appropriate for Health Information systems. This sub-major is available to all students except those enrolled in the Health Informatics key program within the Bachelor of Computing course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300567.3	e-Health
300566.2	Introduction to Health Informatics
300568.2	Services Computing in Healthcare
300582.2	Technologies for Web Applications

Note: 300582 Technologies for Web Applications requires 300580 Programming Fundamentals as a pre-requisite.

Sub-major - Entertainment Computing

SM3011.1

This sub-major is available to all students.

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Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300093.3	Computer Graphics
300491.2	Games Technology
300580.2	Programming Fundamentals

Choose one of

300492.2	Games Theory and Design
300862.1	Video Games Development

Please note 300492 Games Theory and Design will be replaced by 300862 Video Games Development from 2012.

Sub-major - Mathematics

SM3025.1

This sub-major is available to all students. This sub-major may meet the NSW Institute of Teachers accreditation requirements for teaching Mathematics as a second subject in NSW state high schools.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300672.2	Mathematics 1A
300673.2	Mathematics 1B

Choose two of

200028.3	Advanced Calculus
200030.4	Differential Equations
200027.2	Linear Algebra

Sub-major - Statistics

SM3026.1

This sub major is available to students who commenced prior to 2012. SM3026 Statistics replaced by SM3039 Statistics from 2012.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Choose at least one of

200033.5	Applied Statistics
300104.4	Database Design and Development
300606.2	Foundations of Statistical Modelling and Decision Making

Choose at least one of

200036.3	Data Mining and Visualisation
200037.4	Regression Analysis & Experimental Design
200039.2	Surveys and Multivariate Analysis
200038.3	Time Series and Forecasting

Sub-major - Computational Decision Making

SM3027.1

This sub major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

200025.2	Discrete Mathematics

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Choose two of

300606.2	Foundations of Statistical Modelling and Decision Making
200042.3	Introduction to Operations Research
200027.2	Linear Algebra
300670.2	Optimisation Techniques
300671.2	Principles and Practice of Decision Making
200044.1	Simulation Techniques

Students enrolled in Bachelor of Information and Communications Technology course may replace 200025 Discrete Mathematics with 300699 Discrete Structures and Complexity.

Note: For students who want to complete a Mathematics sub-major, but may not necessarily want to quality for NSW Institute of Teachers accreditation, 200029 Numerical Analysis would be added to the list of Level 2 units and

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200024 Mathematical Finance would be added to the list of Level 3 units.

Sub-major - Knowledge Discovery and Data Mining

SM3028.1

This sub major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

200036.3	Data Mining and Visualisation
300104.4	Database Design and Development
300606.2	Foundations of Statistical Modelling and Decision Making

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Sub-major - Construction Economics

SM3029.1

This sub-major is a requirement for membership of the Australian Institute of Quantity Surveyors and is a useful course of study for those interested in the area of cost control and project planning.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

200503.2	Construction Information Systems
300726.2	Estimating 2
200487.3	Quantity Surveying 2
300748.2	Quality and Value Management

Sub-major - IT Support

SM3031.1

This sub-major is only available to students enrolled in the Bachelor of Information and Communications Technology course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300136.4	I.T. Support Practicum
300576.2	Networking Workshop
300150.3	PC Workshop

Choose one of

200120.1	E-Business Fundamentals and Systems
200083.2	Marketing Principles
300167.3	Systems Programming 1

Sub-major - Computer Engineering

SM3032.1

This sub-major is available to students other than those enrolled in B Engineering (Computer) Key Program. This sub-major includes core subjects of computer engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300096.5	Computer Organisation
300029.3	Engineering Visualization
300167.3	Systems Programming 1

Choose one of

300092.1	Computer Architecture
300044.2	Microcontrollers and PLCs
300149.3	Operating Systems

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Sub-major - Construction

SM3033.1

This sub-major is available to any student in UWS other than those enrolled in Bachelor of Construction Management or Bachelor of Housing. This sub-major includes core subjects of construction. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300707.2	Building 2
BG302A.1	Building Regulation Studies
200471.3	Construction Technology 5 (Envelope)
MG313A.1	Project Management

Sub-major - Electrical Engineering

SM3034.1

This sub-major is available to students other than those enrolled in B Engineering (Electrical) Key Program. This sub-major includes core subjects of electrical engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300071.2	Electrical Machines 1
300481.2	Engineering Electromagnetics

Choose two of

300070.4	Electrical Drives
300024.2	Electronic Systems Design
300026.3	Energy Systems

Sub-major - Environmental Engineering

SM3035.1

This sub-major is available to students other than those enrolled in B Engineering (Environmental) Key Program. This sub-major includes core subjects of environmental

engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

EH321A.1	Air Quality Assessment & Management (UG)
300469.2	Introductory Chemistry
EY101A.1	Terrestrial Environment Management
MG309A.2	Water and Waste Management

Sub-major - Civil Engineering

SM3621CIVE.1

This sub-major is available to students other than those enrolled in the B Engineering (Civil) Key Program. This sub-major includes core subjects of civil engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300736.2	Concrete Structures (UG)
300730.2	Steel Structures
300732.2	Structural Analysis
300739.2	Timber Structures (UG)

Sub-major - Ecological Engineering

SM3621ECOE.1

This sub-major is available to students other than those enrolled in the B Engineering (Civil) or (Environmental) Key Program. This sub-major includes core subjects of ecological engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300482.2	Engineering Geology and Concrete Materials
300737.3	Environmental Engineering

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300486.2   Infrastructure Engineering
300738.3   Surveying for Engineers

Sub-major - Robotics and Mechatronics

SM3621R&M.1

This sub-major is available to students other than those enrolled in B Engineering (Robotics and Mechatronics) Key Program. The units forming this sub-major provide a comprehensive introduction to essential aspects of mechatronics and robotics. It is intended as a coherent set of units in mechanics of machines, automation and robotics that can add to engineering knowledge gained in other fields of engineering. The sub-major may be taken by students in non-engineering areas provided they satisfy the unit prerequisites and assumed knowledge.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300735.2   Automated Manufacturing
300035.3   Kinematics and Kinetics of Machines
300044.2   Microcontrollers and PLCs

Choose one of

300043.3   Mobile Robotics
300056.3   Robotics

Sub-major - Soil Engineering

SM3621SOE.1

This sub-major is available to students other than those enrolled in B Engineering (Civil) or (Environmental) Key Programs. This sub-major includes core subjects of soil engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300482.2   Engineering Geology and Concrete Materials
300485.3   Foundation Engineering
200237.3   Mathematics for Engineers 1
300731.2   Soil Engineering

Sub-major - Structural Engineering

SM3621STRE.1

This sub-major is available to students other than those enrolled in the B Engineering (Civil) or (Environmental) Key Programs. This sub-major includes core subjects of structural engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300463.2   Fundamentals of Mechanics
300733.2   Introduction to Structural Engineering
300040.2   Mechanics of Materials
300732.2   Structural Analysis

Sub-major - Water Engineering

SM3621WATE.1

This sub-major is available to students other than those enrolled in B Engineering (Civil) or (Environmental) Key Programs. This sub-major includes core subjects of water engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300479.1   Drainage Engineering
200237.3   Mathematics for Engineers 1
300740.1   Water Engineering
300734.1   Water Resources Engineering (UG)

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SCHOOL OF SCIENCE AND HEALTH

Bachelor of Health Science

4656.1

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2010 or later.

The course provides a broad introduction to the health sciences with opportunities to major in health promotion, health service management and therapeutic recreation, or to transfer to one of the other health science specialisations at UWS. Subject to meeting admission criteria, transfers are possible to the clinical programs in physiotherapy, occupational therapy and podiatric medicine. Note that transfer places may be limited.

Study Mode
Three years full-time. Students may choose to study at a reduced load.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The Bachelor of Health Science (Health Service Management) has Professional Accreditation with the Australasian College of Health Service Management (ACHSM). The Bachelor of Health Science (Therapeutic Recreation) has been granted accreditation from Diversional Therapy Australia (DTA).

Admission
For local students admission is through UAC - Assumed knowledge, any 2 units of English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements
In order to enrol in Second Year Autumn units, all students must have: 1. NSW Health National Criminal Record Check, 2. Prohibited Employment Declaration Form. In order to enrol in Second Year Spring units, all students must have: 1.First Aid Certificate. To be eligible to undertake fieldwork placements in public hospitals, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health.

Course Structure
Qualification for this Key Program requires the successful completion of 240 credit points including the units within one of the following Key Programs.

Recommended Sequence
Students must select and enrol in one of the following Key Programs before selecting individual units.

KT4000.1	Health Promotion
KT4001.1	Health Services Management
KT4002.1	Therapeutic Recreation

Majors

These majors are available to Health Promotion, Health Service Management and Therapeutic Recreation students only.

M4001.1	Health Promotion

This major is not available to students enrolled in the Health Promotion Key Program of the Bachelor of Health Science.

M4002.1	Health Services Management

This major is not available to students enrolled in the Health Services Management Key Program of the Bachelor of Health Science.

M4000.1	Therapeutic Recreation

This major is not available to students enrolled in the Therapeutic Recreation Key Program of the Bachelor of Health Science.

Double Majors
The sharing of some common units across the Key Programs detailed above offers students the opportunity to achieve the Bachelor of Health Science with a double major. Qualification for the double major programs requires the successful completion of 240 credit points including the units listed in the recommended sequences below.

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Bachelor of Health Science (Therapeutic Recreation) with Health Promotion double major

OR

Bachelor of Health Science (Health Promotion) with Therapeutic Recreation double major

Recommended sequence (Double Major)

Full-time

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health
400285.2	Public Health

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400244.2	Introduction to Leisure and Recreation Theory
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

400968.2	Professional Practice in Aged Care and Disability
400246.3	Workplace Learning 1 (Therapeutic Recreation)
400966.2	Health Politics, Policy and Planning
400286.3	Injury Prevention

Year 3

Autumn session

400275.2	Health Planning Project
400252.2	Workplace Learning 2 (Community Placement)
400789.3	Leisure Education Programming and Mental Health
400784.2	Health Promotion Practice 1

Spring session

400785.2	Health Promotion Practice 2
400786.2	Professional Transition Project
400254.2	Therapeutic Recreation Professional Project

400249.2	Ethical and Legal Issues in Health Care

Bachelor of Health Science (Therapeutic Recreation) with Health Services Management double major

OR

Bachelor of Health Science (Health Services Management) with Therapeutic Recreation double major

Recommended Sequence (Double Major)

Full-time

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

101614.2	Psychology and Health
400277.3	Health Services Management
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400244.2	Introduction to Leisure and Recreation Theory
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

400968.2	Professional Practice in Aged Care and Disability
400246.3	Workplace Learning 1 (Therapeutic Recreation)
400966.2	Health Politics, Policy and Planning
400788.2	Health Services Workforce Management

Year 3

Autumn session

400275.2	Health Planning Project
400252.2	Workplace Learning 2 (Community Placement)
400789.3	Leisure Education Programming and Mental Health
400787.2	Health Services Management Practice

Spring session

400249.2	Ethical and Legal Issues in Health Care

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400786.2	Professional Transition Project
400254.2	Therapeutic Recreation Professional Project
400279.3	Health Services Financial Management

Bachelor of Health Science (Health Promotion) with Health Services Management double major

OR

Bachelor of Health Science (Health Services Management) with Health Promotion double major

Recommended Sequence (Double Major)

Full-time

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

101614.2	Psychology and Health
400277.3	Health Services Management
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

And one elective

Spring session

400285.2	Public Health
400286.3	Injury Prevention
400966.2	Health Politics, Policy and Planning
400788.2	Health Services Workforce Management

Year 3

Autumn session

400787.2	Health Services Management Practice
400275.2	Health Planning Project
400784.2	Health Promotion Practice 1

And one elective

Spring session

400785.2	Health Promotion Practice 2
400786.2	Professional Transition Project
400279.3	Health Services Financial Management
400249.2	Ethical and Legal Issues in Health Care

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Health Science (Honours)

4657.2

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2012.

High-achieving students in the Bachelor of Health Science can take Honours as an additional year for full-time students (or a longer equivalent for part-time students) at the end of Year 3. Honours is a key early step in the path to leadership in the profession and opens up the world of research. The honours thesis will identify new ways to address real problems and is written under the supervision of experienced academic researchers.

The honours program encourages independent learning, develops research skills and provides an opportunity for deeper investigation in the major field of study. An honours program is a recognised preparation and entry point for postgraduate research studies and the research training is valuable preparation for careers in research and development and analysis in the public and private sectors.

The honours program consists of supervised research on a topic in health science, culminating in the production of a thesis and presentation of a seminar. The coursework component covers research training, research ethics and advanced research methods. Research projects often involve clinical studies and involvement with external health organisations.

The honours program is available to meritorious students in the Bachelor of Health Science and related courses.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Admission

Admission is through direct application to the university. Students must have completed a Bachelor of Health Science from UWS or equivalent degree from another university, with a threshold Admission Average Mark (AAM) equal to or above the minimum of 65.

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Entry is competitive and will depend of availability of places and supervisors.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students must have an IELTS equal to 6.5 or above.

Applicants from other universities for an honour program in Sport and Exercise Science will, in addition to the above, be required to demonstrate competence in the use of UWS Sport & Exercise Science laboratory equipment deemed necessary to carry out their proposed research as per the applicant's research statement.

In line with the Honours in Bachelors Award Policy:

Admission to an end-on or embedded honours program is determined on the basis of all of the four following criteria being met:

- a) Achievement of a threshold Admission Average Mark (AAM) equal to or above the minimum of 65; and
- b) Statement of Intent or School equivalent; and
- c) Appointment of a principal supervisor by the Head of School; and
- d) Demonstrated satisfactory academic writing skills appropriate to the discipline.
- A School Academic Committee may, on recommendation of the School Honours Coordinator, rank applicants on the basis of AAMs if the Head of School indicates the number of applications exceeds the availability of supervised places

Course Structure

Qualification for this award requires the successful completion of 80 credit points including the units listed in the recommended sequence below.

Recommended Sequence

Start Year Intake

Full-time

Year 1

Autumn session

400872.2	Honours Research Design and Methodology
400898.2	Honours Thesis in Health Science A

Spring session

400899.2	Honours Thesis in Health Science B

Part-time

Year 1

Autumn session

400872.2	Honours Research Design and Methodology

Spring session

400898.2	Honours Thesis in Health Science A

Year 2

Autumn

400900.2	Honours Thesis in Health Science C

Spring

400901.2	Honours Thesis in Health Science D

Mid Year Intake

Year 1

Spring session

400898.2	Honours Thesis in Health Science A

Year 2

Autumn session

400872.2	Honours Research Design and Methodology
400900.2	Honours Thesis in Health Science C

Spring session

400901.2	Honours Thesis in Health Science D

Bachelor of Health Science (UWSC First Year Program)

7028.1

The Bachelor of Health Science (UWSC First Year Program) is designed to provide students with the first year units included in the Bachelor of Health Science degree and presents students with units covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course. This course aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree in the specified key programs of Health Promotion, Health Services Management and Therapeutic Recreation. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Bachelor of Health Science (UWSC First Year Program) will articulate into the B Health Science degree at UWS with up to one year equivalent of advanced standing.

Study Mode

One year full-time (three sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Health Science areas of Health Promotion, Health Services Management and Therapeutic Recreation. This course is accredited by the University, as principal, to

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enable its agent (UWSCollege) to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science), OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

Course Structure

Successful completion of the following units will allow students to enter the second year of the Bachelor of Health Science (with key programs in Health Promotion, Health Services Management, or Therapeutic Recreation) at UWS with 80cp advanced standing.

Qualification for this award requires the successful completion of the units listed below.

700067.1	Professional Health Competencies (UWSC)
700066.1	Population Health and Society (UWSC)
700062.2	Communication in Health (UWSC)
700060.1	Psychology and Health (UWSC)
700061.1	Introduction to Human Biology (UWSC)
700064.1	Foundations of Research and Evidence-Based Practice (UWSC)
700065.2	Approaches to Health Promotion (UWSC)
700075.1	Professional Pathways in Health Science (UWSC)

Students must pass, with a satisfactory grade, the following units

700056.2	Academic English (UWSCFS)
700059.2	Science for Health Science (UWSCFS)

Students also complete a mandatory unit Tertiary Study Skills, although this does not count for credit towards the Diploma.

Bachelor of Health Science (Personal Development, Health and Physical Education)

4659.3

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2013 or later.

The Personal Development, Health and Physical Education (PDHPE) program brings together a comprehensive foundation of health sciences, understanding of physical activity and personal development, and skills in interacting with people. Graduates stand out for their holistic understanding of the concepts of health and physical activity in personal development. The program is a popular pathway to a Master of Teaching degree, and then on to a teaching career. Teaching opportunities can be extended beyond PDHPE by studying electives, such as science and mathematics. Graduates also work as personal trainers and sports coaches and new opportunities are opening up in community-based recreation.

The course explores challenging areas of personal development, including youth health issues, sexuality, drugs, psychology and risk-taking behaviours, as well as general health science, including human biology, health systems, health promotion and research. Facilities are state of the art, including a new gymnasium and a renovated dance and gym studio, and practical experience is a strong feature of the program.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Accreditation
Graduates may be eligible to apply for accreditation with the NSW Institute of Teachers following the successful completion of a recognised teaching qualification. There is no professional accrediting body for the PDHPE specialisation.

Admission
For local students admission is through UAC. Assumed knowledge: any 2 units of English. Recommended Studies: Personal Development, Health and Physical Education or Community and Family Studies.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International with IELTS equal to 6.5 or above.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements
In order to enrol in Second Year Autumn units, all students must have: 1. NSW Health National Criminal Record Check, 2. Prohibited Employment Declaration Form. In

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order to enrol in Second Year Spring units, all students must have a First Aid Certificate. To be eligible to undertake fieldwork placements in public hospitals, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health.

Course Structure

Note: For placement in schools, students must complete a working with children module. This requirement is completed by attendance at lectures in the unit 400732 - Communication in Health.

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Note: at least 60 credit points must be at Level 3 or above.

Recommended sequence

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400880.2	Fundamentals of Exercise Science
400871.2	Professional Health Competencies

Spring session

400808.3	Outdoor Recreation
400891.2	Movement and Skill Development
101614.2	Psychology and Health
400732.2	Communication in Health

Year 2

Autumn session

400867.2	Approaches to Health Promotion
401055.1	Sport and Exercise Psychology
400866.3	Culture, Diversity and Health

And one elective

Spring session

400892.2	Physical Activity, Nutrition and Health
400798.2	PDHPE: Games for Diverse Groups
400863.2	Foundations of Research and Evidence-Based Practice
400962.2	Foundations of Wellbeing

Year 3

Autumn session

400893.2	Ethical Issues in Sports and Athletics
400894.2	Contemporary Youth Health Issues
400895.1	Aquatic Sports

And one elective

Spring session

400896.1	Gymnastics and Dance

401056.1	Applied Exercise Science for Personal Trainers and Coaches

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Health Science (PDHPEP) (UWSC First Year Program)

7029.1

The Bachelor of Health Science (PDHPE) (UWSC First Year Program) is designed to provide students with the first year units included in the Bachelor of Health Science (PDHPE) degree and presents students with units covering introductory Science, Communication and Health aspects of the Bachelor of Health Science (PDHPE) course. This course aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree in the specified key programs of Personal Development, Health and Physical Education. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Bachelor of Health Science (PDHPE) (UWSC First Year Program) will articulate into the B Health Science (PDHPE) degree at UWS with up to one year equivalent of advanced standing.

Study Mode
One year full-time (three sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Health Science areas of PDHPE. This course is accredited by the University, as principal, to enable its agent (UWSCollege) to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Met other entry requirements such as:

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- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science), OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

Course Structure

Successful completion of the following units will allow students to enter the second year of the Bachelor of Health Science (PDHPE) course at UWS with 80cp advanced standing.

Qualification for this award requires the successful completion of the units listed below.

700067.1	Professional Health Competencies (UWSC)
700066.1	Population Health and Society (UWSC)
700062.2	Communication in Health (UWSC)
700060.1	Psychology and Health (UWSC)
700061.1	Introduction to Human Biology (UWSC)
700064.1	Foundations of Research and Evidence-Based Practice (UWSC)
700065.2	Approaches to Health Promotion (UWSC)
700073.1	Fundamentals of Exercise Science (UWSC)

Students must pass, with a satisfactory grade, the following units

700056.2	Academic English (UWSCFS)
700059.2	Science for Health Science (UWSCFS)

Students also complete a special requirement unit, Tertiary Study Skills, although this does not count for credit towards the Diploma.

Bachelor of Health Science (Sport and Exercise Science)

4658.3

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2013 or later.

Sport and exercise science encompasses the science that underpins health, physical activity and exercise, and their applications to the design, implementation and evaluation of exercise programs. There are a range of career options in health and fitness centres, for example as a personal trainer, a health and fitness specialist or a fitness assessor, in government agencies associated with sport, physical activity and health, in teaching and research, and with professional sporting groups, rehabilitation clinics and hospitals. If you gain higher-level accreditation as an exercise physiologist, you will also be able to provide healthcare services funded by Medicare (Australian Government).

The course combines studies in exercise physiology, sports psychology, biomechanics motor control and exercise prescription with a broad understanding of biomedicine and various health science fields to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. Facilities are state-of-the-art, centred on an Exercise and Sport Science Laboratory complex, and practical experience is a strong feature of the program.

Study Mode

Three years full-time. Students may choose to study at a reduced load.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation

Graduates may be eligible to apply for membership and accreditation with the Exercise and Sports Science Australia (ESSA).

Admission

Assumed Knowledge: Any 2 units of English

Recommended Studies: Any 2 units of Science and/or Mathematics. PDHPE can be counted as a science unit for this course.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS

Special Requirements

In order to enrol in Second Year Autumn units, all students must have: 1. NSW Health National Criminal Record Check, 2. Prohibited Employment Declaration Form. In order to enrol in Second Year Spring units, all students must have: 1.First Aid Certificate. To be eligible to undertake fieldwork placements in public hospitals, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Full-time

Year 1

Autumn session

400880.2	Fundamentals of Exercise Science
400868.2	Human Anatomy and Physiology 1
400866.3	Culture, Diversity and Health
400871.2	Professional Health Competencies

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Spring session

400881.3	Functional Anatomy
400869.2	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
101614.2	Psychology and Health

Year 2

Autumn session

400882.2	Introduction to Biomechanics
400885.2	Sport and Exercise Physiology
401055.1	Sport and Exercise Psychology
400884.3	Exercise Nutrition, Body Composition and Weight Control

Spring session

400326.4	Exercise Prescription for General Populations
400903.2	Professional Development and Work Experience
400883.2	Exercise Bioenergetics
400886.2	Motor Control and Skill Acquisition

Year 3

Autumn session

400902.1	Exercise in Musculo-Skeletal Rehabilitation
400887.1	Clinical Exercise Physiology 1
400888.1	Advanced Sports Physiology
400864.3	Research Methods (Quantitative and Qualitative)

Spring session

400889.1	Applied Biomechanics of Sport and Exercise
400156.2	Practice Management for Health Professionals
400904.1	Work Experience in Sport and Exercise Science
400890.1	Resistance Training and Physiology

Bachelor of Health Science/Master of Physiotherapy

4662.4

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2013 or later.

Physiotherapy is a highly regarded profession and demand for physiotherapists is strong. Physiotherapists work in private practice, aged care settings, private and public hospitals, workplaces, community based agencies, schools, rehabilitation centres and chronic health management clinics. Patients range across the life span, from birth to athletes and the elderly.

The course in physiotherapy is offered as a combined Bachelor of Health Science/Master of Physiotherapy. The first three years of the program combine studies in

physiotherapy with a broad understanding of biomedicine and health science fields to develop the professional competencies important for ethical and safe practice, high quality care and the skills to work in multidisciplinary teams. The progression to the Master's component of the combined degree is seamless. The final year focuses predominately on the development of physiotherapy practice skills which are used during clinical placements to treat patients in the community. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program.

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The program is designed to meet all the requirements for accreditation by the Australian Physiotherapy Council and accreditation is being sought.

Inherent requirements
There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission
For local students admission is through UAC. Assumed knowledge, any 2 units of English.

Special note: Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website. Applicants must have IELTS equal to 7.0 or above, with a minimum of 6.5 in all of the components.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills

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Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements

In order to enrol in Second Year Spring units, all students must have: National Criminal History Record Check (National Police Certificate), Prohibited Employment Declaration Form prior to 1st June 2010 or a Working with Children Check Student Declaration after 1st June 2010 First Aid Certificate (including cardiopulmonary resuscitation). To be eligible for clinical placements, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. NSW Health can provide details of necessary vaccinations. To be eligible to undertake field/work/practice placements, students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration. In clinical placement units, students must wear the UWS physiotherapy uniform, which complies with NSW uniform requirements.

Course Structure

Special Note

Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Full-time

Year 1

Autumn session

400870.2	Population Health and Society
400868.2	Human Anatomy and Physiology 1
400906.2	Introduction to Physiotherapy Practice
400871.2	Professional Health Competencies

Spring session

400732.2	Communication in Health
400869.2	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400881.3	Functional Anatomy

Students may enter by transfer from Bachelor of Health Science at this point.

Year 2

Autumn session

| 400882.2 | Introduction to Biomechanics |
| 400138.3 | Pathophysiology 1 |

| 400864.3 | Research Methods (Quantitative and Qualitative) |
| 400866.3 | Culture, Diversity and Health |

2H session

| 400982.2 | Core Competencies in Physiotherapy Practice |

Spring session

101614.2	Psychology and Health
400981.2	Clinical Pharmacology
300754.2	Neuroanatomy

Year 3

1H session

400984.1	Cardiorespiratory Physiotherapy
400986.1	Neurological Physiotherapy
400983.1	Orthopaedic Physiotherapy

Autumn session

| 400985.1 | Clinical Education A |

Spring session

400997.2	Exercise Rehabilitation
400998.1	Neurological Rehabilitation
400865.2	Evidence-Based Practice
400999.2	Musculoskeletal Physiotherapy

At this point, students may exit with a Bachelor of Health Science.

Year 4

1H session

| 401047.1 | Paediatric Physiotherapy |
| 401048.1 | Physiotherapy for Chronic Illness and Disease |

2H

| 401049.1 | Complex Cases and Professional Issues |
| 401050.1 | Integrating Research into Physiotherapy Practice |

Students must also complete the following four units in Year 4 of the course. These units are available in both 1H and 2H sessions.

401051.1	Clinical Education B (Rehabilitation)
401052.1	Clinical Education C (Ambulatory Care)
401053.1	Clinical Education D (Paediatrics)
401054.1	Clinical Education E (Advanced Care)

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Bachelor of Health Science (Honours)/ Master of Physiotherapy

4668.2

The Honours program is available to high achieving students in the Bachelor of Health Science/Master of Physiotherapy. Honours is a key early step in the pathway to leadership in the profession and opens up the world of research, without taking any longer to complete the degree. Students apply for entry into the Honours program in year 3 of the combined degree. They begin advanced research training in the latter half of year 3. Clinical placements and an honours thesis are completed during the fourth year of the program. The thesis presents research that addresses real physiotherapy problems. This research will be conducted under the supervision of experienced academic researchers.

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The program is designed to meet all the requirements for accreditation by the Australian Physiotherapy Council and accreditation is being sought.

Inherent requirements
There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission
Admission is through direct application to the university – applications are directed to the School of Science and Health.

Students must have completed 200 credit points in the first 2.5 years of the UWS Bachelor of Health Science/Master of Physiotherapy course and achieved a GPA of 5.0 or greater. Students with a GPA in the range of 4.5-5.0 and a credit average in units completed in Bachelor of Health Science/Master of Physiotherapy levels 2 and 3 will also be considered (in accordance with the Honours Policy clause 13 and the Graduations Policy clause 53).

SPECIAL NOTE: Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

Special Requirements
In addition, all students must have: National Criminal History Record Check (National Police Certificate), Prohibited Employment Declaration Form prior to 1st June

2010 or a Working with Children Check Student Declaration after 1st June 2010, First Aid Certificate (including cardiopulmonary resuscitation). To be eligible for clinical placements, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. NSW Health can provide details of necessary vaccinations. To be eligible to undertake field/work/practice placements, students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration. In clinical placement units, students must wear the UWS physiotherapy uniform, which complies with NSW uniform requirements.

Course Structure

Special Note:
Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

Qualification for this award requires the successful completion of 360 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Full-time

Year 1

Autumn session

400870.2	Population Health and Society
400868.2	Human Anatomy and Physiology 1
400906.2	Introduction to Physiotherapy Practice
400871.2	Professional Health Competencies

Spring session

400732.2	Communication in Health
400869.2	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400881.3	Functional Anatomy

Year 2

Autumn session

400882.2	Introduction to Biomechanics
400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

2H session

400982.2	Core Competencies in Physiotherapy Practice

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Spring session

101614.2	Psychology and Health
400981.2	Clinical Pharmacology
300754.2	Neuroanatomy

Year 3

1H session

400984.1	Cardiorespiratory Physiotherapy
400986.1	Neurological Physiotherapy
400983.1	Orthopaedic Physiotherapy

Autumn session

400985.1	Clinical Education A

Spring session

400997.2	Exercise Rehabilitation
400998.1	Neurological Rehabilitation
400944.1	Evidence-Based Practice (Advanced)
400999.2	Musculoskeletal Physiotherapy

Year 4

1H session

401047.1	Paediatric Physiotherapy
401048.1	Physiotherapy for Chronic Illness and Disease
401051.1	Clinical Education B (Rehabilitation)
401052.1	Clinical Education C (Ambulatory Care)
400945.1	Honours Research 1

2H session

401049.1	Complex Cases and Professional Issues
401050.1	Integrating Research into Physiotherapy Practice
401053.1	Clinical Education D (Paediatrics)
401054.1	Clinical Education E (Advanced Care)
400946.1	Honours Research 2

Bachelor of Health Science/Master of Occupational Therapy

4663.2

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2012.

Occupational therapy is a highly regarded field in which you can apply your knowledge and skills to provide therapy for people who, because of illness, injury or circumstances, are limited in their ability to perform everyday tasks. The program promotes the value of human diversity, fundamental human rights and the dignity and worth of every client. Occupational therapists find employment in public and private hospitals, rehabilitation centres, insurance companies, schools and large corporations.

The course in occupational therapy is offered as a combined Bachelor of Health Science/Master of Occupational Therapy. The first three years of the program combine studies in occupational therapy with a broad understanding of biomedicine and various health science fields to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. The progression to the Master's component of the combined degree is seamless and the final year focuses predominately on occupational therapy practice skills, practical experience and specialised areas. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program.

An honours stream is available for high performing students.

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The course and the plan for an embedded honours program received interim re-accreditation in 2010. Final accreditation will occur in Spring semester 2013 prior to the first cohort's completion.

Admission
Assumed knowledge: any 2 units of English.

Recommended studies: Physics, Chemistry, Biology and/or Personal Development Health and Physical Education.

To be eligible to undertake fieldwork or practice placements, students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration.

Students must have successfully completed 200 or more credit points for entry into the honours stream in Spring of their third year of study.

In line with the Honours in Bachelors Award Policy:

Admission to an end-on or embedded honours program is determined on the basis of all of the four following criteria being met:

- a) Achievement of a threshold Admission Average Mark (AAM) equal to or above the minimum of 65; and
- b) Statement of Intent or School equivalent; and
- c) Appointment of a principal supervisor by the Head of School; and
- d) Demonstrated satisfactory academic writing skills appropriate to the discipline
- A School Academic Committee may, on recommendation of the School Honours Coordinator, rank applicants on the basis of AAMs if the Head of School indicates the number of applications exceeds the availability of supervised places

It is anticipated that approximately 10-15 students will enter the honours stream each year in line with the above admission requirements.

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Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements
To be able to enrol in the first year Spring unit 400907 Occupational Therapy Practice 1 and subsequent occupational therapy units, all students must have a NSW Health National Criminal Record Check, a Prohibited Employment Declaration Form and a First Aid Certificate. To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health.

Course Structure
Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Full-time

Year 1

Autumn session

400870.2	Population Health and Society
400868.2	Human Anatomy and Physiology 1
400160.3	Introduction to Occupational Therapy
400871.2	Professional Health Competencies

Spring session

400907.3	Occupational Therapy Practice 1
400869.2	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400908.2	People, Environment and Occupations

400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

300754.2	Neuroanatomy
400881.3	Functional Anatomy
101614.2	Psychology and Health
400909.2	Occupational Therapy Practice 2

Non-Honours Stream

Year 3

Autumn session

400171.3	Occupation and Neurology
400169.3	Occupation and Mental Health
400912.1	Occupational Therapy Process

Continuing students choose

400910.1	Occupational Therapy Practice 3

Masters entry students choose

400911.1	Occupational Therapy Theory and Practice

Spring session

400162.2	Child and Adolescent Occupations
400165.2	Occupation and the Environment
400865.2	Evidence-Based Practice
400176.3	Occupation and Ageing

At this point, students may exit with a Bachelor of Health Science.

Year 4

Autumn session

400913.1	Occupational Therapy Project
400916.1	Occupational Justice
400926.1	Ergonomics and Work Occupations
400917.1	Occupational Therapy Specialties

Spring session

400925.1	Professional Reasoning
400914.1	Occupational Therapy Practice 4
400915.1	Occupational Therapy Practice 4 Workshop

Students will graduate with Bachelor of Health Science/ Master of Occupational Therapy

Honours Stream

Year 3

Autumn session

400171.3	Occupation and Neurology
400169.3	Occupation and Mental Health
400912.1	Occupational Therapy Process

Continuing students choose

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400910.1   Occupational Therapy Practice 3

Masters entry students choose

400911.1   Occupational Therapy Theory and Practice

2H session

400944.1   Evidence-Based Practice (Advanced)

Spring session

400162.2   Child and Adolescent Occupations
400165.2   Occupation and the Environment
400176.3   Occupation and Ageing

Year 4

1H session

400945.1   Honours Research 1

Autumn session

400926.1   Ergonomics and Work Occupations
400916.1   Occupational Justice

2H session

400946.1   Honours Research 2

Occupational Therapy Practice 4 (Honours)

Bachelor of Health Science/Master of Podiatric Medicine

4661.4

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2013 or later.

Podiatrists are best known for treating problems that people experience with their feet, but they are increasingly playing an important role in addressing chronic conditions such as diabetes. As a podiatrist, your patients can range from children to active sportspeople to the ageing. There is a large focus on footwear, from everyday wear to workwear and athletic shoes, as well as common problems such as ingrown toenails or bunions. Podiatrists are employed in sports medicine, community centres to help the aged become more mobile, private practice, ensuring children have footwear that meets their needs, and in hospital teams, addressing problems associated with chronic diseases and acute problems such as diabetes. You may also continue your training and become a podiatric surgeon. The course in podiatry is offered as a combined Bachelor of Health Science/Master of Podiatric Medicine. The first three years of the program combine studies in podiatry with a broad understanding of biomedicine and various health science fields to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. The progression to the Master's component of the combined degree is seamless and the final year focuses

predominately on podiatry practice skills, practical experience and specialised areas. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program.

Study Mode
Four years full time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
Accreditation is being sought through the Australian and New Zealand Accreditation Council (ANZPAC). The process has three stages. The first two stages have been completed to the satisfaction of ANZPAC and the submission for the third stage is required at the end of 2013 when the first cohort of students has completed the combined degree. The course(s) are listed as approved programs of study accepted for general registration as a podiatrist by the Podiatry Board of Australia.

Admission
Assumed knowledge, Any 2 units of English.

Recommended studies, Mathematics, Physics and Biology.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Details of minimum English proficiency requirements and acceptable proof can be found on the Universities Admissions Centre website. Applicants must have IELTS equal to 7.0 or above, with a minimum of 6.5 in all of the components.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements
In order to enrol in Second Year Spring units, all students must have: 1. National Criminal History Record Check (National Police Certificate), 2. Prohibited Employment Declaration Form prior to 1st June 2010 or a Working with Children Check Student Declaration after 1st June 2010. 3. First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with

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vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health.

Course Structure

Special Note:

Students in this program are required to participate fully in practical classes. This involves practical hands-on podiatry / lower extremity examination and treatment techniques on both genders and students will personally experience these techniques which will be performed on them by other students and/or relevant academic staff.

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Full-time

Year 1

Autumn session

400870.2	Population Health and Society
400868.2	Human Anatomy and Physiology 1
400905.2	Introduction to Podiatry
400871.2	Professional Health Competencies

Spring session

400881.3	Functional Anatomy
400869.2	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400882.2	Introduction to Biomechanics
400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

300754.2	Neuroanatomy
101614.2	Psychology and Health
400981.2	Clinical Pharmacology
400933.2	Podiatry Pre-Clinical

Year 3

1H session

400929.2	Podiatric Practice 1

Autumn session

400935.3	Podiatric Techniques 1A
400936.3	Podiatric Techniques 1B
400941.1	Podiatric Techniques 3C

2H session

400930.3	Podiatric Practice 2

Spring session

400937.3	Podiatric Techniques 2A
400938.3	Podiatric Techniques 2B
400865.2	Evidence-Based Practice

At this point, students may exit with a Bachelor of Health Science.

Year 4

1H session

400931.2	Podiatric Practice 3

Autumn session

400939.2	Podiatric Techniques 3A
400940.2	Podiatric Techniques 3B

And one elective

2H session

400928.2	Podiatric Clinical Block
400932.2	Podiatric Practice 4

Spring session

400934.2	Podiatric Professional Practice Studies

Students will graduate with Bachelor of Health Science/ Master of Podiatric Medicine

Bachelor of Health Science (Honours)/ Master of Podiatric Medicine

4666.2

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2013 or later.

The Honours program is available to high achieving students in the Bachelor of Health Science/Master of Podiatric Medicine. Honours is a key early step in the path to leadership in the profession and opens up the world of research, without taking any longer to complete the degree.

The honours program encourages independent learning, develops research skills and provides an opportunity for deeper investigation in the major field of study. An honours program is a recognised preparation and entry point for postgraduate research studies and the research training is valuable preparation for careers in research and development and analysis in the public and private sectors.

Students apply for entry into the Honours program in year 3 of the combined degree. They begin advanced research training in the latter half of year 3. Clinical placements and an honours thesis are completed during the fourth year of the program. The thesis presents research that addresses

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real podiatric problems and education across the lifespan. This research will be conducted under the supervision of experienced academic researchers.

Study Mode
Four year full time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
Accreditation is being sought through the Australian and New Zealand Accreditation Council (ANZPAC). The process has three stages. The first two stages have been completed to the satisfaction of ANZPAC and the submission for the third stage is required at the end of 2013 when the first cohort of students has completed the combined degree. The course(s) are listed as approved programs of study accepted for general registration as a podiatrist by the Podiatry Board of Australia.

Admission
Admission is through direct application to the university. Applications are directed to the School of Science and Health.

Students must have completed 200 credit points in the first three years of the UWS B Health Science/M Podiatric Medicine course and achieved a GPA of 5.0 or more. Students with a GPA in the range 4.5 – 5.0 and a credit average in units completed in podiatric medicine in levels 2 and 3 will also be considered (in accordance with Honours policy clause 13 and Graduations Policy clause 53).

Special Requirements
In order to enrol in Second Year Spring units, all students must have: 1. National Criminal History Record Check (National Police Certificate) 2. Prohibited Employment Declaration Form prior to 1st June 2010 or a Working with Children Check Student Declaration after 1st June 2010. 3. First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health.

Course Structure

Special Note:

Students in this program are required to participate fully in practical classes. This involves practical hands-on podiatry / lower extremity examination and treatment techniques on both genders, and students will personally experience these techniques which will be performed on them by other students and/or relevant academic staff.

Qualification for this award requires the successful completion of 340 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Full-time

Year 1

Autumn session

400870.2	Population Health and Society
400868.2	Human Anatomy and Physiology 1
400905.2	Introduction to Podiatry
400871.2	Professional Health Competencies

Spring session

400881.3	Functional Anatomy
400869.2	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400882.2	Introduction to Biomechanics
400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

300754.2	Neuroanatomy
101614.2	Psychology and Health
400981.2	Clinical Pharmacology
400933.2	Podiatry Pre-Clinical

Year 3

1H session

400929.2	Podiatric Practice 1

Autumn session

400935.3	Podiatric Techniques 1A
400936.3	Podiatric Techniques 1B
400941.2	Podiatric Techniques 3C

2H session

400944.1	Evidence-Based Practice (Advanced)
400930.3	Podiatric Practice 2

Spring session

400937.3	Podiatric Techniques 2A
400938.3	Podiatric Techniques 2B

Term 3

400945.1	Honours Research 1

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Year 4

1H session

400931.2	Podiatric Practice 3
401046.1	Honours Research 2 (Podiatric Medicine)

Autumn session

400939.2	Podiatric Techniques 3A
400940.2	Podiatric Techniques 3B

2H session

401046.1	Honours Research 2 (Podiatric Medicine)
400943.2	Podiatric Clinical Block for Honours Students
400932.2	Podiatric Practice 4

Spring session

400934.2	Podiatric Professional Practice Studies

Bachelor of Health Science/Master of Traditional Chinese Medicine

4660.2

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2012 or later.

This course prepares graduates for careers as practitioners of Traditional Chinese Medicine. Traditional Chinese medicine practitioners are usually either self-employed in private practice or work as a member of a team in a clinic that offers a range of therapies. They practice as acupuncturists and treating clients using Chinese herbal medications. There are also opportunities in medical research, product development, management and sales roles in pharmaceutical and herbal companies.

The course in Traditional Chinese Medicine is offered as a combined Bachelor of Health Science/Master of Traditional Chinese Medicine. The first three years of the program combine studies in traditional Chinese medicine, acupuncture and Chinese herbal medicine with a broad understanding of biomedicine and various health science fields to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. The progression to the Master's component of the combined degree is seamless and the final year focuses predominately on practical experience and specialised areas. Part of the clinical experience can be taken through an intensive clinical placement in China. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program.

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
This course has been approved by the Chinese Medicine Board of Australia. Students who have successfully completed the course are eligible to apply for national general registration. The national Chinese medicine registration commences from 1 July 2012.

Admission
For local students admission is through UAC. Assumed knowledge, Any 2 units of Higher School Certificate (or equivalent) English.

Recommended studies, Biology.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International. International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Special Requirements
In order to enrol in Second Year Autumn units, all students must have: 1. NSW Health National Criminal Record Check, 2. Prohibited Employment Declaration Form. In order to enrol in Second Year Spring units, all students must have a First Aid Certificate. To be eligible to undertake fieldwork placements in public hospitals, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health.

Course Structure
Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Year 1

Autumn session

400346.2	Traditional Chinese Medicine 1
400868.2	Human Anatomy and Physiology 1
400866.3	Culture, Diversity and Health
400871.2	Professional Health Competencies

Spring session

400348.2	Traditional Chinese Medicine 2

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400869.2	Human Anatomy and Physiology 2
400732.2	Communication in Health
300816.1	Cell Biology

Year 2

Autumn session

400352.2	Traditional Chinese Medicine 3
400138.3	Pathophysiology 1
400874.2	Channels and Points 1
400876.2	Chinese Materia Medica 1

Spring session

400863.2	Foundations of Research and Evidence-Based Practice
400267.3	Pathophysiology 2
400875.2	Channels and Points 2
400877.2	Chinese Materia Medica 2

Year 3

Autumn session

400864.3	Research Methods (Quantitative and Qualitative)
400878.1	Chinese Medicinal Formulas
400873.1	Acupuncture Techniques
400354.2	Traditional Chinese Medicine Practice 1

Spring session

300505.2	Pharmacology
400865.2	Evidence-Based Practice
400879.1	Clinical Assessment Methods
400356.2	Traditional Chinese Medicine Practice 2

At this point, students may exit with the Bachelor of Health Science by transferring to course 4656 - Bachelor of Health Science.

Year 4

Autumn session

400918.1	Chinese Internal Medicine 1 (PG)
400919.1	Specialities in Traditional Chinese Medicine 1 (PG)
400969.1	Classical Texts in Chinese Medicine (PG)
400920.1	Traditional Chinese Medicine Practice 3 (PG)

Spring session

400922.1	Chinese Internal Medicine 2 (PG)
400923.1	Specialities in Traditional Chinese Medicine 2 (PG)
400927.1	Block Clinical Practicum (PG)
400924.1	Traditional Chinese Medicine Practice 4 (PG)

Bachelor of Medical Science

3673.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2012.

This degree comprises three areas of major: biomedical science, medicinal chemistry and anatomy & physiology. The biomedical science major focuses on microbiology, biochemistry, molecular biology and aspects of health. The medicinal chemistry major focuses on chemistry and biochemistry, while the anatomy & physiology major focuses on anatomy, physiology and pharmacology. Graduates of this degree will find employment in areas such as medical research laboratories, hospital laboratories and in pathology laboratories and be well suited for positions in the pharmaceutical, medical sales and various research and quality control laboratories, as well as further study including research degrees, graduate pharmacy and graduate medicine degrees.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal

Accreditation
The Medicinal Chemistry major within the Bachelor of Medical Science is accredited by the Royal Australian Chemical Institute (RACI) for normal entry of a graduate to the Chartered Chemist qualification.

Admission
Assumed knowledge required: At least two of biology, chemistry, mathematics and physics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

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Course Structure

Recommended Sequence

Start Year Intake

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300825.1	Introduction to Anatomy

Choose one of

| 300800.2 | Essential Chemistry 1 |
| 300808.2 | Introductory Chemistry |

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology

Choose one of

300830.1	Analysis of Change
300831.1	Quantitative Thinking
300672.2	Mathematics 1A
200263.3	Biometry

Year 2 - Year 3

Students must then select one of the following Majors

Anatomy and Physiology Major - Campbelltown only

| M3061.1 | Anatomy and Physiology |

Biomedical Science Major - Campbelltown and Hawkesbury

| M3062.1 | Biomedical Science |

Medicinal Chemistry Major - Campbelltown only

| M3060.1 | Medicinal Chemistry |

Recommended Sequence

Mid Year Intake

The sequence of units for Year 1 for students Mid Year Intake is different for each major. Please see the details under each major in the links above.

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points) including the sub-majors listed below.

Sub-majors

SM3048.1	Climate Change
SM3044.1	Microbiology
SM3050.1	Physics

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Medical Science (Advanced)

3682.1

If you enjoy being constantly challenged and extended by your studies and are thinking about a career involving medicinal or pharmaceutical research, then the UWS Medical Science (Advanced) degree is for you! This degree equips students with both specialised knowledge and enhanced inquiry skills in medicinal Chemistry OR, biomedical science OR anatomy and physiology OR medical nanotechnology. The Medical Science (Advanced) degree is specifically designed to provide initial training for a range of careers in medical science involving research and inquiry. You will be partnered with experienced academic researchers and their research teams, and participate in the University's exciting research activities to facilitate your transition to an Honours year or directly into a range of exciting career opportunities available to high-achieving science graduates.

Further studies can be pursued (Masters (Hon) or PhD degree) leading to a research or academic career. Information and details on how to apply for Honours will be provided to you as you progress through your Bachelor degree, or you can find out more at

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal

Accreditation
The Nanotechnology and Medicinal Chemistry majors for this degree are accredited by the Royal Australian Chemical Institute (RACI) for normal entry of a graduate to the Chartered Chemist qualification.

Admission
Assumed knowledge required: Minimum ATAR of 90 with assumed knowledge of HSC mathematics and at least two of biology, chemistry and/or physics. Students must maintain a Grade Point Average (GPA) of 5.0 or above to continue their enrolment in the course. As part of the

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admission/enrolment process students will be required to sign a statement acknowledging that they understand that a minimum 5.0 GPA is required to remain in the program and that if this GPA is not maintained that they will be automatically transferred into the standard program. Students in the base Bachelor of Medical Science suite of programs who achieve a GPA of 5.0 or greater at the end of their first year of study may be admitted into the Advanced Science program if sufficient places are available.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

International applicants must apply directly to the University of Western Sydney via UWS International.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Details of minimum English proficiency requirements and acceptable proof can be found on the Universities Admissions Centre website (UAC).

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Medicinal Chemistry
Students completing the Bachelor of Medical Science (Advanced) with a major in Medicinal Chemistry will complete the following course structure.

M3063.1　　　　Medicinal Chemistry

Anatomy and Physiology
Students completing the Bachelor of Medical Science (Advanced) with a major in Anatomy and Physiology will complete the following course structure.

M3064.1　　　　Anatomy and Physiology

Biomedical Science
Students completing the Bachelor of Medical Science (Advanced) with a major in Biomedical Science will complete the following course structure.

M3065.1　　　　Biomedical Science

Nanotechnology
Students completing the Bachelor of Medical Science (Advanced) Nanotechnolgy will complete the following course structure.

This key program is available to students who commenced prior to 2013

KT3065.1　　　　Nanotechnology

Bachelor of Medical Science (Honours)

3610.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2011 or later.

The Honours program encourages independent learning and research, further develops academic ability, provides the opportunity to pursue undergraduate studies to a more advanced level, deepens intellectual understanding in the major field of study and develops research skills. An Honours degree is a recognised point of entry for postgraduate research studies at PhD level and enhances a graduate's ability to perform at a high level in a commercial or public organisation. The Honours program consists of a rigorous program of supervised research on a medically related topic, culminating in the production of a thesis and presentation of a final seminar. Students enrol in a 60 credit point honours project and either a 20 credit point research methodology and experimental design unit or a 20 credit point advanced topics and research skills unit, allowing them to explore more advanced topics, including wider areas of research and their applications in science technology and medicine. Although the Honours course is available on several different campuses, some or all of the lectures, workshops and seminars may be held centrally at a single campus to ensure that students are exposed to as wide a range of research topics as possible. The course can provide opportunities for direct commercial and industrial involvement with a diverse range of organisations through the provision of, and joint supervision of, research projects.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Course Structure
Qualification for this award requires the successful completion of 80 credit points as per the recommended sequence below.

Please note: Students must enrol in 300747 Advanced Topics and Research Skills and 300412 Science, Technology and Environment Honours Projects in both 1H and 2H sessions.

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Recommended Sequence

Full-time

Year 1

1H

300747.2	Advanced Topics and Research Skills
300412.3	Science, Technology and Environment Honours Project

2H

300747.2	Advanced Topics and Research Skills
300412.3	Science, Technology and Environment Honours Project

Part-time

Year 1

1H

300747.2	Advanced Topics and Research Skills

2H

300747.2	Advanced Topics and Research Skills

Year 2

1H

300412.3	Science, Technology and Environment Honours Project

2H

300412.3	Science, Technology and Environment Honours Project

Bachelor of Natural Science (Advanced)

3683.1

Our world and its resources are under ever increasing pressure, and we need enthusiastic, switched-on people with new ideas and innovative approaches to address these challenges. We are seeing a bigger population, technology advancements and environmental issues, all of which are placing unprecedented pressure on our natural resources and the biosphere. An Advanced degree in the Natural Sciences will enable you to understand these competing pressures and contribute to the development of sustainable strategies to drive change. This is a challenging program that will stretch you - it includes advanced coursework, extension activities and fundamental research training. You will be partnered with experienced academic researchers and contribute to the University's exciting research activities. The degree will allow you to undertake any of the Natural Science programs in Animal Science, Environmental Management or Sustainable Agriculture and Food Security. Students undertake three Advanced Science projects, Advanced Science Project A, B and C.

An Honours year is available to high-achieving students and further studies can be pursued (Masters (Hon) or PhD degree) leading to a research or academic career.

Information and details on how to apply for Honours will be provided to you as you progress through your Bachelor degree, or you can find out more at

Study Mode
3 years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Admission

Entry requirements: Minimum ATAR of 90 with assumed knowledge of HSC mathematics and at least two of biology, chemistry and/or physics. Students must maintain a Grade Point Average (GPA) of 5.0 or above to continue their enrolment in the course. As part of the admission/enrolment process students will be required to sign a statement acknowledging that they understand that a minimum 5.0 GPA is required to remain in the program and that if this GPA is not maintained that they will be automatically transferred into the standard program.

Students in the base Natural science courses within the suite who achieve a GPA of 5.0 or greater at the end of their first year of study may be admitted into the Bachelor of Natural Science Advanced program if sufficient places are available.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

International applicants must apply directly to the University of Western Sydney via UWS International.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Details of minimum English proficiency requirements and acceptable proof can be found on the Universities Admissions Centre website (UAC).

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Students in the Bachelor of Natural Science (Advanced) must follow one of the study programs listed below.

KT3097.1	Animal Science
KT3098.1	Environmental Management
KT3099.1	Sustainable Agriculture and Food Security

Students enrolled in the Bachelor of Natural Science (Advanced) must complete the units appropriate to their chosen study program and the three project units listed below. These Advanced Science Project units are taken in Semesters 3, 4 and 5.

300937.1	Advanced Science Project A

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300938.1   Advanced Science Project B
300910.1   Advanced Science Project C

Bachelor of Natural Science (Animal Science)

3670.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2012.

Interactions between people and animals are increasing due to our ever-increasing reliance on animals for companionship and food production, whilst we also strive to understand the pressures placed on our unique wildlife. A Bachelor of Natural Science (Animal Science) will enable you to develop a deep understanding of these issues, through studies of animal behaviour, animal health and welfare, animal nutrition, animal production, animal reproduction, human-animal interactions, vertebrate biodiversity, and wildlife science. Throughout your studies, you will have access to diverse on-campus animal facilities including reptiles, native mammals, horses, sheep, cattle and deer and off-campus animal professionals and organisations such as wildlife parks, zoos, farms and horse studs. There are a range of majors (conservation biology, zoology) and sub-majors (environmental sustainability and management) offered in Natural Science and Science that can add diversity and/or focus to your degree, to enable your degree to be matched to your career aspirations. A variety of compelling and exciting career paths are available to graduates of this program, including international opportunities in the many fields of animal science.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Admission
Assumed Knowledge: Any two units of English and Mathematics.

Recommended Studies: One unit of Biology, Chemistry, Geography, Earth and Environmental Science or Agriculture.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Start Year Intake

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300807.1	Human Animal Interactions
300813.1	Wildlife Studies

Spring session

300810.1	Resource Sustainability
300831.1	Quantitative Thinking
300801.1	Animal Science

And one elective

Year 2

Autumn session

300931.1	Integrated Science
300834.1	Animal Health and Welfare
300853.1	Animal Nutrition and Feeding

And one elective

Spring session

300932.1	Natural Science Research Methods
300835.1	Animal Reproduction

Choose one of

300836.1	Botany
300838.1	Comparative Physiology

And one elective

Year 3

Autumn session

300913.1	Field Project 1
300878.1	Animal Behaviour
300854.1	Animal Production

And one elective

Spring session

300914.1	Field Project 2

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300861.1   Vertebrate Biodiversity

And two electives

Mid Year Intake

Year 1

Spring session

300810.1   Resource Sustainability
300831.1   Quantitative Thinking
300801.1   Animal Science
300811.1   Scientific Literacy

Autumn session

300802.1   Biodiversity
300813.1   Wildlife Studies
300807.1   Human Animal Interactions

And one elective

Year 2

Spring session

300932.1   Natural Science Research Methods
300835.1   Animal Reproduction

Choose one of

300836.1   Botany
300838.1   Comparative Physiology

And one elective

Autumn session

300913.1   Field Project 1
300834.1   Animal Health and Welfare
300853.1   Animal Nutrition and Feeding
300931.1   Integrated Science

Year 3

Spring session

300914.1   Field Project 2
300861.1   Vertebrate Biodiversity

And two electives

Autumn session

300854.1   Animal Production
300878.1   Animal Behaviour

And two elective

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3049.1   Conservation Biology
M3056.1   Zoology

Sub-majors

SM3048.1   Climate Change
SM3042.1   Conservation Biology
SM3045.1   Zoology

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Natural Science (Environment and Health)

3672.1

The air we breathe, the water we drink, the food we eat, and the places we live, work and play all have major impacts on our health and well-being. Health scares such as swine/bird flu, obesity, cancers and asthma have all been connected to our environmental conditions. A Bachelor of Natural Science (Environment and Health) will equip you to explore the diverse range of natural and built-environment challenges that confront us, from the mitigation of human health impacts of global climate change through to the more localised issues of air and water quality, waste management, food security, environmental noise and healthy communities. The major areas of study addressed within the program include air pollution; community studies; emergency management; environmental regulation and policy; environmental monitoring; environmental planning; environmental protection; epidemiology; food safety; noise, occupational environment; risk assessment; sustainable environmental management; toxicology; urban development and water pollution. A variety of fulfilling career paths are available to graduates of this program.

Study Mode

Six years in external part-time offering.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Part Time	External

Accreditation

This course is currently accredited by Environmental Health Australia.

Admission

Assumed Knowledge: Any two units of Mathematics and Science or equivalent.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and

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International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

This course is not available to International Students.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Start Year Intake

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300824.1	Management of Aquatic Environments
300808.2	Introductory Chemistry

Spring session

300810.1	Resource Sustainability
300831.1	Quantitative Thinking
300821.1	Environment and Health
300814.1	Water Quality Assessment and Management

Year 2

Autumn session

300931.1	Integrated Science
300872.1	Epidemiology
300840.1	Environmental Planning and Climate Change
300844.1	General Microbiology

Spring session

300932.1	Natural Science Research Methods
300877.1	Toxicology
300841.1	Environmental Regulation and Policy
300859.1	Food Safety

Year 3

Autumn session

300913.1	Field Project 1
300919.1	Occupational Health and Safety
300858.1	Environmental Risk Management
300852.1	Air Quality and Climate Change

Spring session

300914.1	Field Project 2
300860.1	Urban Environment
300867.1	Disease Prevention and Control
300880.1	Disaster and Emergency Management

Mid Year Intake

Full Time

Year 1

Spring session

300810.1	Resource Sustainability
300811.1	Scientific Literacy
300821.1	Environment and Health
300814.1	Water Quality Assessment and Management

Autumn session

300802.1	Biodiversity
300831.1	Quantitative Thinking
300824.1	Management of Aquatic Environments
300808.2	Introductory Chemistry

Year 2

Spring session

300932.1	Natural Science Research Methods
300877.1	Toxicology
300841.1	Environmental Regulation and Policy
300859.1	Food Safety

Autumn session

300913.1	Field Project 1
300931.1	Integrated Science
300840.1	Environmental Planning and Climate Change
300844.1	General Microbiology

Year 3

Spring session

300914.1	Field Project 2
300860.1	Urban Environment
300867.1	Disease Prevention and Control
300880.1	Disaster and Emergency Management

Autumn session

300872.1	Epidemiology
300919.1	Occupational Health and Safety
300858.1	Environmental Risk Management
300852.1	Air Quality and Climate Change

Part Time

Year 1

Spring session

300821.1	Environment and Health
300811.1	Scientific Literacy

Autumn session

300802.1	Biodiversity
300831.1	Quantitative Thinking

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Year 2

Spring session

300810.1	Resource Sustainability
300877.1	Toxicology

Autumn session

300844.1	General Microbiology
300931.1	Integrated Science

Year 3

Spring session

300932.1	Natural Science Research Methods
300841.1	Environmental Regulation and Policy

Autumn session

300808.2	Introductory Chemistry
300840.1	Environmental Planning and Climate Change

Year 4

Q3 session

300880.1	Disaster and Emergency Management

Spring session

300859.1	Food Safety

Autumn session

300824.1	Management of Aquatic Environments
300852.1	Air Quality and Climate Change

Year 5

Spring session

300814.1	Water Quality Assessment and Management
300867.1	Disease Prevention and Control

Autumn session

300872.1	Epidemiology
300919.1	Occupational Health and Safety

Year 6

Spring session

300914.1	Field Project 2
300860.1	Urban Environment

Autumn session

300913.1	Field Project 1
300858.1	Environmental Risk Management

Bachelor of Natural Science (Environmental Management)

3671.1

History has shown that if we don't effectively manage our environment, we will degrade it - possibly to the point where it can no longer sustain us. Environmental managers are concerned with ensuring the ecological sustainability of human development and minimising the size of our "ecological footprint". A Bachelor of Natural Science (Environmental Management) will develop your problem solving skills and equip you to work collaboratively with both community members and professional practitioners to develop innovative policy and strategies that address the increasingly complex causes of today's environmental problems. Issues include urban development, global climate change, persistent organic pollutants (POPs), decreasing biodiversity, deteriorating air and water quality, and sustainable use of natural resources. The major areas embodied within the program include assessment and management of aquatic environments water quality assessment and management; introduction to wildlife; sustainable land and resource use; Indigenous land management; environmental planning; climate change science; environmental regulation and policy; environmental risk management and urban development. The majors (aquatic and conservation biology) and sub-majors (environmental sustainability and management) offered in Natural Science and Science can add diversity and/or focus to your degree, to help match your studies to your career aspirations.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Accreditation
This course is currently accredited by Environmental Health Australia.

Admission

Assumed Knowledge: Any two units of Science (Biology or Chemistry recommended) and any two units of English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English

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proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note - At least 60 credit points must be at Level 3 or above (one elective must be at least a Level 3 unit)

Year 1

Start Year Intake

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300813.1	Wildlife Studies
300824.1	Management of Aquatic Environments

Spring session

300810.1	Resource Sustainability
300831.1	Quantitative Thinking
300814.1	Water Quality Assessment and Management
300812.1	Understanding Landscape

Year 2

Autumn session

300931.1	Integrated Science
101878.1	Indigenous Landscapes
300840.1	Environmental Planning and Climate Change

And one elective

Spring session

300932.1	Natural Science Research Methods
300875.1	Landuse and the Environment
300841.1	Environmental Regulation and Policy

And one elective

Year 3

Autumn session

300913.1	Field Project 1
300858.1	Environmental Risk Management

And two electives

Spring session

300914.1	Field Project 2
300860.1	Urban Environment
300870.1	Water in the Landscape

And one elective

Mid Year Intake

Year 1

Spring session

300810.1	Resource Sustainability
300811.1	Scientific Literacy
300814.1	Water Quality Assessment and Management
300812.1	Understanding Landscape

Autumn session

300802.1	Biodiversity
300831.1	Quantitative Thinking
300813.1	Wildlife Studies
300824.1	Management of Aquatic Environments

Year 2

Spring session

300932.1	Natural Science Research Methods
300875.1	Landuse and the Environment
300841.1	Environmental Regulation and Policy

And one elective

Autumn session

300913.1	Field Project 1
300931.1	Integrated Science
300840.1	Environmental Planning and Climate Change
101878.1	Indigenous Landscapes

Year 3

Spring session

300914.1	Field Project 2
300860.1	Urban Environment
300870.1	Water in the Landscape

And one elective

Autumn session

300858.1	Environmental Risk Management

And three electives

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3046.1	Aquatic Biology
M3049.1	Conservation Biology

Sub-majors

SM3040.1	Aquatic Environments
SM3048.1	Climate Change
SM3042.1	Conservation Biology

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Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Natural Science (Sustainable Agriculture & Food Security)

3669.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 onwards.

By 2050 global food demand is forecast to be 70% greater than current demand. This increasing demand must be achieved from a degraded natural resource base and with a reduction in greenhouse gas emissions. To effectively address these issues will require a fundamental shift in the way we view and manage the environment, agriculture, food and health. A Bachelor of Natural Science (Sustainable Agriculture and Food Security) will explore the interconnections between food security, agriculture and the environment, social stability, health, plants and animals, and the sustainable use of resources (including energy and water and the management/reuse of "wastes"). You will gain critical thinking skills and the ability to contribute innovative solutions to the complex challenges of future sustainable agriculture and food security. The program embeds an integrated suite focussing on sustainable agriculture and food security including crop and animal production, agronomy, animal science, soil and water in the landscape, plant health and biosecurity, post harvest, global nutrition, food and community. There are a range of majors and sub-majors (agricultural economics and environmental sustainability and management) offered in Natural Science and Science that can add diversity and/or focus to your degree, to help match your studies to your career aspiration.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Admission

Assumed Knowledge: One or more units of Agriculture, Business Studies, Geography, Society and Culture, and any two units of Mathematics and any two units of Science.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the

Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300804.1	Feeding the Planet
300808.2	Introductory Chemistry

Spring session

300810.1	Resource Sustainability
300831.1	Quantitative Thinking
300815.1	Crop Production
300805.1	Food Science 1

Year 2

Autumn session

300931.1	Integrated Science
300863.1	Agronomy

Choose one of

300853.1	Animal Nutrition and Feeding
300865.1	Plant Physiology

And one elective

Spring session

300932.1	Natural Science Research Methods
300823.1	Soils
300875.1	Landuse and the Environment

And one elective

Year 3

Autumn session

300913.1	Field Project 1
300869.1	Postharvest
300921.1	Plant Health and Biosecurity

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And one elective

Spring session

300914.1	Field Project 2
300870.1	Water in the Landscape
300917.1	Global Nutrition, Food and Community

And one elective

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points) including the sub-majors listed below.

Sub-majors

SM3048.1	Climate Change
SM3044.1	Microbiology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science

3675.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2012.

Science asks questions about how the natural world works. It does so in a systematic, yet rigorously creative way based on inquiry and evidence for ideas. This approach has led to our current understanding of nature as being (in large part) systematic and predictable, and has underpinned major advances in human welfare. A Bachelor of Science will prepare you to take part in this process of enquiry, by both contributing to it and by using scientific knowledge to solve current problems. Students will learn core concepts and skills necessary for scientific inquiry: investigating the natural world, proposing and testing ideas by experimentation and observation; quantifying and modelling processes; communicating findings, thinking independently and critically. Students can enrol in a generalist Bachelor of Science or a Bachelor of Science in a specific discipline. Within each program students can select from a range of scientific disciplines to suit their interests, studying a core of basic science units to which other science units, and if desired, non-science units, can be added.

Study Mode

Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Campus	Attendance	Mode
Campbelltown Campus	Part Time	Internal
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal

Admission

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Assumed Knowledge: At least two of Biology, Chemistry, Mathematics and Physics.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Qualifying for this award requires successful completion of 240 credit points within the following rules

Core units

Six core units must be completed as follows

- at least one mathematics or statistics unit

- one academic skills unit

- three science foundation units, which must come from a further two science disciplines out of the following: Biology, Chemistry, Computer Science, Geoscience, Physics or Integrated Science
- one level 3 capstone unit which ties the area of study together

Remaining units

- at least ten more science units must be selected from the listings for each Campus below
- at least one science Major must be completed

- at least 60 credit points must be taken at level 3

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Note 1: Students must complete at least one of the following majors:

- Hawkesbury: Aquatic Biology, Biochemistry and Molecular Biology, Climate Change, Conservation Biology, Forensic Science, Microbiology, General Biology, Nutrition and Physiology, Zoology. Please note: Mathematics major can not be completed on Hawkesbury campus.
- Parramatta: Biochemistry and Molecular Biology, Chemistry, General Biology, Geochemistry (continuing students only), Mathematics
- Campbelltown: Biochemistry and Molecular Biology, Chemistry, General Biology, Mathematics

Note 2: selection of science units in Year 1 must cover the following discipline areas: mathematics/statistics, and two more from the following: Biology, Chemistry, Computer Science, Geoscience, Physics or Integrated Science

Note 3: Students commencing mid-year should seek academic advice about completing their chosen major; more than three years may be required for completing in some cases due to the Semester some units are offered in and the sequence in which they must be completed

Start Year Intakes

Hawkesbury Campus

Year 1

Autumn session

Non-mathematics majors: choose at least one mathematics or statistics unit in your first year. Students cannot do a mathematics major on the Hawkesbury campus

300811.1	Scientific Literacy

Choose at least three of

300802.1	Biodiversity
300828.1	Physics 1
300931.1	Integrated Science
300831.1	Quantitative Thinking
300830.1	Analysis of Change
200263.4	Biometry

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

Choose at least two of

300803.1	Essential Chemistry 2
300816.1	Cell Biology
300818.1	Introduction to Physiology
300134.2	Introduction to Information Technology
200263.4	Biometry
300831.1	Quantitative Thinking
300830.1	Analysis of Change

And two elective units

Year 2

Autumn session

Choose at least three of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300837.1	Climate Change Science
300843.1	Forensic and Environmental Analysis

And one elective

Spring session

Choose at least three of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300839.1	Ecology

And one elective

Year 3

Autumn session

Choose at least one capstone unit in your final year of study; capstone units are listed below. The capstone unit selected should come from your Major.

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300856.1	Ecosystem Carbon Accounting
300921.1	Plant Health and Biosecurity
300919.1	Occupational Health and Safety

Capstone units

300857.1	Environmental Geochemistry
300866.1	Analytical Microbiology
300851.1	Advanced Physiology
300929.1	Aquatic Ecology

And two electives (one elective must be a Level 3 unit)

Spring session

Choose at least two of

300905.1	Advanced Immunology
300855.1	Conservation Biology
300826.1	Medical Microbiology
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology

Capstone units

300927.1	Molecular Medicine
300924.1	Science Research Project
300909.1	Biological Adaptation to Climate Change
300883.1	Laboratory Quality Management

And two electives (one elective must be a Level 3 unit)

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Parramatta Campus

Year 1

Autumn session

Non-mathematics majors choose at least one mathematics or statistics unit in your first year

300811.1	Scientific Literacy

Choose three of

300802.1	Biodiversity
300828.1	Physics 1
300931.1	Integrated Science
300831.1	Quantitative Thinking
300830.1	Analysis of Change
200263.4	Biometry
300672.2	Mathematics 1A
200025.2	Discrete Mathematics
300580.2	Programming Fundamentals
300134.2	Introduction to Information Technology

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

Choose at least two units from the list below

300803.1	Essential Chemistry 2
300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
200263.4	Biometry
300672.2	Mathematics 1A
300673.2	Mathematics 1B
300580.2	Programming Fundamentals
300830.1	Analysis of Change

And two electives

Year 2

Autumn session

Choose at least three of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry
200027.2	Linear Algebra
200028.3	Advanced Calculus

And one elective unit

Spring session

Choose at least three of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300839.1	Ecology

300876.1	Organic Chemistry
300832.1	Analytical Chemistry
200030.3	Differential Equations
200033.5	Applied Statistics
300847.1	Immunology

And one elective

Year 3

Autumn session

Choose at least one capstone unit in your final year of study; capstone units are listed below. The capstone unit selected should come from your Major.

Choose at least two of

300820.1	Genes, Genomics and Human Health
300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
200193.2	Abstract Algebra
200037.4	Regression Analysis & Experimental Design
200023.3	Analysis

Capstone units

300857.1	Environmental Geochemistry

And two electives (one elective must be a Level 3 unit)

Spring session

Choose at least two of

300905.1	Advanced Immunology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
200038.3	Time Series and Forecasting
200022.3	Mathematical Modelling

Capstone units

300927.1	Molecular Medicine
300855.1	Conservation Biology
300924.1	Science Research Project

And two electives (one elective must be a Level 3 unit)

Campbelltown Campus

Year 1

Autumn session

Non-mathematics majors: choose at least one mathematics or statistics unit in your first year

300811.1	Scientific Literacy

Choose three of

300802.1	Biodiversity
300828.1	Physics 1
300931.1	Integrated Science
300831.1	Quantitative Thinking
300830.1	Analysis of Change
200263.4	Biometry
300580.2	Programming Fundamentals
300134.2	Introduction to Information Technology
300672.2	Mathematics 1A
300800.2	Essential Chemistry 1

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Or

300808.2   Introductory Chemistry

Spring session

Choose at least two of

300803.1   Essential Chemistry 2
300816.1   Cell Biology
300818.1   Introduction to Physiology
300829.1   Physics 2
300580.2   Programming Fundamentals
300672.2   Mathematics 1A
300673.2   Mathematics 1B
200263.4   Biometry

And two elective units

Year 2

Autumn session

Choose at least three of

300936.1   Functional Proteins and Genes
300833.1   Microbiology 1
300845.1   Genetics
300899.1   Inorganic Chemistry
300849.1   Physical Chemistry
200027.2   Linear Algebra
200028.3   Advanced Calculus

And one elective unit

Spring session

Choose at least three of

300848.1   Metabolism
300896.1   Microbiology 2
300817.1   Molecular Biology
300838.1   Comparative Physiology
300839.1   Ecology
300876.1   Organic Chemistry
300832.1   Analytical Chemistry
200030.3   Differential Equations
200033.5   Applied Statistics
300847.1   Immunology

And one elective unit

Year 3

Autumn session

Choose at least one capstone unit in your final year of study; capstone units are listed below. The capstone unit selected should come from your Major.

Choose at least two of

300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300819.1   Topics in Physiology
300907.1   Advanced Inorganic Chemistry
300912.1   Molecular Pharmacokinetics
200193.2   Abstract Algebra
200037.4   Regression Analysis & Experimental Design
200023.3   Analysis

And two elective units (one elective must be a Level 3 unit)

Spring session

Choose at least two of

300905.1   Advanced Immunology
300925.1   Advanced Analytical Chemistry
300906.1   Advanced Organic Chemistry
200038.3   Time Series and Forecasting
200022.3   Mathematical Modelling

Capstone units

300927.1   Molecular Medicine
300924.1   Science Research Project

And two elective units (one elective must be a Level 3 unit)

Mid Year Intakes

Hawkesbury Campus

Select at least six Level 1 science units over the next three semesters; Scientific Literacy is a compulsory unit, at least one unit must be mathematics or statistics, and the remaining four units must cover at least two other scientific disciplines

Year 1

Spring session

Level 1 Science units

300811.1   Scientific Literacy

Choose at least two of

300816.1   Cell Biology
300818.1   Introduction to Physiology
300134.2   Introduction to Information Technology
300803.1   Essential Chemistry 2

Statistics Unit

200263.4   Biometry

And one elective (if 200263 - Biometry has not been chosen)

Autumn session

Choose at least two of

300802.1   Biodiversity
300828.1   Physics 1
300931.1   Integrated Science

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2   Essential Chemistry 1
300808.2   Introductory Chemistry

Mathematics and Statistics Units

300831.1   Quantitative Thinking
200263.4   Biometry

And one elective if completing a mathematics or statistics unit this semester; select two electives otherwise.

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Year 2

Spring session

Select unit below if required by your major

300803.1   Essential Chemistry 2

Level 2 Science Units

Select one of

300839.1   Ecology
300838.1   Comparative Physiology

And two electives if doing Essential Chemistry 1; select three electives otherwise.

Autumn session

Select three of

300936.1   Functional Proteins and Genes
300833.1   Microbiology 1
300845.1   Genetics
300865.1   Plant Physiology
300837.1   Climate Change Science
300843.1   Forensic and Environmental Analysis

And one elective

Year 3

Spring session

Continue your choice of Level 2 units from the list below: select units required to complete six Level 2 science units.

300848.1   Metabolism
300896.1   Microbiology 2
300817.1   Molecular Biology

Level 3 Science Units

Select at least four Level 3 science units over the next two semesters; one must be a capstone unit.

300855.1   Conservation Biology
300826.1   Medical Microbiology
300861.1   Vertebrate Biodiversity
300918.1   Invertebrate Biology

Capstone Units

300927.1   Molecular Medicine
300924.1   Science Research Project
300909.1   Biological Adaptation to Climate Change
300883.1   Laboratory Quality Management

Autumn session

Select your remaining Level 3 science units from the list below

300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300856.1   Ecosystem Carbon Accounting
300921.1   Plant Health and Biosecurity
300919.1   Occupational Health and Safety

Capstone Units

300857.1   Environmental Geochemistry
300866.1   Analytical Microbiology
300851.1   Advanced Physiology
300929.1   Aquatic Ecology

And two Level 3 electives

Parramatta Campus

Select at least six Level 1 science units over the next three semesters; Scientific Literacy is a compulsory unit, at least one unit must be mathematics or statistics, and the remaining four units must cover at least two other scientific disciplines.

Year 1

Spring session

Level 1 Science units

300811.1   Scientific Literacy

Choose at least two of

300816.1   Cell Biology
300818.1   Introduction to Physiology
300829.1   Physics 2
300931.1   Integrated Science
300580.2   Programming Fundamentals
300803.1   Essential Chemistry 2

Mathematics and Statistics Units

200263.4   Biometry
300830.1   Analysis of Change
300672.1   Mathematics 1A

And one elective (if not completing a mathematics or statistics unit)

Autumn session

Choose at least two of

300802.1   Biodiversity
300828.1   Physics 1
300822.1   Introduction to Earth Science
300931.1   Integrated Science
300134.2   Introduction to Information Technology
300580.2   Programming Fundamentals

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2   Essential Chemistry 1
300808.2   Introductory Chemistry

Mathematics Units

300831.1   Quantitative Thinking
200263.1   Biometry
300672.1   Mathematics 1A
200025.2   Discrete Mathematics

And one elective if completing a mathematics or statistics unit this semester; select two electives otherwise

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Year 2

Spring session

Select unit below if required by your major

300803.1	Essential Chemistry 2

Level 2 Science Units

Select one of

300838.1	Comparative Physiology
300839.1	Ecology

And two electives if doing Essential Chemistry 1; select three electives otherwise.

Autumn session

Continue your choice of Level 2 units from the list below: do at least three this semester

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry
200027.2	Linear Algebra

And one elective

Year 3

Spring session

Continue your choice of Level 2 units from the list below: select units required to complete six Level 2 science units.

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
200030.2	Differential Equations
200033.5	Applied Statistics
300847.1	Immunology

Level 3 Science Units

Select at least four Level 3 science units over the next two semesters; one must be a capstone unit.

300855.1	Conservation Biology
300905.1	Advanced Immunology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
200038.3	Time Series and Forecasting
200022.3	Mathematical Modelling

Capstone Units

300927.1	Molecular Medicine
300855.1	Conservation Biology
300924.1	Science Research Project

Autumn session

Select your remaining Level 3 science units from the list below

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
200193.2	Abstract Algebra
200037.4	Regression Analysis & Experimental Design
200023.3	Analysis

Capstone Units

300857.1	Environmental Geochemistry

And two Level 3 electives

Campbelltown Campus

Select at least six Level 1 science units over the next three semesters; Scientific Literacy is a compulsory unit, at least one unit must be mathematics or statistics, and the remaining four units must cover at least two other scientific disciplines

Year 1

Spring session

Level 1 Science Units

300811.1	Scientific Literacy

Choose at least two of

300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300931.1	Integrated Science
300580.2	Programming Fundamentals
300803.1	Essential Chemistry 2

Mathematics and Statistics Units

200263.4	Biometry
300830.1	Analysis of Change
300672.1	Mathematics 1A

And one elective

Autumn session

Choose at least two of

300802.1	Biodiversity
300828.1	Physics 1
300931.1	Integrated Science
300134.2	Introduction to Information Technology
300580.2	Programming Fundamentals

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Major and Sub-major elective spaces

Mathematics Units

300831.1	Quantitative Thinking
200263.4	Biometry
300672.1	Mathematics 1A
200025.2	Discrete Mathematics

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And one elective if completing a mathematics or statistics unit this semester; select two electives otherwise.

Year 2

Spring session

Select unit below if required by your major

Level 2 Science Units

Select one of

300839.1	Ecology
300838.1	Comparative Physiology
300803.1	Essential Chemistry 2

And two electives if doing Essential Chemistry 1; select three electives otherwise.

Autumn session

Continue your choice of Level 2 units from the list below: do at least three this semester

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry
200027.2	Linear Algebra
200028.3	Advanced Calculus

And one elective

Year 3

Spring session

Continue your choice of Level 2 units from the list below: select what you require to make the total of six Level 2 science units completed.

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
200030.3	Differential Equations
200033.5	Applied Statistics
300847.1	Immunology

Level 3 Science Units

Select at least four Level 3 science units over the next two semesters; one must be a capstone unit.

300905.1	Advanced Immunology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
200038.3	Time Series and Forecasting
200022.3	Mathematical Modelling

Capstone Units

| 300927.1 | Molecular Medicine |
| 300924.1 | Science Research Project |

Year 3

Autumn session

Select your remaining level 3 science units from the list below

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology
300907.1	Advanced Inorganic Chemistry
300912.1	Molecular Pharmacokinetics
200193.2	Abstract Algebra
200039.2	Surveys and Multivariate Analysis
200023.3	Analysis

And two Level 3 electives

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3046.1	Aquatic Biology
M3045.1	Biochemistry and Molecular Biology
M3047.1	Chemistry
M3048.1	Climate Change
M3049.1	Conservation Biology
M3050.1	Environmental Management
M3051.1	Forensic Science
M3052.1	General Biology
M3054.1	Mathematics
M3055.1	Microbiology
M3058.1	Nutrition and Physiology
M3056.1	Zoology

This major below is available to students who commenced prior to 2013

| M3053.1 | Geochemistry |

Sub-majors

SM3040.1	Aquatic Environments
SM3041.1	Biochemistry and Molecular Biology
SM3048.1	Climate Change
SM3042.1	Conservation Biology
SM3038.1	Food Technology - Secondary Teaching
SM3049.1	Immunology and Cell Biology
SM3044.1	Microbiology
SM3050.1	Physics
SM3046.1	Sustainable Environmental Management
SM3045.1	Zoology

This sub-major below is available to students who commenced prior to 2013

| SM3043.1 | Geochemistry |

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

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Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science (Advanced Science)

3562.6

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2012 or later

If you enjoy being constantly challenged and extended by your studies and are thinking about a career involving scientific research, then the UWS Advanced Science degree is for you! This degree equips students with both specialised knowledge and enhanced inquiry skills in any one of a range of scientific disciplines. The Advanced Science degree is specifically designed to provide initial training for a range of scientific careers involving research and inquiry. You will be partnered with experienced academic researchers and their research teams and participate in the University's exciting research activities to facilitate your transition to an Honours year or directly into a range of exciting career opportunities available to high-achieving science graduates.

Further studies can be pursued (Masters (Hon) or PhD degree) leading to a research or academic career. Information and details on how to apply for Honours will be provided to you as you progress through your Bachelor degree, or you can find out more at

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Science (Advanced Science) is accredited by the Royal Australian Chemical Institute (RACI) for normal entry of a graduate to the Chartered Chemist qualification.

Admission
Minimum ATAR of 90. Students must maintain a Grade Point Average (GPA) of 5.0 or above to continue their enrolment in the course. If this GPA is not maintained they will be automatically transferred into the standard program after one warning (one semester of further study). Students in other UWS science courses who achieve a GPA of 5.0 or greater at the end of their first year of study may be admitted into the Advanced Science program by invitation if sufficient places are available.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

UWS Advanced Science Pathway - Applicants who complete Year 1 (full time) of either the UWS Bachelor of Science (Advanced Science) or UWS Bachelor of Medical Science (Advanced) will be considered for an interview if they achieve a GPA of 5.5 or more at the end of year 1 and have a total percentile of 50 or more in UMAT. There are a total of six spaces available for interview in this category (six in total, not six per course). If there are more eligible applicants than there are interview places, applicants will be ranked using their UMAT total percentile. Applicants in this category should apply in the same way as "local applicants".

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Students in the Bachelor of Science (Advanced Science) must follow one of the study programs listed below.

KP3010.1	General program
KT3090.1	Biological Science
KT3091.1	Chemistry
KT3092.1	Environmental Science
KT3093.1	Forensic Science
KT3094.1	Nutrition and Food Science
KT3095.1	Mathematical Sciences
KT3096.1	Zoology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science (Biological Sciences)

3677.1

The biological sciences are diverse, fascinating, rapidly changing, and essential to our understanding of living

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systems at scales ranging from the molecular to the global. They play a vital role in our understanding of the environment, as well as animals, plants and micro-organisms, and are essential to a wide range of contemporary industries. A Bachelor of Science (Biological Science) offers a solid foundation in the basic sciences, including biology, microbiology, biochemistry and environmental science. You will be equipped to enter government, industry or research-based employment in this area (e.g. Biotechnology companies, pathology, quality assurance, university and hospital laboratories, scientific sales and government agencies).You may also choose to maximise the biological science content of your degree or combine biological sciences with studies in another discipline.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal

Admission

Assumed Knowledge: At least two units of Biology, Chemistry, Mathematics and Physics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note: At least 60 credit points must be at Level 3 or above.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Choose one of

300831.1	Quantitative Thinking
200263.4	Biometry

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology

And one elective

Year 2

Autumn session

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics

And one elective

Spring session

300839.1	Ecology
300817.1	Molecular Biology

Choose one of

300848.1	Metabolism
300896.1	Microbiology 2
300838.1	Comparative Physiology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
200030.3	Differential Equations
200033.5	Applied Statistics
300847.1	Immunology

And one elective

Year 3

Autumn session

Choose at least one capstone unit in your final year of study. Capstone units are listed separately below.

Hawkesbury Campus

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300856.1	Ecosystem Carbon Accounting
300919.1	Occupational Health and Safety
300826.1	Medical Microbiology

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Capstone units

300866.1   Analytical Microbiology
300851.1   Advanced Physiology
300929.1   Aquatic Ecology

Parramatta Campus

300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology

Campbelltown Campus

Choose at least two of

300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300819.1   Topics in Physiology

And two elective units (one elective must be a Level 3 unit)

Spring session

Hawkesbury Campus

Choose at least two of

300905.1   Advanced Immunology
300861.1   Vertebrate Biodiversity
300918.1   Invertebrate Biology

Capstone units

300927.1   Molecular Medicine
300924.1   Science Research Project
300855.1   Conservation Biology
300909.1   Biological Adaptation to Climate Change
300883.1   Laboratory Quality Management

Parramatta Campus

Choose at least two of

300905.1   Advanced Immunology
300826.1   Medical Microbiology

Capstone units

300927.1   Molecular Medicine
300855.1   Conservation Biology
300924.1   Science Research Project

Campbelltown Campus

Choose at least two of

300905.1   Advanced Immunology
300826.1   Medical Microbiology

Capstone units

300927.1   Molecular Medicine
300924.1   Science Research Project

And two elective units (one elective must be a Level 3 unit)

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3046.1   Aquatic Biology
M3045.1   Biochemistry and Molecular Biology
M3049.1   Conservation Biology
M3052.1   General Biology
M3055.1   Microbiology
M3056.1   Zoology

Sub-majors

SM3041.1   Biochemistry and Molecular Biology
SM3048.1   Climate Change
SM3042.1   Conservation Biology
SM3043.1   Geochemistry
SM3049.1   Immunology and Cell Biology
SM3044.1   Microbiology
SM3045.1   Zoology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science (Chemistry)

3676.1

A Bachelor of Science (Chemistry) will prepare you to take part in a process of inquiry, by both contributing to it and by using scientific knowledge to solve current problems. The Chemistry program provides a strong background in the key topic areas of contemporary chemistry, including aspects of chemical theory in analytical, inorganic, organic and physical chemistry, with a strong emphasis on practical laboratory skills, and applications in contemporary research, industry and the environment. A research project is available to students in the final year of the degree preparing you for a professional career in a wide range of chemistry based industries. A major in geochemistry will prepare you for a career in the minerals and mining industries (where graduates are in high demand). A double major or sub-major with biochemistry and molecular biology or microbiology will prepare you for a career in the pharmaceutical, health or food industries. Alternatively, graduates who elect studies in the physical sciences, mathematics or business are well placed for careers in the manufacturing industry.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal

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Campus	Attendance	Mode
Parramatta Campus	Part Time	Internal

Accreditation

The Bachelor of Science (Chemistry) is accredited by The Royal Australian Chemical Institute (RACI).

Admission

Assumed Knowledge: At least two units of Biology, Chemistry, Mathematics and Physics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note: At least 60 credit points must be at Level 3 or above, including one elective unit

Year 1

Autumn session

300800.2	Essential Chemistry 1
300811.1	Scientific Literacy
300828.1	Physics 1

Choose one of

300802.1	Biodiversity
300931.1	Integrated Science
300831.1	Quantitative Thinking
200263.4	Biometry
200025.2	Discrete Mathematics
300580.2	Programming Fundamentals
300134.2	Introduction to Information Technology

Spring session

300803.1	Essential Chemistry 2

Choose one of

300672.2	Mathematics 1A
300830.1	Analysis of Change

Choose one of

300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300672.2	Mathematics 1A
300673.2	Mathematics 1B
200263.4	Biometry
200025.2	Discrete Mathematics
300580.2	Programming Fundamentals

And one elective

Year 2

Autumn session

300899.1	Inorganic Chemistry
300849.1	Physical Chemistry

Choose at least one of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
200027.2	Linear Algebra
200028.3	Advanced Calculus

And one elective

Spring session

300876.1	Organic Chemistry
300832.1	Analytical Chemistry

Choose at least one of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300839.1	Ecology
200030.3	Differential Equations
200033.5	Applied Statistics
300847.1	Immunology

And one elective

Year 3

Autumn session

300907.1	Advanced Inorganic Chemistry

Choose one of

300926.1	Advanced Physical Chemistry
300912.1	Molecular Pharmacokinetics

And two electives (one elective must be a Level 3 unit)

Spring session

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry

Choose one of

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300924.1   Science Research Project
300883.1   Laboratory Quality Management

And one elective

Major and Sub-major elective spaces

Majors

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

M3045.1   Biochemistry and Molecular Biology
M3052.1   General Biology
M3055.1   Microbiology

The major below is available to students who commenced prior to 2013

M3053.1   Geochemistry

Sub-majors

SM3041.1   Biochemistry and Molecular Biology
SM3049.1   Immunology and Cell Biology
SM3050.1   Physics

The sub-major below is available to students who commenced prior to 2013

SM3043.1   Geochemistry

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science (Environmental Science)

3680.1

Solving the world's environmental problems will require professionals who are trained in the sciences underlying these issues and who understand the wider human and social contexts of the challenges faced. A Bachelor of Science (Environmental Science) will open up a wide range of career opportunities for those with environmental, conservation and ecological interests. A solid grounding in the underlying science is essential for people intending to work in this field, who will need to integrate knowledge across a range of disciplines, to devise solutions spanning the scientific and social issues involved. Some of the key areas in this degree include conservation biology, environmental analysis, regulation and policy, environmental chemistry, climate change science, microbiological and spatial data analysis, environmental geochemistry, biodiversity and adaptation, and ecology including aquatic ecology. There are a range of majors

(climate change and environmental management) and sub-majors (sustainability) offered in Science that can add diversity and/or focus to your degree. There are also a range of sub-majors from other disciplines such as the arts, business, humanities and social sciences to choose from, although these may require cross campus study and are subject to availability and timetabling.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal

Admission

Assumed Knowledge: Any two units of English and any two units of Science (Biology or Chemistry recommended).

Recommended Studies: Geography.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note: At least 60 credit points must be at Level 3 or above, including one elective unit

Year 1

Autumn session

300802.1   Biodiversity
300811.1   Scientific Literacy
300824.1   Management of Aquatic Environments

Choose one of

300808.2   Introductory Chemistry
300800.2   Essential Chemistry 1

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Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
101646.2	Analysis of Spatial Data
300810.1	Resource Sustainability

Year 2

Autumn session

300837.1	Climate Change Science
300843.1	Forensic and Environmental Analysis

Choose one of

300831.1	Quantitative Thinking
200263.4	Biometry

And one elective

Spring session

300839.1	Ecology
300841.1	Environmental Regulation and Policy

Choose one of

300836.1	Botany
300838.1	Comparative Physiology

And one elective

Year 3

Autumn session

300929.1	Aquatic Ecology
300857.1	Environmental Geochemistry
300833.1	Microbiology 1

And one elective

Spring session

300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change

Choose one of

300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology

And one elective

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3046.1	Aquatic Biology
M3048.1	Climate Change
M3049.1	Conservation Biology
M3050.1	Environmental Management
M3052.1	General Biology
M3056.1	Zoology

Sub-majors

SM3040.1	Aquatic Environments
SM3048.1	Climate Change
SM3042.1	Conservation Biology
SM3044.1	Microbiology
SM3046.1	Sustainable Environmental Management
SM3045.1	Zoology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science (Forensic Science)

3589.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2012 or later.

This is a three year program that produces scientists who have a good background in the biological and chemical sciences, coupled with specialised expertise in forensic science, including methods of forensic analysis, crime scene investigation, forensic photography, forensic investigation, crime and criminal justice and complex case. Students may opt to further specialise in forensic biology, chemistry or microbiology by selecting additional electives or studies in a related or unrelated discipline. Career opportunities include forensic scientists, crime scene investigators, private investigators and consultants, police officers, drug analysts, researchers and academics, and specialised forensic science practitioners. The main employers of forensic scientists are State and Federal police services, State and Commonwealth Government Health Departments and analytical chemical laboratories. Graduates will be versatile with a wide skills base with (depending on their choice of electives) potential for employment in analytical chemistry and microbiology, quality control and assurance, biochemistry and molecular biology, scientific research, education and the chemical industry.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Admission

Assumed Knowledge: Students should have successfully completed at least two of the following units: Biology, Chemistry or Mathematics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

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Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note - At least 60 credit points must be at Level 3 or above (one elective must be at least a Level 3 unit)

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300800.2	Essential Chemistry 1
300806.1	Forensic Science

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Choose one of

200263.1	Biometry
300831.1	Quantitative Thinking

Choose one of

101567.3	Evidence, Investigations and Police Intelligence
101568.3	Legislation, Courts and Policing

Year 2

Autumn session

300843.1	Forensic and Environmental Analysis
300845.1	Genetics
300874.1	Digital Forensic Photography

And one elective

Spring session

300873.1	Crime Scene Investigation
300817.1	Molecular Biology

300864.1	Imaging Science & Photographic Evidence

And one elective

Year 3

Autumn session

300881.1	Forensic Biology
300868.1	Forensic Chemistry
300882.1	Forensic Archaeology

Plus one elective unit

Spring session

300911.1	Complex Forensic Studies
300877.1	Toxicology
300918.1	Invertebrate Biology

And one elective

Sub-majors

SM3041.1	Biochemistry and Molecular Biology
SM3044.1	Microbiology
SM3049.1	Immunology and Cell Biology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science (Mathematical Science)

3679.1

A Bachelor of Science (Mathematical Science) provides you with a strong background in key analytical techniques that have contemporary applications such as the treatment and interpretation of data and the modelling of real-world problems such as global warming. You will develop skills that allow you to model and solve real world problems using mathematical techniques and have the opportunity to specialise in mathematics, statistics or a combination of both. This will provide you with a wide range of career options in commercial and government institutions, which require highly-skilled problem-solvers. There are also a range of majors (e.g. Biology, chemistry) and sub-majors offered in Science that can add diversity and/or focus to your degree. There are also a range of sub-majors from other disciplines such as the arts, business, humanities and social sciences to choose from, although these may require cross campus study and are subject to availability and timetabling.

Study Mode
Three years full-time.

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Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal

Admission

Recommended Studies: Mathematics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300672.2	Mathematics 1A
300811.1	Scientific Literacy
200025.2	Discrete Mathematics

Choose one of

300802.1	Biodiversity
300800.2	Essential Chemistry 1
300828.1	Physics 1
300822.1	Introduction to Earth Science

Spring session

300134.2	Introduction to Information Technology
300673.2	Mathematics 1B
200263.4	Biometry

And one elective

Year 2

Autumn session

200027.2	Linear Algebra
200028.3	Advanced Calculus
300580.2	Programming Fundamentals

And one elective

Spring session

200030.3	Differential Equations
200033.5	Applied Statistics

Choose one science foundation core unit

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300829.1	Physics 2
300809.1	Introductory Geochemistry

And one elective

Year 3

Autumn session

200193.2	Abstract Algebra
200037.4	Regression Analysis & Experimental Design
200023.3	Analysis

And one elective

Spring session

300924.1	Science Research Project
200038.3	Time Series and Forecasting
200022.3	Mathematical Modelling

And one elective

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points) including the sub-majors listed below.

Sub-majors

SM3050.1	Physics

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science (Nutrition & Food Sciences)

3678.1

There is more to healthy eating than you realise. This program will help you understand nutrition and the science

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behind food. A Bachelor of Science (Nutrition and Food Science) will prepare you for the future by developing the skills and knowledge to solve future challenges in nutrition and health, food quality and security. Students will develop a strong foundation in the biological and chemical sciences to needed underpin their studies, with majors in 'Human Nutrition' or 'Food Science and Technology' that will allow further specialisation. Career opportunities include community nutrition and health, health promotion, new food product development, quality assurance, and food technology secondary teaching. The program has strong industry and community links, well-equipped facilities including food processing pilot plant and modern kitchen facilities.

A major in Human Nutrition (M3059) investigates healthy eating as a vital part of good health. The major covers nutrition, food and health, with specialised studies in community nutrition, public health nutrition, human physiology, health promotion and food studies. The major prepares students for careers in community nutrition, health promotion and education, or work in a range of food and nutrition related businesses, including new product development of healthy foods. Students seeking to do postgraduate studies in Nutrition and Dietetics are advised to select a double major of Nutrition and Physiology (M3058) with the Human Nutrition major and complete further studies in metabolism and advanced physiology.

A major in Food Science and Technology (M3057) explores the science behind food, its preparation and manufacture. The major covers specialised topics in food processing, food safety, quality assurance, new product development, postharvest, packaging, microbiological and chemical analysis. The major prepares students for a wide range of careers in the food and beverage related industries, including food product development, quality assurance, management of the fresh food supply, food regulations, research and development.

Students seeking to be secondary Food Technology teachers are advised to select a Sub-major in Education Studies (SM1067) in preparation for Master of Teaching in their fourth year of study. This program will satisfy the requirements of the NSW Institute of Teachers for first teaching areas of 'Food Technology' and 'Biology', with further teaching areas possible in 'chemistry', 'physics', or 'design and technology' depending on the electives selected.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal

Admission
Assumed Knowledge: At least two of the following subjects - 2 unit Biology, 2 unit Chemistry or 2 unit Mathematics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and

International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note 1: At least 60 credit points must be at Level 3 or above. Some students may need to take one elective as a Level 3 unit.

Note 2: Students must also satisfactorily complete a minimum of ten weeks Approved Industrial Experience, the time can be accrued throughout the duration of your course. The work experience will be recognised by achieving Satisfactory grade in the final semester core unit 300655 - Approved Industrial Experience.

Note 3: Students completing the SM1067 - Education Studies Sub-major will need to complete two units from the sub major instead of two electives from the recommended sequence below.

SM1067.1   Education Studies

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300831.1	Quantitative Thinking

Choose one of

300808.2	Introductory Chemistry
300800.2	Essential Chemistry 1

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300805.1	Food Science 1

And one elective

Year 2

Autumn session

300936.1	Functional Proteins and Genes

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300833.1   Microbiology 1
300842.2   Food Science 2
300933.1   Nutrition and Health 1

Spring session

300879.1   Experimental Foods

Human Nutrition Major

300934.1   Nutrition and Health 2
300818.1   Introduction to Physiology

And one elective

Food Science and Technology Major

300859.1   Food Safety
300869.1   Postharvest

And one elective

Year 3

Autumn session

300922.1   Quality Assurance and Food Analysis

Human Nutrition Major

300928.1   Consumer Issues in Nutrition
300871.1   Culinary Science

And one elective

Food Science and Technology major

300871.1   Culinary Science

Choose one of

300866.1   Analytical Microbiology
300843.1   Forensic and Environmental Analysis

Or Education Studies sub-major unit
And one elective

Spring session

300915.1   Food Product Development

**All students must satisfactorily complete the unit
300655 - Approved Industrial Experience (10 weeks),
comprising a minimum of ten weeks Approved
Industrial Experience.**

300655.2   Approved Industrial Experience

Human Nutrition Major

300908.1   Applied Nutrition
300917.1   Global Nutrition, Food and Community

And one elective

Food Science and Technology Major

300904.1   Advanced Food Science and Technology

Choose one of

300883.1   Laboratory Quality Management

Or Education sub-major unit
And one elective
Students seeking to be secondary Food Technology
teachers are also able to select a Sub-major in Education
Studies (SM1067) in preparation for Master of Teaching in
the fourth year of study. This program will satisfy the
requirements of the NSW Institute of Teachers for first
teaching areas of 'Food Technology' and 'Biology', with
further teaching areas possible in 'chemistry', 'physics', or
'design and technology' depending on the electives
selected.

SM1067.1   Education Studies

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional
approved major (80 credit points) or sub-major (40 credit
points) including the majors and sub-majors listed below.

Majors

M3045.1   Biochemistry and Molecular Biology
M3057.1   Food Science & Technology
M3052.1   General Biology
M3059.1   Human Nutrition
M3055.1   Microbiology
M3058.1   Nutrition and Physiology

Sub-majors

SM3041.1   Biochemistry and Molecular Biology
SM1067.1   Education Studies
SM3038.1   Food Technology - Secondary
                  Teaching
SM3049.1   Immunology and Cell Biology
SM3044.1   Microbiology

Sub-major elective spaces

Elective units may be used toward obtaining an additional
approved sub-major (40 credit points). UWS offers sub-
majors in a range of areas including Sustainability and
Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via
MySR in the Unit Sets section under Enrolment.

Bachelor of Science (Zoology)

3681.1

A Bachelor of Science (Zoology) recognises the increased
demand for scientific knowledge of how to conserve,
protect and care for animals, including native wildlife, and
companion and production animals. It will enable you to
develop an in--epth scientific understanding of how animals
function and interact with their environment; from their
ecology and evolution; to physiology and biochemistry of
tissues and major organs systems, as well as the structure
and function of biomolecules and cells. The key learning
and research areas embodied in this degree are ecology,
evolution, physiology, growth, reproduction, genetics, and

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conservation biology. On-campus animal facilities include those for reptiles, small marsupials, small rodents, horses, sheep and cattle, as well as over 1,000ha of native, rural and aquatic habitats.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal

Admission

Assumed Knowledge: Any two units of English and any two units of Science.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300813.1	Wildlife Studies

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300801.1	Animal Science
300831.1	Quantitative Thinking

Year 2

Autumn session

300834.1	Animal Health and Welfare
300936.1	Functional Proteins and Genes
200263.4	Biometry

And one elective

Spring session

300861.1	Vertebrate Biodiversity
300838.1	Comparative Physiology
300839.1	Ecology

And one elective

Year 3

Autumn session

300878.1	Animal Behaviour
300851.1	Advanced Physiology

And two electives

Spring session

300855.1	Conservation Biology
300918.1	Invertebrate Biology

Choose one of

300909.1	Biological Adaptation to Climate Change
300924.1	Science Research Project

And one elective

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3046.1	Aquatic Biology
M3045.1	Biochemistry and Molecular Biology
M3048.1	Climate Change
M3049.1	Conservation Biology
M3052.1	General Biology

Sub-majors

SM3040.1	Aquatic Environments
SM3041.1	Biochemistry and Molecular Biology
SM3048.1	Climate Change
SM3042.1	Conservation Biology
SM3049.1	Immunology and Cell Biology
SM3044.1	Microbiology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

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Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science (Honours)

3611.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2011 or later.

The Honours program encourages independent learning and research, further develops academic ability, provides the opportunity to pursue undergraduate studies to a more advanced level, deepens intellectual understanding in the major field of study and develops research skills. An Honours degree is a recognised point of entry for postgraduate research studies at PhD level and enhances a graduate's ability to perform at a high level in a commercial or public organisation. The Honours program consists of a rigorous program of supervised research on a scientific topic, culminating in the production of a thesis and presentation of a final seminar. Students enrol in a 60 credit point honours project and either a 20 credit point research methodology and experimental design unit, or a 20 credit point advanced topics and research skills unit, allowing them to explore more advanced topics, including wider areas of research and their applications in science, technology, medicine and the environment. Although the Honours course is available on several different campuses, some or all of the lectures, workshops and seminars may be held centrally at a single campus to ensure that students are exposed to as wide a range of research topics as possible. The course can provide opportunities for direct commercial and industrial involvement with a diverse range of organisations through the provision of, and joint supervision of, research projects.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Course Structure

Qualification for this award requires the successful completion of 80 credit points as per the recommended sequence below.

Please note: Students must enrol in 300747 Advanced Topics and Research Skills and 300412 Science,

Technology and Environment Honours Projects in both 1H and 2H sessions.

Recommended Sequence

Full-time

Year 1

1H

300412.3	Science, Technology and Environment Honours Project
300747.2	Advanced Topics and Research Skills

2H

300412.3	Science, Technology and Environment Honours Project
300747.2	Advanced Topics and Research Skills

Part-time

Year 1

1H

300747.2	Advanced Topics and Research Skills

2H

300747.2	Advanced Topics and Research Skills

Year 2

1H

300412.3	Science, Technology and Environment Honours Project

2H

300412.3	Science, Technology and Environment Honours Project

Bachelor of Science - Pathway to Teaching (Secondary)

3638.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2012 or later.

The Bachelor of Science - Pathway to Teaching (Secondary) will allow you to focus on a science program of your choice and to structure your units of study to gain the necessary learning areas to satisfy the NSW Institute of Teachers discipline kowledge requirements for entry into teaching. It also gives the advantage of early access to Education Studies units through mandatory completion of an Education Studies submajor.

Graduates of this degree who complete the requisite units to meet the requirements of the Institute will receive guaranteed entry into the Master of Teaching.

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Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Science (Chemistry) is accredited by The Royal Australian Chemical Institute Incorporated (RACI).

Admission
At least two of Biology, Chemistry, Mathematics (excluding General Mathematics) and Physics at HSC level.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International. International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure
Qualifying for this award requires successful completion of 240 credit points within the following rules

- Students completing the biological sciences program must follow the course structure for 3677 Bachlelor of Science (Biological Science)

- Students completing the chemistry program must follow the course structure for 3676 Bachelor of Science (Chemistry)

- Students completing the mathematical sciences program must follow the course structure for 3679 Bachelor of Science (Mathematical Science)

- Students completing other science programs must follow the course structure for 3675 Bachelor of Science

In addition, all students must complete the mandatory 40 credit point sub-major in Education Studies (SM1067 Education Studies). Students must meet this requirement by choosing the units from SM1067 as electives within their Bachelor of Science program.

SM1067.1   Education Studies

Sub-majors

SM3039.1   Statistics

Sub-major elective spaces
Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Bachelor of Science/Bachelor of Arts

3658.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2013 or later.

This double degree program is designed for students whose interests span the Arts and Sciences. It will produce versatile graduates who can work across a range of academic and professional disciplines, including the opportunity to develop global perspectives and communication skills in an Asian language. In the Science area, students can design their own academic program within the Bachelor of Science course structure, which must include a science Major. This qualification in science can be combined with one of the following majors: International Relations and Asian Studies; Cultural and Social Analysis; English; History and Political Thought; Philosophy; Chinese; Japanese.

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Admission
Local students will normally be admitted through UAC. The following sets of Assumed Knowledge and Recommended Studies apply.

Bachelor of Science

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Assumed knowledge: At least two of Biology, Chemistry, Mathematics, Physics.

Bachelor of Arts

Assumed knowledge: Two units of HSC English at Band 4

Recommended studies: HSC English Standard, or equivalent

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via the UWS International office.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Qualification for this award requires the successful completion of 320 credit points as prescribed in the structure below. Students who complete this award will graduate with a Bachelor of Science and a Bachelor of Arts.

Note: At least 60 credit points must be at Level 3 or above.

Students who wish to exit this double degree after their third year and graduate with a Bachelor of Science must have completed 240 credit points and completed the units as listed below in Years 1, 2 and 3.

Students completing the Bachelor of Science portion of this double degree must complete one of the Science majors listed in the first three years of study.

The conceptual design of this Bachelor of Science/Bachelor of Arts double degree is as follows.

Years 1 to 3

Students will complete 160 credit points of Bachelor of Science units as listed in the course structure below.

In Years 1 to 4 they will complete the four Bachelor of Arts (BA) core units, eight Bachelor of Arts major units from one of the following Bachelor of Arts majors and four Bachelor of Arts sub-major units from one of the sub-majors listed:

BA Majors
• International Relations and Asian Studies
• Chinese
• Cultural and Social Analysis
• English
• History and Political Thought
• Japanese

• Philosophy

BA sub-majors
• International Relations and Asian Studies
• Chinese
• Cultural and Social Analysis
• English
• History and Political Thought
• Japanese
• Philosophy

Arts Units

For details of the relevant Arts units, refer to the current listing of Bachelor of Arts.

Recommended Sequence

For the Science component of this degree students must study 16 Science units of which a minimum of 8 units must be from one of the Science majors: Biochemistry and Molecular Biology, Chemistry, General Biology, or Mathematics.

Consult the handbook entry for the Bachelor of Science degree course for further details about the science majors.

Year 1

Autumn session

Two Core Arts units

Non-mathematics majors choose

300811.1	Scientific Literacy

Choose one more science unit as follows

Biochemistry and Molecular Biology major choose one of

300802.1	Biodiversity
300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

General Biology major choose

300802.1	Biodiversity

Chemistry major choose

300800.2	Essential Chemistry 1

Mathematics major choose

300672.2	Mathematics 1A
200025.2	Discrete Mathematics

Spring session

Two Core Arts units

Non-mathematics majors choose two units as follows

Biochemistry and Molecular Biology major or General Biology major

300816.1	Cell Biology
300803.1	Essential Chemistry 2

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Chemistry major choose

300803.1   Essential Chemistry 2

And one science units from the list below

Science units

300816.1   Cell Biology
300818.1   Introduction to Physiology
300809.1   Introductory Geochemistry
300580.2   Programming Fundamentals
300829.1   Physics 2

Mathematics majors choose

300673.2   Mathematics 1B
200263.3   Biometry

Year 2

Autumn session

BA Major unit

Non-mathematics majors choose at least one Level 1 mathematics unit from the list below in either semester in second year.

Mathematics units

300831.1   Quantitative Thinking
300830.1   Analysis of Change
300672.2   Mathematics 1A
200263.3   Biometry
200025.2   Discrete Mathematics

Either choose two more science units if completing a mathematics unit in Autumn, or three science units otherwise

Science units

300936.1   Functional Proteins and Genes
300845.1   Genetics
300865.1   Plant Physiology
300833.1   Microbiology 1
300899.1   Inorganic Chemistry
300849.1   Physical Chemistry

Mathematics major choose

300811.1   Scientific Literacy
200027.2   Linear Algebra
200028.3   Advanced Calculus
300580.2   Programming Fundamentals

Spring session

BA Major unit

Non-mathematics majors choose either one mathematics unit and two science units, or, three science units (if mathematics unit completed in Autumn)

Science units

300848.1   Metabolism
300847.1   Immunology
300838.1   Comparative Physiology

300896.1   Microbiology 2
300839.1   Ecology
300817.1   Molecular Biology
300876.1   Organic Chemistry
300832.1   Analytical Chemistry
300846.1   Geochemical Systems

Mathematics major choose

200030.3   Differential Equations
200033.5   Applied Statistics

And one science unit from the following

300816.1   Cell Biology
300803.1   Essential Chemistry 2
300829.1   Physics 2
300809.1   Introductory Geochemistry

Year 3

Autumn session

BA Major unit

Non-mathematics majors choose three units from the following

300907.1   Advanced Inorganic Chemistry
300926.1   Advanced Physical Chemistry
300857.1   Environmental Geochemistry
300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300866.1   Analytical Microbiology

Mathematics major

200193.2   Abstract Algebra
200023.3   Analysis
200037.4   Regression Analysis & Experimental Design

Spring session

BA Major unit

Non-mathematics majors choose three units from the list below. At least one must be a capstone unit appropriate to your major.

Major capstone units

300927.1   Molecular Medicine
300855.1   Conservation Biology
300924.1   Science Research Project
300883.1   Laboratory Quality Management

Alternate units

300925.1   Advanced Analytical Chemistry
300906.1   Advanced Organic Chemistry
300826.1   Medical Microbiology
300905.1   Advanced Immunology

Mathematics major

200022.3   Mathematical Modelling
200193.2   Abstract Algebra
200023.3   Analysis

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Year 4

Autumn session

Two BA Major units

Two BA sub-major units

Spring session

Two BA Major units

Two BA sub-major units

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3045.1	Biochemistry and Molecular Biology
M3047.1	Chemistry
M3052.1	General Biology
M3053.1	Geochemistry
M3054.1	Mathematics
M3055.1	Microbiology

Sub-majors

SM3041.1	Biochemistry and Molecular Biology
SM3049.1	Immunology and Cell Biology

Bachelor of Science/Bachelor of Business and Commerce

3659.3

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students who commenced study in this course in 2012 or later.

The Bachelor of Science/Bachelor of Business and Commerce double degree program allows graduates to span both the commercial and scientific worlds in a way that single degree graduates cannot. It provides students with the capacity for critical analysis and independent thinking. The double degrees permit students to undertake multi-skilling, and offer diverse career paths providing high marketability in multiple areas of expertise. This double degree program equips its graduates with a qualification in science, combined with a good understanding of basic business issues, complemented by a high level of knowledge relevant to a specific business discipline as applied in a global environment. Graduates will have a solid grounding in a core science discipline such as Biochemistry and Molecular Biology, Chemistry, General Biology, or Mathematics. This qualification in science is combined with one of the following Majors from the Bachelor of Business and Commerce: Applied Finance; Hospitality Management; Human Resource Management and Industrial Relations; International Business; Management; Marketing; Sport Management. Graduates will be equipped to work as scientists, with a good understanding of business principles and practices. Alternatively, as Business and Commerce graduates they will be well-prepared to work in science-based industries and institutions.

Study Mode

Four years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Accreditation

Accreditation is held with the Australian Human Resource Institute (AHRI) for students completing the Bachelor of Business and Commerce (Human Resource Management and Industrial Relations) major only. The Bachelor of Science (Chemistry) is accredited by The Royal Australian Chemical Institute (RACI).

Admission

Eligibility for admission to the Bachelor Science/Bachelor of Business and Commerce is based on the following requirements:

The following sets of Assumed Knowledge and Recommended Studies apply:

Bachelor of Science

Assumed knowledge: At least two of Biology, Chemistry, Mathematics (excluding General Mathematics), Physics at HSC level.

Bachelor of Business and Commerce

Assumed knowledge: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Qualification for this award requires the successful completion of 320 credit points as prescribed in the structure below.

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Note: At least 60 credit points must be at Level 3 or above.

Students who complete this award will graduate with a Bachelor of Science and a Bachelor of Business and Commerce.

Students who wish to exit this double degree after their third year and graduate with a Bachelor of Science must have completed 240 credit points and competed the units as listed below in Years 1, 2 and 3.

Students completing the Bachelor of Science portion of this double degree must complete one of the Science majors, in the first three years of study. Students must study 16 Science units of which a minimum of 8 units must be from one of the Science majors: Biochemistry and Molecular Biology, Chemistry, General Biology, or Mathematics.

Consult the handbook entry for the Bachelor of Science degree courses for further details about the science majors.

The conceptual design of this Bachelor of Science/Bachelor of Business and Commerce double degree is as follows

1) Years 1 to 3 - Students will complete 160 credit points of Bachelor of Science units as listed in the course structure below.

2) also, in Years 1 to 3 students complete the Bachelor of Business and Commerce seven common core units and also one Bachelor of Business and Commerce Major unit. In Year 4 they complete eight Bachelor of Business and Commerce Major units.

3) students within this course will only be permitted to undertake the following majors within 2753 Bachelor Business and Commerce.

Recommended Sequence

Students in the Bachelor of Science /Bachelor of Business and Commerce must follow one of the study programs listed below.

Bachelor of Science/Bachelor of Business and Commerce (Applied Finance)

KP3011.1   Applied Finance

Bachelor of Science/Bachelor of Business and Commerce (Hospitality Management)

KP3012.1   Hospitality Management

Bachelor of Science/Bachelor of Business and Commerce (HRM & IR)

KP3013.1   Human Resource Management and Industrial Relations

Bachelor of Science/Bachelor of Business and Commerce (Management)

KP3014.1   Management

Bachelor of Science/Bachelor of Business and Commerce (Sport Management)

KP3015.1   Sport Management

Bachelor of Science/Bachelor of Business and Commerce (International Business)

KP3016.1   International Business

Bachelor of Science/Bachelor of Business and Commerce (Marketing)

KP3017.1   Marketing

Bachelor of Science/Bachelor of International Studies

3660.4

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students who commenced study in this course in 2013 or later.

This double degree program is designed for students who want to combine their interest and expertise in science with a sophisticated understanding of international issues and systems. This will equip them to work in globalised science-based professions and industries. In the Science area, students can design their own academic program within the Bachelor of Science course structure, which must include a science Major. This will be combined with a degree in International Studies that examines the relationships of societies, cultures, languages and systems of government within the international system. It develops students' capacity to analyse the historical development of relations among nation states and contemporary political, social and cultural issues, such as globalisation, transnationalism and migration. Students complete a major in Asian Studies and International Relations, and sub-majors are available in Japanese or Chinese.

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Admission

Local students will normally be admitted through UAC. The following sets of Assumed Knowledge and Recommended Studies apply.

Bachelor of Science

Assumed knowledge: At least two of Biology, Chemistry, Mathematics, Physics.

Bachelor of International Studies

Assumed knowledge: Two units of HSC English at Band 4

Recommended studies: HSC English Standard, or equivalent

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and

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International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to UWS should also use the information provided on the UAC website.

International applicants must apply directly to the University of Western Sydney via UWS International.

International students applying to UWS through UWS International can find details of minimum English proficiency requirements and acceptable proof on the UWS International website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and UWS.

Course Structure

Qualification for this award requires the successful completion of 320 credit points as prescribed in the structure below. Students who complete this award will graduate with a Bachelor of Science and a Bachelor of International Studies.

Note: At least 60 credit points must be at Level 3 or above.

Students who wish to exit this double degree after their third year and graduate with a Bachelor of Science must have completed 240 credit points and completed the units as listed below in Years 1, 2 and 3.

Students completing the Bachelor of Science portion of this double degree must complete one of the Science majors listed, in the first three years of study.

The conceptual design of this BSc/BIS double degree is as follows:

Years 1 to 3

Students complete 160 credit points of Bachelor of Science units as listed in the course structure below.

In Years 1 to 4 students complete the four Bachelor of Science/Bachelor of International Studies core units and 12 Bachelor of International Studies units as offered on Parramatta campus only:

• International Relations and Asian Studies major and

Sub-majors are available in the BIS course as follows:

• Japanese

• Chinese

Bachelor of International Studies Units

For details of the relevant International Studies units, refer to the current listing of Bachelor of International Studies, course code 1658 - Bachelor of International Studies. Continuing students should refer to the earlier versions of 1658 -Bachelor of International Studies.

For the Science component of this double degree students must study 16 Science units of which a minimum of 8 units must be from one of the Science majors: Biochemistry and Molecular Biology, Chemistry, General Biology or Mathematics.

Consult the handbook entry for the Bachelor of Science degree course for further details about the science majors.

Recommended Sequence

Year 1

Autumn session

Two core Arts units

Non-mathematics majors

300811.1	Scientific Literacy

Choose one more science unit as follows

Biochemistry and Molecular Biology major choose one of

300802.1	Biodiversity
300800.2	Essential Chemistry 1
300808.1	Introductory Chemistry

General Biology major choose

300802.1	Biodiversity

Chemistry major choose

300800.2	Essential Chemistry 1

Mathematics major choose

300672.2	Mathematics 1A
200025.2	Discrete Mathematics

Spring session

Two Core Arts units

Non-mathematics majors choose two units as follows

Biochemistry and Molecular Biology major or General Biology major choose

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Chemistry major choose

300803.1	Essential Chemistry 2

And one science unit from the list below

Science units

300816.1	Cell Biology
300818.1	Introduction to Physiology
300809.1	Introductory Geochemistry
300580.2	Programming Fundamentals
300829.1	Physics 2

Mathematics majors choose

300673.2	Mathematics 1B
200263.3	Biometry

Year 2

Autumn session

One Bachelor of International Studies unit

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Non-mathematics majors choose at least one Level 1 Mathematics unit from the list below in either semster second year.

Mathematics units

300831.1	Quantitative Thinking
300830.1	Analysis of Change
300672.2	Mathematics 1A
200263.3	Biometry
200025.2	Discrete Mathematics

Either choose two more science units if completing a mathematics unit in Autumn, or three science units otherwise:

Science units

300936.1	Functional Proteins and Genes
300845.1	Genetics
300865.1	Plant Physiology
300833.1	Microbiology 1
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry

Mathematics major choose

300811.1	Scientific Literacy
200027.2	Linear Algebra
200028.3	Advanced Calculus

Spring session

One Bachelor of International Studies unit

Non-mathematics majors choose either one mathematics unit and two science units, or, three science units (if mathematics unit completed in Autumn)

Science units

300848.1	Metabolism
300847.1	Immunology
300838.1	Comparative Physiology
300896.1	Microbiology 2
300839.1	Ecology
300817.1	Molecular Biology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
300846.1	Geochemical Systems

Mathematics major

200030.3	Differential Equations
200033.5	Applied Statistics

And one science unit from the following

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300829.1	Physics 2
300809.1	Introductory Geochemistry

Year 3

Autumn session

One Bachelor of International Studies unit

Non-mathematics majors choose three units from the following

300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300857.1	Environmental Geochemistry
300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology

Mathematics major

200193.2	Abstract Algebra
200023.3	Analysis
200037.4	Regression Analysis & Experimental Design

Spring session

One Bachelor of International Studies unit

Non-mathematics majors choose three units from the list below. At least one must be a capstone unit appropriate for your major.

Major capstone units

300927.1	Molecular Medicine
300855.1	Conservation Biology
300924.1	Science Research Project
300883.1	Laboratory Quality Management

Alternate Science units:

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
300826.1	Medical Microbiology
300905.1	Advanced Immunology

Mathematics major

200022.3	Mathematical Modelling
200193.2	Abstract Algebra
200023.3	Analysis

Year 4

Autumn session

Four Bachelor of International Studies units

Spring session

Four Bachelor of International Studies units

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3045.1	Biochemistry and Molecular Biology
M3047.1	Chemistry
M3052.1	General Biology
M3053.1	Geochemistry
M3054.1	Mathematics
M3055.1	Microbiology

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Sub-majors

SM3041.1	Biochemistry and Molecular Biology
SM3049.1	Immunology and Cell Biology

Bachelor of Science (UWSC First Year Program)

7025.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2012.

The Bachelor in Science (UWSC First Year Program) is designed to prepare students for tertiary study in Science and in doing so address any perceived deficiencies in the students' mathematical and chemistry knowledge and skills. It presents students with first year level Bachelor of Science units. Equivalent to the Diploma in Science, this course aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Science degree. The course, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
One year full-time (three sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Science. This course is accredited by the University, as principal, to enable its agent (UWSCollege) to produce students who are fully prepared for study beyond the first year of a tertiary award.

1. Academic Entry Requirements:

Varies according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement; Or
- Passed the UWSCollege Foundation Certificate, offered by UWSCollege, with a Grade Point Average (GPA) of 5.5 or higher.

2. Local students entering this course are required to have met the following:

- Completed an English subject in the NSW Higher School Certificate, or to have competency in English at IELTS 6.0 with a minimum of 5.5 in all areas (unless a native speaker) or have completed the UWSCollege English test at IELTS 6.0 equivalent with a minimum of 5.5 in all areas or to have passed the UWSCollege Foundation English unit.

- Other entry requirements such as an ATAR identified prior to the offer of a place, or to have completed the UWSCollege Foundation Studies course, with a GPA of 5.5 or better, and a pass in Foundation level Mathematics Extension.

3. Students are assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Special Requirements
All students must complete Tertiary Study Skills with UWSCollege prior to completion of the program.

Course Structure
Students must pass the following units:

700095.1	Biodiversity (UWSC)
700125.1	Cell Biology (UWSC)
700121.2	Essential Chemistry 1 (UWSC)
700122.1	Essential Chemistry 2 (UWSC)
700124.1	Scientific Literacy (UWSC)

Students must also complete the following two units:

700043.2	Chemistry (UWSCFS)
700069.2	Mathematics B (UWSCFS)

Students must also pass one of the following units (dependent upon the students result in 700069 Mathematics B (UWSCF):

700108.1	Analysis of Change (UWSC)
700123.1	Quantitative Thinking (UWSC)

Students wishing to enter the Bachelor of Natural Science (Animal Science) or the Bachelor of Natural Science (Enviromental Management) or the Bachelor of Natural Science (Enviroment and Health), upon successful completion of their studies must also pass the following two units:

700099.1	Resource Sustainability (UWSC)
700096.2	Integrated Science (UWSC)

Or

Students wishing to enter the Bachelor of Science or the Bachelor of Medical Science, upon successful completion of their studies must also pass the following two units:

700097.1	Introduction to Anatomy (UWSC)
700098.1	Introduction to Physiology (UWSC)

Students must also complete (does not count towards the course)

Tertiary Study Skills (Special Requirement)

Diploma in Health Science

7018.2

This course, along with 7017 Diploma in Health Science (PDHPE Pathway), replaces 7013 Diploma in Health Science from 2011.

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2012 or later.

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This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Health Science is designed to provide students with the first year units included in the Bachelor of Health Science course. The Diploma presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course. Transition to tertiary study is assisted by the inclusion of Foundation level Academic English and Science. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree in the specified key programs of Health Promotion, Health Services Management and Therapeutic Recreation. This course, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site

Study Mode
One year full-time (three sessions).

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Health Science areas of Health Promotion, Health Services Management and Therapeutic Recreation. The Diploma will be accredited by the University, as principal, to enable its agent, UWSCollege, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science) OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

English Entry Requirements. International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR

- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

Course Structure
Successful completion of the following units will allow students to enter the second year of the Bachelor of Health Science (with key programs in Health Promotion, Health Services Management, or Therapeutic Recreation) at UWS with 80cp advanced standing.

Qualification for this award requires the successful completion of the units listed below.

700067.1	Professional Health Competencies (UWSC)
700066.1	Population Health and Society (UWSC)
700062.2	Communication in Health (UWSC)
700060.1	Psychology and Health (UWSC)
700061.1	Introduction to Human Biology (UWSC)
700064.1	Foundations of Research and Evidence-Based Practice (UWSC)
700065.2	Approaches to Health Promotion (UWSC)
700075.1	Professional Pathways in Health Science (UWSC)

Students must pass, with a satisfactory grade, the following units

700056.2	Academic English (UWSCFS)
700059.2	Science for Health Science (UWSCFS)

Students also complete a mandatory unit Tertiary Study Skills, although this does not count for credit towards the Diploma.

Diploma in Health Science Fast Track

7019.2

This course replaces 7014 Diploma in Health Science Fast Track from Term 2, 2011.

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2012 or later.

The Diploma in Health Science Fast Track is designed to provide students with the first year units included in the Bachelor of Health Science course. The Diploma presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree in the specified key programs of Health Promotion, Health Services Management and Therapeutic Recreation. This course, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

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For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
Eight months full-time (two sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Health Science areas of Health Promotion, Health Services Management and Therapeutic Recreation. The Diploma will be accredited by the University, as principal, to enable its agent, UWSCollege, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science) OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

English Entry Requirements. International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

Course Structure
Successful completion of the units listed below will allow students to enter the second year of the Bachelor of Health Science (with key programs in Health Promotion, Health Services Management, or Therapeutic Recreation) at UWS with 80cp advanced standing.

Qualification for this award requires the successful completion of the units listed below.

700067.1	Professional Health Competencies (UWSC)
700066.1	Population Health and Society (UWSC)
700062.2	Communication in Health (UWSC)
700060.1	Psychology and Health (UWSC)
700061.1	Introduction to Human Biology (UWSC)
700064.1	Foundations of Research and Evidence-Based Practice (UWSC)
700065.2	Approaches to Health Promotion (UWSC)
700075.1	Professional Pathways in Health Science (UWSC)

Students also complete a special requirement unit, Tertiary Study Skills, although this does not count for credit towards the Diploma.

Diploma in Health Science (Personal Development, Health and Physical Education Pathway)

7017.2

This course, along with 7018 Diploma in Health Science (Health Promotion, Health Services Management and Therapeutic Recreation Pathway), replaces 7013 Diploma in Health Science from 2011.

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2012 or later.

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Health Science (PDHPE Pathway) is designed to provide students with the first year units included in the Bachelor of Health Science (PDHPE) course. The Diploma presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course. Transition to tertiary study is assisted by the inclusion of Foundation level Academic English and Science. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree in the specified key programs of PDHPE. This course, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
One year full-time (three sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Health Science areas of PDHPE. The Diploma will be accredited by the University, as principal, to enable its agent, UWSCollege, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

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- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science - PDHPE), OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

English Entry Requirements. International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

Course Structure

Successful completion of the following units will allow students to enter the second year of the Bachelor of Health Science (PDHPE) course at UWS with 80cp advanced standing.

Qualification for this award requires the successful completion of the units listed below.

700067.1	Professional Health Competencies (UWSC)
700066.1	Population Health and Society (UWSC)
700062.2	Communication in Health (UWSC)
700060.1	Psychology and Health (UWSC)
700061.1	Introduction to Human Biology (UWSC)
700064.1	Foundations of Research and Evidence-Based Practice (UWSC)
700065.2	Approaches to Health Promotion (UWSC)
700073.1	Fundamentals of Exercise Science (UWSC)

Students must pass, with a satisfactory grade, the following units

700056.2	Academic English (UWSCFS)
700059.2	Science for Health Science (UWSCFS)

Students also complete a special requirement unit, Tertiary Study Skills, although this does not count for credit towards the Diploma.

Diploma in Science

7003.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2012 or later.

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Science is designed to prepare students for tertiary study in Science and in doing so address any perceived deficiencies in the students' mathematical and chemistry knowledge and skills. It presents students with first year level Bachelor of Science subjects. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Science degree. The Diploma in Science, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
One year full-time (three sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Science. The Diploma is accredited by the University, as principal, to enable its agent (UWSCollege) to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Science) OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

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- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 5.5 or higher.

Special Requirements
All students must complete Tertiary Study Skills with UWSCollege prior to completion of the Diploma.

Course Structure
Students must pass the following units:

700095.1	Biodiversity (UWSC)
700125.1	Cell Biology (UWSC)
700121.2	Essential Chemistry 1 (UWSC)
700122.1	Essential Chemistry 2 (UWSC)
700124.1	Scientific Literacy (UWSC)

Students must also complete the following two units:

700043.2	Chemistry (UWSCFS)
700069.2	Mathematics B (UWSCFS)

Students must also pass one of the following units (dependent upon the students result in 700069 Mathematics B (UWSCF):

700108.1	Analysis of Change (UWSC)
700123.1	Quantitative Thinking (UWSC)

Students wishing to enter the Bachelor of Natural Science (Animal Science) or the Bachelor of Natural Science (Enviromental Management) or the Bachelor of Natural Science (Enviroment and Health), upon successful completion of their studies must also pass the following two units:

700099.1	Resource Sustainability (UWSC)
700096.2	Integrated Science (UWSC)

Or

Students wishing to enter the Bachelor of Science or the Bachelor of Medical Science, upon successful completion of their studies must also pass the following two units:

700097.1	Introduction to Anatomy (UWSC)
700098.1	Introduction to Physiology (UWSC)

Students must also complete (does not count towards the course)

Tertiary Study Skills (Special Requirement)

Diploma in Science Fast Track

7009.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2012 or later.

This course is delivered by UWSCollege as an agent of the University of Western Sydney.

The Diploma in Science Fast Track is designed to prepare students for tertiary study in Science and in doing so address any perceived deficiencies in the students' mathematical and chemistry knowledge and skills. It presents students with eight university level Science units. The Diploma aims to produce students who are fully prepared for study beyond the first year of university study. The Diploma in Science Fast Track, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on UWSCollege, please refer to the UWSCollege web site.

Study Mode
Eight months full-time (two sessions)

Location

Campus	Attendance	Mode
UWSC - Nirimba Education Precinct	Full Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Science. The Diploma is accredited by the University, as principal, to enable its agent (UWSCollege) to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.
- Passed a UWSCollege Foundation Studies Mathematics unit at C grade level or higher (if enrolling in Analysis of Change).

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Science) OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

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International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the UWSCollege EAP III course with a 50% pass OR
- Passed the UWSCollege English test at IELTS 6.0 equivalent OR
- Passed the UWSCollege Foundation Studies Academic English unit at C grade level or higher.
- Passed a UWSCollege Foundation Studies Mathematics unit at C grade level or higher (if enrolling in Analysis of Change).

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the UWSCollege Foundation Studies course with a Grade Point Average of 6.0 or higher.

Special Requirements

All students must complete Tertiary Study Skills with UWSCollege prior to completion of the diploma.

Course Structure

Students must pass the following units:

700095.1	Biodiversity (UWSC)
700125.1	Cell Biology (UWSC)
700121.2	Essential Chemistry 1 (UWSC)
700122.1	Essential Chemistry 2 (UWSC)
700124.1	Scientific Literacy (UWSC)

Students must also pass one of the following units (based on advice from UWSCollege prior to enrolment):

700108.1	Analysis of Change (UWSC)
700123.1	Quantitative Thinking (UWSC)

Students wishing to enter the Bachelor of Natural Science (Animal Science) or the Bachelor of Natural Science (Enviromental Management) or the Bachelor of Natural Science (Enviroment and Health), upon successful completion of their studies must also pass the following two units:

700099.1	Resource Sustainability (UWSC)
700096.2	Integrated Science (UWSC)

Or

Students wishing to enter the Bachelor of Science or the Bachelor of Medical Science, upon successful completion of their studies must also pass the following two units:

700097.1	Introduction to Anatomy (UWSC)
700098.1	Introduction to Physiology (UWSC)

Students must also complete (does not count towards the course)

Tertiary Study Skills (Special Requirement)

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Unit Sets

Key Program - General program

KP3010.1

Science asks questions about how the natural world works. It does so in a systematic, yet rigorously creative way based on inquiry and evidence for ideas. This approach has led to our current understanding of nature as being (in large part) systematic and predictable, and has underpinned major advances in human welfare. A Bachelor of Science will prepare you to take part in this process of enquiry, by both contributing to it and by using scientific knowledge to solve current problems. Students will learn core concepts and skills necessary for scientific inquiry: investigating the natural world, proposing and testing ideas by experimentation and observation; quantifying and modelling processes; communicating findings, thinking independently and critically.

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students completing the Bachelor of Science (Advanced Science) General will complete the following course structure.

Qualifying for this award requires successful completion of 240 credit points within the following rules.

Core units

Six core units must be completed, comprising

- at least one mathematics or statistics unit other than Quantitative Thinking or Analysis of Change
- one academic skills unit
- three science foundation units, which must come from a further two science disciplines out of the following: Biology, Chemistry, Computer Science, Geoscience, Physics or Integrated Science
- one level 3 capstone unit which ties the area of study together

Remaining units

- at least ten more science units must be selected from the listings for each Campus below
- at least one science Major must be completed
- at least 60 credit points must be taken at level 3

- 3 Advanced Science project units plus one other science research unit must be completed

Note 1: Students must complete at least one of the following majors:

- Hawkesbury: Aquatic Biology, Biochemistry and Molecular Biology, Climate Change, Conservation Biology, Forensic Science, Microbiology, General Biology, Nutrition and Physiology, Zoology. Please note: Mathematics major can not be completed on Hawkesbury campus.
- Parramatta: Biochemistry and Molecular Biology, Chemistry, General Biology, Geochemistry, Mathematics
- Campbelltown: Biochemistry and Molecular Biology, Chemistry, General Biology, Mathematics

Note 2: selection of science units in Year 1 must cover the following discipline areas: mathematics/statistics, and two more from the following: Biology, Chemistry, Computer Science, Geoscience, Physics or Integrated Science

Note 3: Students commencing mid-year should seek academic advice about completing their chosen major; more than three years may be required for completing in some cases due to the Semester some units are offered in and the sequence in which they must be completed

Hawkesbury Campus

Year 1

Autumn session

Non-mathematics majors: choose at least one appropriate mathematics or statistics unit in your first year: Students cannot do a mathematics major on the Hawkesbury campus.

300811.1	Scientific Literacy

Choose three of

300800.2	Essential Chemistry 1
300802.1	Biodiversity
300828.1	Physics 1
300931.1	Integrated Science
300831.1	Quantitative Thinking
300830.1	Analysis of Change
200263.4	Biometry

Spring session

Choose at least two of

300803.1	Essential Chemistry 2
300816.1	Cell Biology
300818.1	Introduction to Physiology
300134.2	Introduction to Information Technology
200263.4	Biometry
300831.1	Quantitative Thinking
300830.1	Analysis of Change

And two elective units

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Year 2

Autumn session

300937.1   Advanced Science Project A

Choose at least three of

300936.1   Functional Proteins and Genes
300833.1   Microbiology 1
300845.1   Genetics
300865.1   Plant Physiology
300837.1   Climate Change Science
300843.1   Forensic and Environmental Analysis

Spring session

300938.1   Advanced Science Project B

Choose at least three of

300848.1   Metabolism
300896.1   Microbiology 2
300817.1   Molecular Biology
300838.1   Comparative Physiology
300839.1   Ecology

Year 3

Autumn session

Choose at least one capstone unit in your final year of study; capstone units are listed below. The capstone unit selected should come from your Major.

300910.1   Advanced Science Project C

Choose at least two of

300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300856.1   Ecosystem Carbon Accounting
300921.1   Plant Health and Biosecurity
300919.1   Occupational Health and Safety

Capstone Units

300857.1   Environmental Geochemistry
300866.1   Analytical Microbiology
300851.1   Advanced Physiology
300929.1   Aquatic Ecology

And one Level 3 elective

Spring session

300924.1   Science Research Project

Choose at least two of

300905.1   Advanced Immunology
300855.1   Conservation Biology
300826.1   Medical Microbiology
300861.1   Vertebrate Biodiversity
300918.1   Invertebrate Biology

Capstone Units

300927.1   Molecular Medicine
300909.1   Biological Adaptation to Climate Change

300883.1   Laboratory Quality Management

And one Level 3 elective

Parramatta Campus

Year 1

Autumn session

Non-mathematics majors: choose at least one appropriate mathematics or statistics unit in your first year:

300811.1   Scientific Literacy

Choose three of

300800.2   Essential Chemistry 1
300802.1   Biodiversity
300828.1   Physics 1
300822.1   Introduction to Earth Science
300931.1   Integrated Science
300831.1   Quantitative Thinking
300830.1   Analysis of Change
200263.4   Biometry
300672.2   Mathematics 1A
200025.2   Discrete Mathematics
300580.2   Programming Fundamentals
300134.2   Introduction to Information Technology

Spring session

Choose at least two of

300803.1   Essential Chemistry 2
300816.1   Cell Biology
300818.1   Introduction to Physiology
300829.1   Physics 2
200263.4   Biometry
300809.1   Introductory Geochemistry
300672.2   Mathematics 1A
300673.2   Mathematics 1B
300580.2   Programming Fundamentals
300830.1   Analysis of Change

And two electives

Year 2

Autumn session

300937.1   Advanced Science Project A

Choose at least three of

300936.1   Functional Proteins and Genes
300833.1   Microbiology 1
300845.1   Genetics
300865.1   Plant Physiology
300899.1   Inorganic Chemistry
300849.1   Physical Chemistry
200027.2   Linear Algebra
200028.3   Advanced Calculus

Spring session

300938.1   Advanced Science Project B

Choose at least three of

300848.1   Metabolism

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300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300839.1	Ecology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
200030.4	Differential Equations
200033.5	Applied Statistics
300847.1	Immunology

Year 3

Autumn session

Choose at least one capstone unit in your final year of study; capstone units are listed below. The capstone unit selected should come from your Major.

300910.1	Advanced Science Project C

Choose at least two of

300820.1	Genes, Genomics and Human Health
300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
200193.2	Abstract Algebra
200037.4	Regression Analysis & Experimental Design
200023.3	Analysis

Capstone Units

300857.1	Environmental Geochemistry

And one Level 3 elective

Spring session

300924.1	Science Research Project

Choose at least two of

300905.1	Advanced Immunology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
200038.3	Time Series and Forecasting
200022.3	Mathematical Modelling

Capstone Units

300927.1	Molecular Medicine
300855.1	Conservation Biology

And one Level 3 elective

Campbelltown Campus

Year 1

Autumn session

Non-mathematics majors: choose at least one other than Quantitative Thinking appropriate mathematics or statistics unit in your first year:

300811.1	Scientific Literacy

Choose three of

300800.2	Essential Chemistry 1
300802.1	Biodiversity
300828.1	Physics 1

300931.1	Integrated Science
300831.1	Quantitative Thinking
300830.1	Analysis of Change
200263.4	Biometry
300580.2	Programming Fundamentals
300134.2	Introduction to Information Technology
300672.2	Mathematics 1A

Spring session

Choose at least two of

300803.1	Essential Chemistry 2
300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300580.2	Programming Fundamentals
300672.2	Mathematics 1A
300673.2	Mathematics 1B
200263.4	Biometry

And two electives

Year 2

Autumn session

300937.1	Advanced Science Project A

Choose at least three of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry
200027.2	Linear Algebra
200028.3	Advanced Calculus

Spring session

300938.1	Advanced Science Project B

Choose at least three of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300839.1	Ecology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
200030.4	Differential Equations
200033.5	Applied Statistics
300847.1	Immunology

Year 3

Autumn session

Choose at least one capstone unit in your final year of study; capstone units are listed below. The capstone unit selected should come from your Major.

300910.1	Advanced Science Project C

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology

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300907.1	Advanced Inorganic Chemistry
300912.1	Molecular Pharmacokinetics
200193.2	Abstract Algebra
200037.4	Regression Analysis & Experimental Design
200023.3	Analysis

And one Level 3 elective

Spring session

300924.1	Science Research Project

Choose at least two of

300905.1	Advanced Immunology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
200038.3	Time Series and Forecasting
200022.3	Mathematical Modelling

Capstone Units

300927.1	Molecular Medicine

And one Level 3 elective

Key Program - Applied Finance

KP3011.1

This unit set is for administrative purposes only to advise course structure information. Students do not enrol in this unit set.

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Students in the Bachelor of Science /Bachelor of Business and Commerce (Applied Finance) will complete the following course structure.

Year 1

Autumn session

200336.3	Business Academic Skills
200525.2	Principles of Economics

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology major choose

300802.1	Biodiversity
300800.2	Essential Chemistry 1

OR

300808.2	Introductory Chemistry

General Biology major choose

300802.1	Biodiversity

And one unit from the list below

Chemistry major choose

300800.2	Essential Chemistry 1

And one unit from the list below

Science Units

300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300828.1	Physics 1

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Mathematics major choose

300672.2	Mathematics 1A
200025.2	Discrete Mathematics

Spring session

200083.2	Marketing Principles
200101.3	Accounting Information for Managers

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology or General Biology major choose

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Chemistry major choose

300803.1	Essential Chemistry 2

And one science unit from the list below

Science Units

300816.1	Cell Biology
300818.1	Introduction to Physiology
300580.2	Programming Fundamentals
300829.1	Physics 2
300809.1	Introductory Geochemistry

Mathematics major choose

300673.2	Mathematics 1B
200263.4	Biometry

Year 2

Autumn session

200571.3	Management Dynamics

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Non-mathematics Majors: choose at least one Level 1 mathematics unit from the list below in either semester in second year

Mathematics units

300831.1	Quantitative Thinking
300830.1	Analysis of Change
300672.2	Mathematics 1A
200263.4	Biometry
200025.2	Discrete Mathematics

Either choose two more science units if completing a mathematics unit in Autumn or three science units

Science units

300936.1	Functional Proteins and Genes
300845.1	Genetics
300865.1	Plant Physiology

(Parramatta Only)

300833.1	Microbiology 1
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry

Mathematics Major choose

200027.2	Linear Algebra
200028.3	Advanced Calculus

And one more science unit from the list below:

300800.2	Essential Chemistry 1
300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300828.1	Physics 1

Spring session

200184.3	Introduction to Business Law

Non-mathematics Majors: choose either one mathematics unit and two science units, or three science units (if mathematics unit completed in Autumn)

Science Units

300848.1	Metabolism
300847.1	Immunology
300838.1	Comparative Physiology
300896.1	Microbiology 2
300839.1	Ecology
300817.1	Molecular Biology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
300846.1	Geochemical Systems

Mathematics Major

200030.4	Differential Equations
200033.5	Applied Statistics

And one Science unit from the following

300816.1	Cell Biology

300803.1	Essential Chemistry 2
300829.1	Physics 2
300809.1	Introductory Geochemistry

Year 3

Autumn session

One Level 3 elective

Non-mathematics Majors: choose three of

300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300857.1	Environmental Geochemistry
300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology

Mathematics Major

200193.2	Abstract Algebra
200023.3	Analysis
200037.4	Regression Analysis & Experimental Design

Spring session

200488.3	Corporate Financial Management

Non-mathematics Majors: choose three units from the list below. At least one must be a capstone unit appropriate for your Major:

Major Capstone units

300927.1	Molecular Medicine
300855.1	Conservation Biology
300924.1	Science Research Project
300883.1	Laboratory Quality Management

Alternate Science units

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
300826.1	Medical Microbiology
300905.1	Advanced Immunology

Mathematics Major

200022.3	Mathematical Modelling
200193.2	Abstract Algebra
200023.3	Analysis

Year 4

Autumn session

200549.2	The Australian Macroeconomy
200048.2	Financial Institutions and Markets
200537.3	Economics and Finance Engagement Project

And one alternate unit

Spring session

200053.3	Economic Modelling
200057.3	Investment Management

And two alternate units

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Alternate Units

200078.2	Portfolio Management
200055.4	International Finance
200077.2	The Superannuation Industry
200079.2	Derivatives
200518.2	Behavioural Finance
200059.2	Financial Economics

Key Program - Hospitality Management

KP3012.1

This unit set is for administrative purposes only to advise course structure information. Students do not enrol in this unit set.

Location

Campus	Mode
Campbelltown Campus	External

Unit Set Structure

Students in the Bachelor of Science /Bachelor of Business and Commerce (Hospitality Management) will complete the following course structure.

Year 1

Autumn session

200336.3	Business Academic Skills
200273.4	Managing Service and Experience

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology major choose

300802.1	Biodiversity

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

General Biology major choose

300802.1	Biodiversity

And one unit from the list below

Chemistry major choose

300800.2	Essential Chemistry 1

And one unit from the list below

Science Units

300800.2	Essential Chemistry 1

OR

300808.2	Introductory Chemistry

300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300828.1	Physics 1

Mathematics major choose

300672.2	Mathematics 1A
200025.2	Discrete Mathematics

Spring session

200571.3	Management Dynamics
200083.2	Marketing Principles

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology or General Biology major choose

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Chemistry major choose

300803.1	Essential Chemistry 2

And one science unit from the list below

Science Units

300816.1	Cell Biology
300818.1	Introduction to Physiology
300580.2	Programming Fundamentals
300829.1	Physics 2
300809.1	Introductory Geochemistry

Mathematics major choose

300673.2	Mathematics 1B
200263.4	Biometry

Year 2

Autumn session

200710.2	Managing the Food and Beverage Experience

Non-mathematics Majors: choose at least one Level 1 mathematics unit from the list below in either semester in second year

Mathematics units

300831.1	Quantitative Thinking
300830.1	Analysis of Change
300672.2	Mathematics 1A
200263.4	Biometry
200025.2	Discrete Mathematics

Either choose two more science units if completing a mathematics unit in Autumn, or three science units

Science units

300936.1	Functional Proteins and Genes

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300845.1	Genetics
300865.1	Plant Physiology

(Parramatta Only)

300833.1	Microbiology 1
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry

Mathematics Major choose

200027.2	Linear Algebra
200028.3	Advanced Calculus

And one more science unit from the list below

300800.2	Essential Chemistry 1
300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300828.1	Physics 1

Spring session

200101.3	Accounting Information for Managers

Non-mathematics Majors: choose either one mathematics unit and two science units, or three science units (if mathematics unit completed in Autumn)

Science Units

300848.1	Metabolism
300847.1	Immunology
300838.1	Comparative Physiology
300896.1	Microbiology 2
300839.1	Ecology
300817.1	Molecular Biology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
300846.1	Geochemical Systems

Mathematics Major

200030.4	Differential Equations
200033.5	Applied Statistics

And one Science unit from the following

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300829.1	Physics 2
300809.1	Introductory Geochemistry

Year 3

Autumn session

One Level 3 elective

Non-mathematics Majors: choose three units from

300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300857.1	Environmental Geochemistry
300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology

Mathematics Major

200193.2	Abstract Algebra
200023.3	Analysis
200037.4	Regression Analysis & Experimental Design

Spring session

200742.2	Sport and Hospitality Event Management

Non-mathematics Majors: choose three units from the list below: at least one must be a capstone unit appropriate for your Major

Major capstone units

300927.1	Molecular Medicine
300855.1	Conservation Biology
300924.1	Science Research Project
300883.1	Laboratory Quality Management

Alternate Science units

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
300826.1	Medical Microbiology
300905.1	Advanced Immunology

Mathematics Major

200022.3	Mathematical Modelling
200193.2	Abstract Algebra
200023.3	Analysis

Year 4

Autumn session

200525.2	Principles of Economics
200709.2	Managing the Accommodation Experience
200708.2	Hospitality Industry
200707.2	Service Industry Studies

Spring session

200184.3	Introduction to Business Law
200584.3	Hospitality Management Operations
200148.2	Planning and Design of Hospitality Facilities
200561.3	Hospitality Management Applied Project

Key Program - Human Resource Management and Industrial Relations

KP3013.1

This unit set is for administrative purposes only to advise course structure information. Students do not enrol in this unit set.

Location

Campus	Mode
Campbelltown Campus	Internal

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Unit Set Structure

Students in the Bachelor of Science /Bachelor of Business and Commerce (Human Resource Management and Industrial Relations) will complete the following course structure.

Year 1

Autumn session

200336.3	Business Academic Skills
200571.3	Management Dynamics

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology major choose

300802.1	Biodiversity
300800.2	Essential Chemistry 1

OR

300808.2	Introductory Chemistry

General Biology major choose

300802.1	Biodiversity

And one science unit from the list below

Chemistry major choose

300800.2	Essential Chemistry 1

And one science unit from the list below

Science Units

300800.2	Essential Chemistry 1

OR

300808.2	Introductory Chemistry
300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300828.1	Physics 1

Mathematics major choose

300672.2	Mathematics 1A
200025.2	Discrete Mathematics

Spring session

200300.2	Managing People at Work
200184.3	Introduction to Business Law

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology or General Biology major choose

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Chemistry major choose

300803.1	Essential Chemistry 2

And one science unit from the list below

Science Units

300816.1	Cell Biology
300818.1	Introduction to Physiology
300580.2	Programming Fundamentals
300829.1	Physics 2
300809.1	Introductory Geochemistry

Mathematics major choose

300673.2	Mathematics 1B
200263.4	Biometry

Year 2

Autumn session

200614.2	Enterprise Industrial Relations

Non-mathematics Majors: choose at least one Level 1 mathematics unit from the list below in either semester in second year

Mathematics Units

300831.1	Quantitative Thinking
300830.1	Analysis of Change
300672.2	Mathematics 1A
200263.4	Biometry
200025.2	Discrete Mathematics

Either choose two more science units if completing a mathematics unit in Autumn, or three science units

Science Units

300936.1	Functional Proteins and Genes
300845.1	Genetics
300865.1	Plant Physiology

(Parramatta Only)

300833.1	Microbiology 1
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry

Mathematics Major choose

200027.2	Linear Algebra
200028.3	Advanced Calculus

And one more science unit from the list below:

300800.2	Essential Chemistry 1
300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300558.1	Physics 1

Spring session

200083.2	Marketing Principles

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Non-mathematics Majors: choose either one mathematics unit and two science units, or three science units (if mathematics unit completed in Autumn)

Science Units

300848.1	Metabolism
300847.1	Immunology
300838.1	Comparative Physiology
300896.1	Microbiology 2
300839.1	Ecology
300927.1	Molecular Medicine
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
300846.1	Geochemical Systems

Mathematics Major

200030.4	Differential Equations
200033.5	Applied Statistics

And one science unit from the following:

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300829.1	Physics 2
300809.1	Introductory Geochemistry

Year 3

Autumn session

One Level 3 elective

Non-mathematics Majors: choose three of

300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300857.1	Environmental Geochemistry
300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology

Mathematics Major

200193.2	Abstract Algebra
200023.3	Analysis
200037.4	Regression Analysis & Experimental Design

Spring session

200739.2	Reward and Performance Management

Non-mathematics Majors: choose three units from the list below: at least one must be a capstone unit appropriate for your Major:

Major capstone units:

300927.1	Molecular Medicine
300855.1	Conservation Biology
300924.1	Science Research Project
300883.1	Laboratory Quality Management

Alternate Science units:

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry

300826.1	Medical Microbiology
300905.1	Advanced Immunology

Mathematics Major

200022.3	Mathematical Modelling
200193.2	Abstract Algebra
200023.3	Analysis

Year 4

Autumn session

200525.2	Principles of Economics
200621.3	International Human Resource Management
200616.3	Workplace Behaviour
200613.2	Negotiation, Bargaining and Advocacy

Spring session

200101.3	Accounting Information for Managers
200575.3	Processes and Evaluation in Employment Relations
200740.3	Human Resource and Industrial Relations Strategy

Choose one of the following

200610.2	Employee Training and Development
200150.2	Managing Diversity
200753.2	Occupational Health and Safety

Key Program - Management

KP3014.1

This unit set is for administrative purposes only to advise course structure information. Students do not enrol in this unit set.

Location

Campus	Mode
Campbelltown Campus	External

Unit Set Structure

Students in the Bachelor of Science /Bachelor of Business and Commerce (Management) will complete the following course structure.

Year 1

Autumn session

200336.3	Business Academic Skills
200571.3	Management Dynamics

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology major choose

300802.1	Biodiversity
300800.2	Essential Chemistry 1

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OR

300808.2   Introductory Chemistry

General Biology major choose

300802.1   Biodiversity

And one of

Chemistry major choose

300800.2   Essential Chemistry 1

And one of

Science Units

300802.1   Biodiversity
300822.1   Introduction to Earth Science
300580.2   Programming Fundamentals
300828.1   Physics 1

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2   Essential Chemistry 1
300808.2   Introductory Chemistry

Mathematics major choose

300672.2   Mathematics 1A
200025.2   Discrete Mathematics

Spring session

200585.2   Organisational Behaviour
200083.2   Marketing Principles

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology or General Biology major choose

300816.1   Cell Biology
300803.1   Essential Chemistry 2

Chemistry major choose

300803.1   Essential Chemistry 2

And one of

Science Units

300816.1   Cell Biology
300818.1   Introduction to Physiology
300580.2   Programming Fundamentals
300829.1   Physics 2
300809.1   Introductory Geochemistry

Mathematics major choose

300673.2   Mathematics 1B
200263.4   Biometry

Year 2

Autumn session

200158.3   Business, Society and Policy

Non-mathematics Majors: choose at least one Level 1 mathematics unit from the list below in either semester in second year

Mathematics units

300831.1   Quantitative Thinking
300830.1   Analysis of Change
300672.2   Mathematics 1A
200263.4   Biometry
200025.2   Discrete Mathematics

Either choose two more science units if completing a mathematics unit in Autumn, or three science units:

Science Units

300936.1   Functional Proteins and Genes
300845.1   Genetics
300865.1   Plant Physiology

(Parramatta Only)

300833.1   Microbiology 1
300899.1   Inorganic Chemistry
300849.1   Physical Chemistry

Mathematics Major choose

200027.2   Linear Algebra
200028.3   Advanced Calculus

And one of

300800.2   Essential Chemistry 1
300802.1   Biodiversity
300822.1   Introduction to Earth Science
300580.2   Programming Fundamentals
300828.1   Physics 1

Spring session

200101.3   Accounting Information for Managers

Non-mathematics Majors: choose either one mathematics unit and two science units, or three science units (if mathematics unit completed in Autumn)

Science Units

300848.1   Metabolism
300847.1   Immunology
300838.1   Comparative Physiology
300896.1   Microbiology 2
300839.1   Ecology
300817.1   Molecular Biology
300876.1   Organic Chemistry
300832.1   Analytical Chemistry
300846.1   Geochemical Systems

Mathematics Major

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| 200030.4 | Differential Equations |
| 200033.5 | Applied Statistics |

And one of

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300829.1	Physics 2
300809.1	Introductory Geochemistry

Year 3

Autumn session

One level 3 elective

Non-mathematics Majors: choose three of

300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300857.1	Environmental Geochemistry
300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology

Mathematics Major

200193.2	Abstract Algebra
200023.3	Analysis
200037.4	Regression Analysis & Experimental Design

Spring session

| 200588.2 | Global Operations and Logistics Management |

Non-mathematics Majors: choose three units from the list below: at least one must be a capstone unit appropriate for your Major

Major capstone units

300927.1	Molecular Medicine
300855.1	Conservation Biology
300924.1	Science Research Project
300883.1	Laboratory Quality Management

Alternate Science units:

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
300826.1	Medical Microbiology
300905.1	Advanced Immunology

Mathematics Major

200193.2	Abstract Algebra
200023.3	Analysis
200022.3	Mathematical Modelling

Year 4

Autumn session

200525.2	Principles of Economics
200586.2	Cross Cultural Management
200570.3	Management of Change
200752.2	Power, Politics and Knowledge

Spring session

200184.3	Introduction to Business Law
200568.3	Contemporary Management Issues
200587.2	Strategic Management

Choose one of

| 200157.3 | Organisational Learning and Development |
| 200159.4 | Organisation Analysis and Design |

Key Program - Sport Management

KP3015.1

This unit set is for administrative purposes only to advise course structure information. Students do not enrol in this unit set.

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Students in the Bachelor of Science /Bachelor of Business and Commerce (Sport Management) will complete the following course structure.

Year 1

Autumn session

| 200336.3 | Business Academic Skills |
| 200705.2 | The World of Sport Management |

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology major choose

| 300802.1 | Biodiversity |

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

| 300800.2 | Essential Chemistry 1 |
| 300808.2 | Introductory Chemistry |

General Biology major choose

| 300802.1 | Biodiversity |

And one of

Chemistry major choose

| 300800.2 | Essential Chemistry 1 |

And one of

Science Units

| 300800.2 | Essential Chemistry 1 |

OR

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300808.2	Introductory Chemistry
300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300828.1	Physics 1

Mathematics major choose

| 200025.2 | Discrete Mathematics |
| 300672.2 | Mathematics 1A |

Spring session

| 200571.3 | Management Dynamics |
| 200083.2 | Marketing Principles |

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology or General Biology major choose

| 300816.1 | Cell Biology |
| 300803.1 | Essential Chemistry 2 |

Chemistry major choose

| 300803.1 | Essential Chemistry 2 |

And one of

Science Units

300816.1	Cell Biology
300818.1	Introduction to Physiology
300580.2	Programming Fundamentals
300829.1	Physics 2
300809.1	Introductory Geochemistry

Mathematics major choose

| 200263.4 | Biometry |
| 300673.2 | Mathematics 1B |

Year 2

Autumn session

| 200273.4 | Managing Service and Experience |

Non-mathematics Majors: choose at least one Level 1 mathematics unit from the list below in either semester in second year

Mathematics units

300831.1	Quantitative Thinking
300830.1	Analysis of Change
300672.2	Mathematics 1A
200263.4	Biometry
200025.2	Discrete Mathematics

Either choose two more science units if completing a mathematics unit in Autumn, or three science units

Science Units:

| 300936.1 | Functional Proteins and Genes |

| 300845.1 | Genetics |
| 300865.1 | Plant Physiology |

(Parramatta Only)

300833.1	Microbiology 1
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry

Mathematics Major choose

| 200028.3 | Advanced Calculus |
| 200027.2 | Linear Algebra |

And one of

300800.2	Essential Chemistry 1
300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300828.1	Physics 1

Spring session

| 200101.3 | Accounting Information for Managers |

Non-mathematics Majors: choose either one mathematics unit and two science units, or three science units (if mathematics unit completed in Autumn)

Science Units:

300848.1	Metabolism
300847.1	Immunology
300838.1	Comparative Physiology
300896.1	Microbiology 2
300839.1	Ecology
300817.1	Molecular Biology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
300846.1	Geochemical Systems

Mathematics Major

| 200033.5 | Applied Statistics |
| 200030.4 | Differential Equations |

And one of

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300829.1	Physics 2
300809.1	Introductory Geochemistry

Year 3

Autumn session

One level 3 elective

Non-mathematics Majors: choose three of

300850.1	Advanced Cell Biology
300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300866.1	Analytical Microbiology
300857.1	Environmental Geochemistry
300820.1	Genes, Genomics and Human Health

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Mathematics Major

200193.2	Abstract Algebra
200023.3	Analysis
200037.4	Regression Analysis & Experimental Design

Spring session

200742.2	Sport and Hospitality Event Management

Non-mathematics Majors: choose three units from the list below: at least one must be a capstone unit appropriate for your Major

Major capstone units

300927.1	Molecular Medicine
300855.1	Conservation Biology
300924.1	Science Research Project
300883.1	Laboratory Quality Management

Alternate Science units:

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
300826.1	Medical Microbiology
300905.1	Advanced Immunology

Mathematics Major

200193.2	Abstract Algebra
200023.3	Analysis
200022.3	Mathematical Modelling

Year 4

Autumn session

200525.2	Principles of Economics
200665.2	Strategic Communication in Sport
200754.2	Sports Management - Planning and Development
200707.2	Service Industry Studies

Spring session

200184.3	Introduction to Business Law
200664.2	Sport Management Internship
200751.2	Sport Management Applied Project
400335.3	Contemporary Issues in Sport Management

Key Program - International Business

KP3016.1

This unit set is for administrative purposes only to advise course structure information. Students do not enrol in this unit set.

Location

Campus	Mode
Campbelltown Campus	External

Unit Set Structure

Students in the Bachelor of Science /Bachelor of Business and Commerce (International Business) will complete the following course structure.

Year 1

Autumn session

200336.3	Business Academic Skills
200083.2	Marketing Principles

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology major choose

300802.1	Biodiversity
300800.2	Essential Chemistry 1

OR

300808.2	Introductory Chemistry

General Biology major choose

300802.1	Biodiversity

And one science unit from the list below

Chemistry major choose

300800.2	Essential Chemistry 1

And one science unit from the list below

Science Units

300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300828.1	Physics 1

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Mathematics major choose

200025.2	Discrete Mathematics
300672.2	Mathematics 1A

Spring session

200591.2	Introduction to International Business
200571.3	Management Dynamics

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology or General Biology major choose

300816.1	Cell Biology
300803.1	Essential Chemistry 2

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Chemistry major choose

300803.1   Essential Chemistry 2

And one science unit from the list below

Science Units

300816.1   Cell Biology
300818.1   Introduction to Physiology
300580.2   Programming Fundamentals
300829.1   Physics 2
300809.1   Introductory Geochemistry

Mathematics major choose

200263.4   Biometry
300673.2   Mathematics 1B

Year 2

Autumn session

200525.2   Principles of Economics

Non-mathematics Majors: choose at least one Level 1 mathematics unit from the list below in either semester in second year

Mathematics units

300831.1   Quantitative Thinking
300830.1   Analysis of Change
300672.2   Mathematics 1A
200263.4   Biometry
200025.2   Discrete Mathematics

Either choose two more science units if completing a mathematics unit in Autumn, or three science units:

Science Units

300936.1   Functional Proteins and Genes
300845.1   Genetics
300865.1   Plant Physiology

(Parramatta Only)

300833.1   Microbiology 1
300899.1   Inorganic Chemistry
300849.1   Physical Chemistry

Mathematics Major choose

200028.3   Advanced Calculus
200027.2   Linear Algebra

And one more science unit from the list below

300800.2   Essential Chemistry 1
300802.1   Biodiversity
300822.1   Introduction to Earth Science
300580.2   Programming Fundamentals
300828.1   Physics 1

Spring session

200101.3   Accounting Information for Managers

Non-mathematics Majors: choose either one mathematics unit and two science units, or three science units (if mathematics unit completed in Autumn)

Science Units

300848.1   Metabolism
300847.1   Immunology
300838.1   Comparative Physiology
300896.1   Microbiology 2
300839.1   Ecology
300817.1   Molecular Biology
300876.1   Organic Chemistry
300832.1   Analytical Chemistry
300846.1   Geochemical Systems

Mathematics Major

200033.5   Applied Statistics
200030.4   Differential Equations

And one of

300816.1   Cell Biology
300803.1   Essential Chemistry 2
300829.1   Physics 2
300809.1   Introductory Geochemistry

Year 3

Autumn session

One level 3 elective

Non-mathematics Major: choose three of

300907.1   Advanced Inorganic Chemistry
300926.1   Advanced Physical Chemistry
300857.1   Environmental Geochemistry
300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300866.1   Analytical Microbiology

Mathematics Major

200193.2   Abstract Algebra
200023.3   Analysis
200037.4   Regression Analysis & Experimental Design

Spring session

200374.3   International Marketing Research

Non-mathematics Majors: choose three units form the list below: at least one must be a capstone unit appropriate for your Major

Major capstone units

300927.1   Molecular Medicine
300855.1   Conservation Biology
300924.1   Science Research Project
300883.1   Laboratory Quality Management

Alternate Science units

300925.1   Advanced Analytical Chemistry
300906.1   Advanced Organic Chemistry

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300826.1	Medical Microbiology
300905.1	Advanced Immunology

Mathematics Major

200193.2	Abstract Algebra
200023.3	Analysis
200022.3	Mathematical Modelling

Year 4

Autumn session

200541.3	Globalisation and Trade
200626.2	International Business Strategy
200595.3	International Business Finance

Choose one of the following

200094.2	International Marketing
200623.3	International Management

Spring session

200184.3	Introduction to Business Law
200589.2	Export Strategy and Applications
200590.2	International Business Project

Choose one of

200098.2	The Markets of Asia
200099.3	The Markets of Europe

Key Program - Marketing

KP3017.1

This unit set is for administrative purposes only to advise course structure information. Students do not enrol in this unit set.

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Students in the Bachelor of Science /Bachelor of Business and Commerce (Marketing) will complete the following course structure.

Year 1

Autumn session

200336.3	Business Academic Skills
200083.2	Marketing Principles

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology major choose

300802.1	Biodiversity

300800.2	Essential Chemistry 1

OR

300808.2	Introductory Chemistry

General Biology major choose

300802.1	Biodiversity

And one science unit from the list below

Chemistry major choose

300800.2	Essential Chemistry 1

And one science unit from the list below

Science Units

300802.1	Biodiversity
300822.1	Introduction to Earth Science
300580.2	Programming Fundamentals
300828.1	Physics 1

*Students may only choose one unit 300800 - Essential Chemistry 1 or 300808 - Introductory Chemistry

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Mathematics major choose

200025.2	Discrete Mathematics
300672.2	Mathematics 1A

Spring session

200084.2	Consumer Behaviour
200571.3	Management Dynamics

Non-mathematics majors choose two science units as follows

Biochemistry and Molecular Biology or General Biology major choose

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Chemistry major choose

300803.1	Essential Chemistry 2

And one science unit from the list below

Science Units

300816.1	Cell Biology
300818.1	Introduction to Physiology
300580.2	Programming Fundamentals
300829.1	Physics 2
300809.1	Introductory Geochemistry

Mathematics major choose

300673.2	Mathematics 1B
200263.4	Biometry

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Year2

Autumn session

200592.2   Marketing Research

Non-mathematics Majors: choose at least one Level 1 mathematics unit from the list below in either semester in second year

Mathematics units

300831.1   Quantitative Thinking
300830.1   Analysis of Change
300672.2   Mathematics 1A
200263.4   Biometry
200025.2   Discrete Mathematics

Either choose two more science units if completing a mathematics unit in Autumn, or three science units

Science Units

300936.1   Functional Proteins and Genes
300845.1   Genetics
300865.1   Plant Physiology

(Parramatta Only)

300833.1   Microbiology 1
300899.1   Inorganic Chemistry
300849.1   Physical Chemistry

Mathematics Major choose

200028.3   Advanced Calculus
200027.2   Linear Algebra

And one more science unit from the list below

300800.2   Essential Chemistry 1
300802.1   Biodiversity
300822.1   Introduction to Earth Science
300580.2   Programming Fundamentals
300828.1   Physics 1

Spring session

200101.3   Accounting Information for Managers

Non-mathematics Majors: choose either one mathematics unit and two science units, or three science units (if mathematics unit completed in Autumn)

Science units

300848.1   Metabolism
300847.1   Immunology
300838.1   Comparative Physiology
300896.1   Microbiology 2
300839.1   Ecology
300817.1   Molecular Biology
300876.1   Organic Chemistry
300832.1   Analytical Chemistry
300846.1   Geochemical Systems

Mathematics Major

200033.5   Applied Statistics
200030.4   Differential Equations

And one science unit from the following

300816.1   Cell Biology
300803.1   Essential Chemistry 2
300829.1   Physics 2
300809.1   Introductory Geochemistry

Year 3

Autumn session

200088.2   Brand and Product Management

Non-mathematics Majors: choose three of

300907.1   Advanced Inorganic Chemistry
300926.1   Advanced Physical Chemistry
300857.1   Environmental Geochemistry
300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300866.1   Analytical Microbiology

Mathematics Major

200193.2   Abstract Algebra
200023.3   Analysis
200037.4   Regression Analysis & Experimental Design

Spring session

200086.3   Marketing Communications

Non-mathematics Majors: choose three units from the list below: at least one must be a capstone unit appropriate for your Major

Major capstone units

300927.1   Molecular Medicine
300855.1   Conservation Biology
300924.1   Science Research Project
300883.1   Laboratory Quality Management

Alternate science units

300925.1   Advanced Analytical Chemistry
300906.1   Advanced Organic Chemistry
300826.1   Medical Microbiology
300905.1   Advanced Immunology

Mathematics Major

200193.2   Abstract Algebra
200023.3   Analysis
200022.3   Mathematical Modelling

Year 4

Autumn session

200525.2   Principles of Economics
200090.3   Marketing of Services
200087.3   Strategic Marketing Management
200094.2   International Marketing

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Spring session

200184.3	Introduction to Business Law
200096.3	Marketing Planning Project
200091.3	Business to Business Marketing

And one level 3 elective

Key Program - Information Systems

KT3000.1

The Key Program in Information Systems focuses on computing and information technology in the context of business.

Location

Campus	Mode
Parramatta Campus	Internal

Unit Set Structure

Start of Year Intake

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300573.2	Information Systems in Context

Spring session

300565.2	Computer Networking
300104.4	Database Design and Development
300144.4	Object Oriented Analysis

And one elective

Year 2

Autumn session

300582.2	Technologies for Web Applications
300570.3	Human-Computer Interaction
300581.3	Programming Techniques
200032.5	Statistics for Business

Spring session

300583.2	Web Systems Development
300569.2	Computer Security
300572.2	Information Systems Deployment and Management
300089.5	Commercial Applications Development

Year 3

Autumn session

300578.3	Professional Development
300584.3	Emerging Trends in Information Systems

And two electives

Spring session

300579.3	Professional Experience

And three electives

Mid Year Intake

Year 1

Spring session

300565.2	Computer Networking
300104.4	Database Design and Development
300144.4	Object Oriented Analysis

And one elective

Year 2

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300573.2	Information Systems in Context

Spring session

300569.2	Computer Security
300572.2	Information Systems Deployment and Management
300089.5	Commercial Applications Development

And one elective

Year 3

Autumn session

300582.2	Technologies for Web Applications
300570.3	Human-Computer Interaction
300581.3	Programming Techniques
200032.5	Statistics for Business

Spring session

300579.3	Professional Experience
300583.2	Web Systems Development

And two electives

Year 4

Autumn session

300578.3	Professional Development
300584.3	Emerging Trends in Information Systems

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

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Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Construction

KT3026.1

The Construction Key Program consisits of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, project management, quantity surveying and estimation. Career opportunities include those in the private or public sector on projects covering roads, bridges, airports, and residential and commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full time - Autumn intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
200486.2	Quantity Surveying 1
300482.2	Engineering Geology and Concrete Materials

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
200468.2	Estimating 1

Year 3

Autumn session

300732.2	Structural Analysis
300727.2	Project Management
300728.2	Construction Planning

And one elective

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

200471.3	Construction Technology 5 (Envelope)
300488.3	Numerical Methods in Engineering

And one elective

Spring session

300483.4	Engineering Project
300725.2	Construction Technology 6 (Services)
300485.3	Foundation Engineering

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis
300488.3	Numerical Methods in Engineering

And one elective

Spring session

300675.2	Honours Thesis
300485.3	Foundation Engineering

And one elective

Full-time - Spring intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300674.2	Engineering, Design and Construction Practice

Year 2

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations

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| 300738.3 | Surveying for Engineers |
| 200468.2 | Estimating 1 |

Autumn session

300731.2	Soil Engineering
300027.2	Engineering Computing
200486.2	Quantity Surveying 1
300482.2	Engineering Geology and Concrete Materials

Year 3

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Autumn session

300732.2	Structural Analysis
300727.2	Project Management
300728.2	Construction Planning

And one elective

Industrial Experience

| 300741.2 | Industrial Experience (Engineering) |

Year 4 (Non-Honours stream)

Spring session

| 300483.4 | Engineering Project |

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

| 300725.2 | Construction Technology 6 (Services) |
| 300485.3 | Foundation Engineering |

And one elective

Autumn session

300483.4	Engineering Project
200471.3	Construction Technology 5 (Envelope)
300488.3	Numerical Methods in Engineering

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

| 300675.2 | Honours Thesis |
| 300485.3 | Foundation Engineering |

And one elective

Autumn session

| 300675.2 | Honours Thesis |
| 300488.3 | Numerical Methods in Engineering |

And one elective

Although students may choose any unit offered by the University as an elective, it is recommended that electives are chosen from the following list.

300706.2	Building 1
300707.2	Building 2
300748.2	Quality and Value Management
300723.2	Development Control
300722.2	Building Regulations Studies
200482.2	Construction in Practice 1
200484.3	Construction in Practice 3
300762.2	Fluid Mechanics
300486.2	Infrastructure Engineering
200471.3	Construction Technology 5 (Envelope)
300725.2	Construction Technology 6 (Services)

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Construction

KT3037.1

The Construction Key Program consisits of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, project management, quantity surveying and estimation. Career opportunities include those in the private or public sector on projects covering roads, bridges, airports, and residential and commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

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Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
200486.2	Quantity Surveying 1
300482.2	Engineering Geology and Concrete Materials

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
200468.2	Estimating 1

Year 3

Autumn session

300732.2	Structural Analysis
300488.3	Numerical Methods in Engineering
300728.2	Construction Planning
300666.2	Advanced Engineering Topic 1

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)
300485.3	Foundation Engineering

Industrial experience

300741.2	Industrial Experience (Engineering)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3010)

Autumn session

300668.2	Advanced Engineering Thesis
300727.2	Project Management

Spring session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Key Program - Mechanical

KT3042.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Examples include mechanical and machinery design; manufacturing; energy production; and marketing and management activities. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

300282.2	Industrial Graphics 2: Transition
300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Spring session

300044.2	Microcontrollers and PLCs
300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Year 3

Autumn session

300056.3	Robotics
300764.1	Mechanical Design

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Spring session

300043.3	Mobile Robotics
300053.3	Professional Practice

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Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300025.3	Electronics

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Spring session

300483.4	Engineering Project
300304.3	Sustainable Design: Materials Technology
300487.3	Mechatronic Design

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Spring session

300675.2	Honours Thesis
300487.3	Mechatronic Design

And one elective

Full-time - Spring Intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics

300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Year 2

Spring session

300735.2	Automated Manufacturing
300044.2	Microcontrollers and PLCs

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

And one elective

Autumn session

300282.2	Industrial Graphics 2: Transition
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300035.3	Kinematics and Kinetics of Machines

Year 3

Spring session

300053.3	Professional Practice
300480.2	Dynamics of Mechanical Systems
300043.3	Mobile Robotics

Choose one of

300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Autumn session

300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

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Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

300304.3	Sustainable Design: Materials Technology
300487.3	Mechatronic Design

And one elective

Autumn session

300483.4	Engineering Project
300025.3	Electronics

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

300675.2	Honours Thesis
300487.3	Mechatronic Design

And one elective

Autumn session

300675.2	Honours Thesis

Choose one of

300763.1	Advanced Dynamics
300759.1	Thermal and Fluid Engineering

And one elective

Although students may choose any unit offered by the University as an elective, students are recommended to choose their electives from the following list.

300725.2	Construction Technology 6 (Services)
300733.2	Introduction to Structural Engineering
300052.2	Power and Machines
300005.2	Circuit Theory
300071.2	Electrical Machines 1
300075.4	Instrumentation and Measurement
300732.2	Structural Analysis

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Civil

KT3043.1

Civil engineering covers the fields of structural design, construction management and water engineering, together with quality assurance and environmental engineering. Graduates will work in the fields of design, construction and management. Projects may cover roads, airports, water supply and sewerage schemes, and large buildings. You may be an engineer in private industry, government departments, or in city, municipal or shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300482.2	Engineering Geology and Concrete Materials

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
300765.2	Hydraulics

Year 3

Autumn session

300732.2	Structural Analysis
300486.2	Infrastructure Engineering
300766.2	Hydrology

And one elective

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

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Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300739.2	Timber Structures (UG)
300488.3	Numerical Methods in Engineering

And one elective

Spring session

300483.4	Engineering Project
300737.3	Environmental Engineering
300485.3	Foundation Engineering

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis
300488.3	Numerical Methods in Engineering

And one elective

Spring session

300675.2	Honours Thesis
300485.3	Foundation Engineering

And one elective

Full-time - Spring Intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Year 2

Spring session

300733.2	Introduction to Structural Engineering
300765.2	Hydraulics
300738.3	Surveying for Engineers
MG102A.4	Management Foundations

Autumn session

300731.2	Soil Engineering
300027.2	Engineering Computing

300674.2	Engineering, Design and Construction Practice
300482.2	Engineering Geology and Concrete Materials

Year 3

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

Autumn session

300732.2	Structural Analysis
300486.2	Infrastructure Engineering
300766.2	Hydrology

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

300737.3	Environmental Engineering
300485.3	Foundation Engineering

And one elective

Autumn session

300483.4	Engineering Project
300739.2	Timber Structures (UG)
300488.3	Numerical Methods in Engineering

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

300675.2	Honours Thesis
300485.3	Foundation Engineering

And one elective

Autumn session

300675.2	Honours Thesis
300488.3	Numerical Methods in Engineering

And one elective

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Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Robotics and Mechatronics

KT3045.1

This program provides the skills necessary for the design of smart machines of all types: cruise control in automobiles, pilotless spacecraft, automated factories and medical telerobotics. The course, accompanied by an extensive and integrated hands-on laboratory program, is essentially concerned with the design of intelligent mechanical systems and automation, and includes the study of robotics, computer control, automated manufacturing, microprocessor applications and machine design. Graduates in the program acquire the combined skills of mechanical and computer/electrical engineering that are needed in leading-edge industries such as aerospace systems, the car industry, automation and robotic applications, biomedical engineering, laser systems, and building materials manufacture.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn intake

Year 2

Autumn session

300025.3	Electronics
300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300005.2	Circuit Theory

Spring session

300044.2	Microcontrollers and PLCs
300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300052.2	Power and Machines

Year 3

Autumn session

300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Or one elective

Spring session

300043.3	Mobile Robotics
300053.3	Professional Practice
300487.3	Mechatronic Design

And one elective

Industrial Experience:

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300075.4	Instrumentation and Measurement
300071.2	Electrical Machines 1

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Spring session

300483.4	Engineering Project
300304.3	Sustainable Design: Materials Technology

And two electives

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis
300071.2	Electrical Machines 1

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Spring session

300675.2	Honours Thesis

And two electives

Full-time - Spring Intake

Year 1

Spring session

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200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300005.2	Circuit Theory

Year 2

Spring session

300735.2	Automated Manufacturing
300044.2	Microcontrollers and PLCs
300052.2	Power and Machines

And one elective

Autumn session

300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300035.3	Kinematics and Kinetics of Machines

And one elective

Year 3

Spring session

300053.3	Professional Practice
300480.2	Dynamics of Mechanical Systems
300487.3	Mechatronic Design
300043.3	Mobile Robotics

Autumn session

300025.3	Electronics
300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

300304.3	Sustainable Design: Materials Technology

And two electives

Autumn session

300483.4	Engineering Project
300075.4	Instrumentation and Measurement
300071.2	Electrical Machines 1

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

300675.2	Honours Thesis

And two electives

Autumn session

300675.2	Honours Thesis
300071.2	Electrical Machines 1

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Although students may choose any unit offered by the University as an elective, students are recommended to choose their electives from the following:

300761.1	Advanced Mechanics of Materials
300762.2	Fluid Mechanics
300760.1	Thermodynamics and Heat Transfer
300759.1	Thermal and Fluid Engineering

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Computer

KT3046.1

Computer engineering is a specialist area that relates to computers and communication systems that process information and control physical processes and to designing faster computers. Subjects include computer networks, digital systems and communications, microprocessors and embedded micro-controllers. Graduates will work in hardware and software development, in supervisory and data acquisition systems,

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in industrial applications of computer controlled equipment, in networking and data communications and in developing networking technologies. You will primarily be a problem-solver and organiser, with specialist knowledge of computer hardware, software, communications, computer networking, computer control and real-time computer systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn session

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

Year 3

Autumn session

300167.3	Systems Programming 1
300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective

Spring session

300149.3	Operating Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300095.4	Computer Networks and Internets
300010.3	Data Networks

Choose one of

300019.3	Digital Systems 2
300029.3	Engineering Visualization

Please note: Even years students choose 300019 Digital Systems 2. Odd years students choose 300029 Engineering Visualization.

Spring session

300483.4	Engineering Project

Choose one of

300370.1	Digital Control Systems
300044.2	Microcontrollers and PLCs

Please note: Even years students choose 300370 Digital Control Systems. Odd years students choose 300044 - Microcontrollers and PLCs.

And two electives

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3022)

Autumn session

300675.2	Honours Thesis
300095.4	Computer Networks and Internets
300010.3	Data Networks

Spring session

300675.2	Honours Thesis

And two electives

Full-time - Spring intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300027.2	Engineering Computing
300005.2	Circuit Theory

Year 2

Spring session

200242.3	Mathematics for Engineers 3
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

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Autumn session

300167.3	Systems Programming 1
300018.2	Digital Systems 1
300674.2	Engineering, Design and Construction Practice
300025.3	Electronics

Year 3

Spring session

300069.3	Digital Signal Processing
300053.3	Professional Practice
300149.3	Operating Systems
300076.3	Microprocessor Systems

Autumn session

300075.4	Instrumentation and Measurement
300009.3	Control Systems

And two electives

Industrial Experience:

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

And choose one of

300370.1	Digital Control Systems
300044.2	Microcontrollers and PLCs

Please note: Even years students choose 300370 Digital Control Systems. Odd years students choose 300044 Microcontrollers and PLCs.

And two electives

Autumn session

300483.4	Engineering Project
300095.4	Computer Networks and Internets
300010.3	Data Networks

Choose one of

300019.3	Digital Systems 2
300029.3	Engineering Visualization

Please note: Even years students choose 300019 Digital Systems 2. Odd years students choose 300029 Engineering Visualization.

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3022)

Spring session

300675.2	Honours Thesis

And two electives

Autumn session

300675.2	Honours Thesis
300095.4	Computer Networks and Internets
300010.3	Data Networks

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Mechanical

KT3047.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

Campus	**Mode**
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals

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300462.2   Engineering and Design Concepts

Year 2

Autumn session

300040.2   Mechanics of Materials
300035.3   Kinematics and Kinetics of Machines
300282.2   Industrial Graphics 2: Transition
300762.2   Fluid Mechanics

Spring session

300735.2   Automated Manufacturing
300480.2   Dynamics of Mechanical Systems
300044.2   Microcontrollers and PLCs

Choose one of

300760.1   Thermodynamics and Heat Transfer
300761.1   Advanced Mechanics of Materials

Year 3

Autumn session

300056.3   Robotics
300666.2   Advanced Engineering Topic 1
300764.1   Mechanical Design

Choose one of

300763.1   Advanced Dynamics
300759.1   Thermal and Fluid Engineering

Spring session

300053.3   Professional Practice
300043.3   Mobile Robotics
300487.3   Mechatronic Design

Choose one of

300760.1   Thermodynamics and Heat Transfer
300761.1   Advanced Mechanics of Materials

Industrial experience

300741.2   Industrial Experience (Engineering)

Honours Stream

An Honours stream is offered - see the Honours in
Bachelors Awards Policy and associated College
Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3021)

Autumn session

300668.2   Advanced Engineering Thesis

Choose one of

300763.1   Advanced Dynamics
300759.1   Thermal and Fluid Engineering

Spring session

300668.2   Advanced Engineering Thesis
300667.2   Advanced Engineering Topic 2

Key Program - Civil

KT3048.1

Civil engineering covers the fields of structural design,
construction management and water engineering, together
with quality assurance and environmental engineering.
Graduates will work in the fields of design, construction and
management. Projects may cover roads, airports, water
supply and sewerage schemes, and large buildings. You
may be an engineer in private industry, government
departments, or in city, municipal or shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3   Mathematics for Engineers 1
300464.2   Physics and Materials
300027.2   Engineering Computing
300674.2   Engineering, Design and Construction
            Practice

Spring session

200238.2   Mathematics for Engineers 2
300463.2   Fundamentals of Mechanics
300021.2   Electrical Fundamentals
300462.2   Engineering and Design Concepts

Year 2

Autumn session

300731.2   Soil Engineering
300040.2   Mechanics of Materials
300482.2   Engineering Geology and Concrete Materials
300762.2   Fluid Mechanics

Spring session

300733.2   Introduction to Structural Engineering
300738.3   Surveying for Engineers
300737.3   Environmental Engineering
300765.2   Hydraulics

Year 3

Autumn session

300732.2   Structural Analysis
300488.3   Numerical Methods in Engineering
300666.2   Advanced Engineering Topic 1

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Choose one of

| 300486.2 | Infrastructure Engineering |
| 300766.2 | Hydrology |

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)
300485.3	Foundation Engineering

Industrial experience:

| 300741.2 | Industrial Experience (Engineering) |

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3018)

Autumn session

| 300668.2 | Advanced Engineering Thesis |

Choose one of

| 300739.2 | Timber Structures (UG) |
| MG102A.4 | Management Foundations |

Spring session

| 300668.2 | Advanced Engineering Thesis |
| 300667.2 | Advanced Engineering Topic 2 |

Key Program - Robotics and Mechatronics

KT3050.1

An intensive hands-on laboratory program is an essential part of the course. Mechatronics provides skills necessary for the design of smart machines of all types: from cruise control in automobiles to pilotless spacecraft, from automated factories to medical telerobotics. It is especially concerned with design of intelligent mechanical systems. Examples include design and development of automated machinery and their control; design of mechanical equipment and integrated systems; and marketing and management activities. Skills gained are required in all sections of industry, including manufacturing, packaging, materials handling, aerospace and mining.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

300040.2	Mechanics of Materials
300035.3	Kinematics and Kinetics of Machines
300025.3	Electronics
300005.2	Circuit Theory

Spring session

300735.2	Automated Manufacturing
300480.2	Dynamics of Mechanical Systems
300044.2	Microcontrollers and PLCs
300052.2	Power and Machines

Year 3

Autumn session

300071.2	Electrical Machines 1
300056.3	Robotics
300764.1	Mechanical Design

Choose one of

| 300763.1 | Advanced Dynamics |
| 300018.2 | Digital Systems 1 |

Spring session

300053.3	Professional Practice
300666.2	Advanced Engineering Topic 1
300487.3	Mechatronic Design
300043.3	Mobile Robotics

Industrial experience

| 300741.2 | Industrial Experience (Engineering) |

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

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Year 4 (Honours stream) (Honours stream - H3020)

Autumn session

300668.2	Advanced Engineering Thesis

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Spring session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Key Program - Computer

KT3051.1

Computer engineering is a specialist area that relates to computers and communication systems that process information and control physical processes and to designing faster computers. Subjects include computer networks, digital systems and communications, microprocessors and embedded micro-controllers. Graduates will work in hardware and software development, in supervisory and data acquisition systems, in industrial applications of computer controlled equipment, in networking and data communications and in developing networking technologies. You will primarily be a problem-solver and organiser, with specialist knowledge of computer hardware, software, communications, computer networking, computer control and real-time computer systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

Year 3

Autumn session

300167.3	Systems Programming 1
300010.3	Data Networks
300075.4	Instrumentation and Measurement
300009.3	Control Systems

Spring session

300149.3	Operating Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing
300666.2	Advanced Engineering Topic 1

Industrial experience:

300741.2	Industrial Experience (Engineering)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3019)

Autumn session

300668.2	Advanced Engineering Thesis
300095.4	Computer Networks and Internets

Spring session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Key Program - Nanotechnology

KT3065.1

This key program is available to students who commenced prior to 2013

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Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Students completing the Bachelor of Medical Science (Advanced) Nanotechnology will complete the following course structure.

Year 1

Autumn session

300828.1	Physics 1
300811.1	Scientific Literacy
300800.2	Essential Chemistry 1
300672.2	Mathematics 1A

Spring session

300827.1	Nanotechnology
300803.1	Essential Chemistry 2
300829.1	Physics 2
300673.2	Mathematics 1B

Year 2

Autumn session

300930.1	Classical Physics and Advanced Technologies
300849.1	Physical Chemistry
300899.1	Inorganic Chemistry
300937.1	Advanced Science Project A

Spring session

300818.1	Introduction to Physiology
300816.1	Cell Biology
300923.1	Quantum Physics
300938.1	Advanced Science Project B

Year 3

Autumn session

300890.1	Biodevices
300936.1	Functional Proteins and Genes
300819.1	Topics in Physiology
300910.1	Advanced Science Project C

Spring session

300893.1	Topics in Medical Science
300895.1	Nanochemistry
300889.1	Pathological Basis of Disease
300892.1	Medical Science Project

Key Program - Civil

KT3075.1

Civil engineering covers the fields of structural design, construction management and water engineering, together with quality assurance and environmental engineering. Graduates will work in the fields of design, construction and management. Projects may cover roads, airports, water supply and sewerage schemes, and large buildings. You may be an engineering technologist in private industry, government departments, or in city, municipal or shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
200238.2	Mathematics for Engineers 2

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
300765.2	Hydraulics

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300732.2	Structural Analysis
300486.2	Infrastructure Engineering
300766.2	Hydrology
300482.2	Engineering Geology and Concrete Materials

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

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Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Year 2

Spring session

300733.2	Introduction to Structural Engineering
300765.2	Hydraulics
300738.3	Surveying for Engineers
200238.2	Mathematics for Engineers 2

Autumn session

300731.2	Soil Engineering
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300482.2	Engineering Geology and Concrete Materials

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)
MG102A.4	Management Foundations

Autumn session

300732.2	Structural Analysis
300486.2	Infrastructure Engineering
300766.2	Hydrology

And one elective

Key Program - Computer

KT3076.1

Computer engineering is a specialist area that relates to computers and communication systems that process information and control physical processes and to designing faster computers. Subjects include computer networks, digital systems and communications, microprocessors and embedded micro-controllers. Graduates will work in hardware and software development, in supervisory and data acquisition systems, in industrial applications of computer controlled equipment, in networking and data communications and in developing networking technologies. You will primarily be a problem-solver and organiser, with specialist knowledge of computer hardware, software, communications, computer networking, computer control and real-time computer systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full Time Autumn Intake

Year 2

Autumn session

200238.2	Mathematics for Engineers 2
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

200242.3	Mathematics for Engineers 3
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

Year 3

Autumn session

300167.3	Systems Programming 1
300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective

Spring session

300149.3	Operating Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing
300076.3	Microprocessor Systems

Industrial Experience

300741.2	Industrial Experience (Engineering)

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Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300005.2	Circuit Theory

Year 2

Spring session

200238.2	Mathematics for Engineers 2
300057.3	Signals and Systems
300096.5	Computer Organisation
300052.2	Power and Machines

Autumn session

300167.3	Systems Programming 1
300018.2	Digital Systems 1
300674.2	Engineering, Design and Construction Practice
300025.3	Electronics

Year 3

Spring session

300069.3	Digital Signal Processing
300053.3	Professional Practice
300149.3	Operating Systems
300076.3	Microprocessor Systems

Autumn session

200242.3	Mathematics for Engineers 3
300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Key Program - Construction

KT3077.1

The Construction Key Program consists of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, project management, quantity surveying and estimation. Career opportunities include those in the private or public sector on projects covering roads, bridges, airports, and residential and commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
200486.2	Quantity Surveying 1
200238.2	Mathematics for Engineers 2

Spring session

300733.2	Introduction to Structural Engineering
MG102A.4	Management Foundations
300738.3	Surveying for Engineers
200468.2	Estimating 1

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300732.2	Structural Analysis
300727.2	Project Management
300728.2	Construction Planning
300482.2	Engineering Geology and Concrete Materials

Spring session

300053.3	Professional Practice
300730.2	Steel Structures
300736.2	Concrete Structures (UG)

And one elective

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Full-time - Spring Intake

Year 1

Spring session

300743.2   Mathematics for Engineers Preliminary

or Elective*

300463.2   Fundamentals of Mechanics
300021.2   Electrical Fundamentals
300462.2   Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3   Mathematics for Engineers 1
300464.2   Physics and Materials
300040.2   Mechanics of Materials
300674.2   Engineering, Design and Construction Practice

Year 2

Spring session

300733.2   Introduction to Structural Engineering
MG102A.4   Management Foundations
300738.3   Surveying for Engineers
200238.2   Mathematics for Engineers 2

Autumn session

300731.2   Soil Engineering
300027.2   Engineering Computing
200486.2   Quantity Surveying 1
300482.2   Engineering Geology and Concrete Materials

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 3

Spring session

300053.3   Professional Practice
300730.2   Steel Structures
300736.2   Concrete Structures (UG)
200468.2   Estimating 1

Autumn session

300732.2   Structural Analysis
300727.2   Project Management
300728.2   Construction Planning

And one elective

Key Program - Environmental

KT3079.1

This program provides an essential grounding in ecology, civil engineering and environmental management. Environmental engineers are concerned with ensuring a sustainable and better future for the community by developing and managing systems that integrate with and protect our environment. Graduates will work as environmental engineering technologists in private, industrial, and mining companies; government departments; and city, municipal and shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

300731.2   Soil Engineering
300040.2   Mechanics of Materials
300762.2   Fluid Mechanics
300469.2   Introductory Chemistry

Spring session

300733.2   Introduction to Structural Engineering
300738.3   Surveying for Engineers
200238.2   Mathematics for Engineers 2
300765.2   Hydraulics

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 3

Autumn session

300777.2   Air Quality and Climate Change
300482.2   Engineering Geology and Concrete Materials
300486.2   Infrastructure Engineering
300766.2   Hydrology

Spring session

300737.3   Environmental Engineering
300663.2   Resource Sustainability
300053.3   Professional Practice

And one elective (elective must be at least a Level 3 unit)

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Full-time - Spring Intake

Year 1

Spring session

300743.2   Mathematics for Engineers Preliminary

or Elective*

300463.2   Fundamentals of Mechanics
300021.2   Electrical Fundamentals
300462.2   Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3   Mathematics for Engineers 1
300464.2   Physics and Materials
300040.2   Mechanics of Materials
300762.2   Fluid Mechanics

Year 2

Spring session

300733.2   Introduction to Structural Engineering
300738.3   Surveying for Engineers
200238.2   Mathematics for Engineers 2
300765.2   Hydraulics

Autumn session

300731.2   Soil Engineering
300027.2   Engineering Computing
300674.2   Engineering, Design and Construction Practice
300469.2   Introductory Chemistry

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 3

Spring session

300737.3   Environmental Engineering
300663.2   Resource Sustainability
300053.3   Professional Practice

And one elective (elective must be at least a Level 3 unit)

Autumn session

300777.2   Air Quality and Climate Change
300482.2   Engineering Geology and Concrete Materials
300486.2   Infrastructure Engineering
300766.2   Hydrology

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Key Program - Mechanical

KT3080.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Examples include mechanical and machinery design; manufacturing; energy production; and marketing and management activities. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

200238.2   Mathematics for Engineers 2
300035.3   Kinematics and Kinetics of Machines
300040.2   Mechanics of Materials
300762.2   Fluid Mechanics

Spring session

300044.2   Microcontrollers and PLCs
300480.2   Dynamics of Mechanical Systems
300735.2   Automated Manufacturing

Choose one of

300760.1   Thermodynamics and Heat Transfer
300761.1   Advanced Mechanics of Materials

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 3

Autumn session

300282.2   Industrial Graphics 2: Transition
300764.1   Mechanical Design
300056.3   Robotics

Choose one of

300763.1   Advanced Dynamics
300759.1   Thermal and Fluid Engineering

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Spring session

300043.3   Mobile Robotics
300053.3   Professional Practice

Choose one of

300760.1   Thermodynamics and Heat Transfer
300761.1   Advanced Mechanics of Materials

And one elective

Full-time - Spring Intake

Year 1

Spring session

300743.2   Mathematics for Engineers Preliminary

or Elective*

300463.2   Fundamentals of Mechanics
300021.2   Electrical Fundamentals
300462.2   Engineering and Design Concepts

***Elective - Students without a HSC Mathematics band 5
or higher should complete 300743 Mathematics for
Engineers Preliminary as an elective**

Autumn session

200237.3   Mathematics for Engineers 1
300464.2   Physics and Materials
300040.2   Mechanics of Materials
300762.2   Fluid Mechanics

Year 2

Spring session

200238.2   Mathematics for Engineers 2
300735.2   Automated Manufacturing
300044.2   Microcontrollers and PLCs

Choose one of

300760.1   Thermodynamics and Heat Transfer
300761.1   Advanced Mechanics of Materials

Autumn session

300282.2   Industrial Graphics 2: Transition
300027.2   Engineering Computing
300674.2   Engineering, Design and Construction
            Practice
300035.3   Kinematics and Kinetics of Machines

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 3

Spring session

300053.3   Professional Practice
300480.2   Dynamics of Mechanical Systems
300043.3   Mobile Robotics

Choose one of

300760.1   Thermodynamics and Heat Transfer
300761.1   Advanced Mechanics of Materials

Autumn session

300764.1   Mechanical Design
300056.3   Robotics

Choose one of

300763.1   Advanced Dynamics
300759.1   Thermal and Fluid Engineering

And one elective

Key Program - Robotics and Mechatronics

KT3081.1

This program provides the skills necessary for the design of
smart machines of all types: cruise control in automobiles,
pilotless spacecraft, automated factories and medical
telerobotics. The course, accompanied by an extensive and
integrated hands-on laboratory program, is essentially
concerned with the design of intelligent mechanical
systems and automation, and includes the study of
robotics, computer control, automated manufacturing,
microprocessor applications and machine design.
Graduates in the program acquire the combined skills of
mechanical and computer/electrical engineering that are
needed in leading-edge industries such as aerospace
systems, the car industry, automation and robotic
applications, biomedical engineering, laser systems, and
building materials manufacture.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

200238.2   Mathematics for Engineers 2
300035.3   Kinematics and Kinetics of Machines
300040.2   Mechanics of Materials
300005.2   Circuit Theory

Spring session

300044.2   Microcontrollers and PLCs
300480.2   Dynamics of Mechanical Systems
300735.2   Automated Manufacturing
300052.2   Power and Machines

Industrial Experience

300741.2   Industrial Experience (Engineering)

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Year 3

Autumn session

300025.3	Electronics
300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Spring session

300043.3	Mobile Robotics
300053.3	Professional Practice
300487.3	Mechatronic Design

And one elective

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300005.2	Circuit Theory

Year 2

Spring session

200238.2	Mathematics for Engineers 2
300735.2	Automated Manufacturing
300044.2	Microcontrollers and PLCs
300052.2	Power and Machines

Autumn session

300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300035.3	Kinematics and Kinetics of Machines

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300053.3	Professional Practice
300480.2	Dynamics of Mechanical Systems
300487.3	Mechatronic Design
300043.3	Mobile Robotics

Autumn session

300025.3	Electronics
300764.1	Mechanical Design
300056.3	Robotics

Choose one of

300763.1	Advanced Dynamics
300018.2	Digital Systems 1

Key Program - Environmental

KT3087.1

This program provides an essential grounding in ecology, civil engineering and environmental management. Environmental engineers are concerned with ensuring a sustainable and better future for the community by developing and managing systems that integrate with and protect our environment. Graduates will work as environmental engineers in private, industrial, and mining companies; government departments; and city, municipal and shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

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300731.2	Soil Engineering
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300469.2	Introductory Chemistry

Spring session

300733.2	Introduction to Structural Engineering
300738.3	Surveying for Engineers
300663.2	Resource Sustainability
300765.2	Hydraulics

Year 3

Autumn session

300633.1	Management of Aquatic Environments
300482.2	Engineering Geology and Concrete Materials
300766.2	Hydrology
300284.4	Environmental Risk Management

Spring session

300737.3	Environmental Engineering
300666.2	Advanced Engineering Topic 1
300053.3	Professional Practice
MG102A.4	Management Foundations

Industrial experience

300741.2	Industrial Experience (Engineering)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3023)

Autumn session

300668.2	Advanced Engineering Thesis
300777.2	Air Quality and Climate Change

Spring session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Key Program - Environmental

KT3089.1

This program provides an essential grounding in ecology, civil engineering and environmental management. Environmental engineers are concerned with ensuring a sustainable and better future for the community by developing and managing systems that integrate with and protect our environment. Graduates will work as environmental engineers in private, industrial, and mining companies; government departments; and city, municipal and shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn intake

Year 2

Autumn session

300731.2	Soil Engineering
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300469.2	Introductory Chemistry

Spring session

300733.2	Introduction to Structural Engineering
300738.3	Surveying for Engineers
300663.2	Resource Sustainability
300765.2	Hydraulics

Year 3

Autumn session

300777.2	Air Quality and Climate Change
300482.2	Engineering Geology and Concrete Materials
300486.2	Infrastructure Engineering
300766.2	Hydrology

Spring session

300737.3	Environmental Engineering
300053.3	Professional Practice

And two electives

Note: one of the Year 3 Electives must be at least a Level 3 unit.

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300633.1	Management of Aquatic Environments
300284.4	Environmental Risk Management
300488.3	Numerical Methods in Engineering

Spring session

300483.4	Engineering Project
MG102A.4	Management Foundations

And two electives

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Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2	Honours Thesis
300633.1	Management of Aquatic Environments

And one elective

Spring session

300675.2	Honours Thesis
MG102A.4	Management Foundations

And one elective

Full-time - Spring Intake

Year 1

Spring session

200237.3	Mathematics for Engineers 1
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200238.2	Mathematics for Engineers 2
300464.2	Physics and Materials
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics

Year 2

Spring session

300733.2	Introduction to Structural Engineering
300738.3	Surveying for Engineers
300663.2	Resource Sustainability
300765.2	Hydraulics

Autumn session

300731.2	Soil Engineering
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice
300469.2	Introductory Chemistry

Year 3

Spring session

300737.3	Environmental Engineering
300053.3	Professional Practice

And two electives

Note: one of the Year 3 Electives must be at least a Level 3 unit.

Autumn session

300777.2	Air Quality and Climate Change
300482.2	Engineering Geology and Concrete Materials
300486.2	Infrastructure Engineering
300766.2	Hydrology

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

MG102A.4	Management Foundations

And two electives

Autumn session

300483.4	Engineering Project
300633.1	Management of Aquatic Environments
300284.4	Environmental Risk Management
300488.3	Numerical Methods in Engineering

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

300675.2	Honours Thesis
MG102A.4	Management Foundations

And one elective

Autumn session

300675.2	Honours Thesis
300633.1	Management of Aquatic Environments

And one elective

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

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Key Program - Biological Science

KT3090.1

The biological sciences are diverse, fascinating, rapidly changing, and essential to our understanding of living systems at scales ranging from the molecular to the global. They play a vital role in our understanding of the environment, as well as animals, plants and micro-organisms, and are essential to a wide range of contemporary industries. A Bachelor of Science (Biological Science) offers a solid foundation in the basic sciences, including biology, microbiology, biochemistry and environmental science. You will be equipped to enter government, industry or research-based employment in this area (e.g. biotechnology companies, pathology, quality assurance, university and hospital laboratories, scientific sales and government agencies).

Unit Set Structure

Students completing the Bachelor of Science (Advanced Science) (Biological Science) will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300800.2	Essential Chemistry 1

Choose one of

| 300672.2 | Mathematics 1A |
| 200263.4 | Biometry |

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology

And one elective

Year 2

Autumn session

300937.1	Advanced Science Project A
300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics

Spring session

300938.1	Advanced Science Project B
300839.1	Ecology
300817.1	Molecular Biology

Choose one more Level 2 science unit from the list below

| 300848.1 | Metabolism |

300896.1	Microbiology 2
300838.1	Comparative Physiology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
200030.4	Differential Equations
200033.5	Applied Statistics
300847.1	Immunology

Year 3

Choose at least one capstone unit in your final year of study; capstone units are listed below.

Autumn session

| 300910.1 | Advanced Science Project C |

One Level 3 elective unit

Hawkesbury Campus

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300856.1	Ecosystem Carbon Accounting
300921.1	Plant Health and Biosecurity
300919.1	Occupational Health and Safety

Capstone units

300857.1	Environmental Geochemistry
300866.1	Analytical Microbiology
300851.1	Advanced Physiology
300929.1	Aquatic Ecology

Parramatta Campus

Choose at least two of

300820.1	Genes, Genomics and Human Health
300907.1	Advanced Inorganic Chemistry
200193.2	Abstract Algebra
200037.4	Regression Analysis & Experimental Design
200023.3	Analysis

Capstone units

| 300857.1 | Environmental Geochemistry |

Campbelltown Campus

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology
300907.1	Advanced Inorganic Chemistry
200193.2	Abstract Algebra
200037.4	Regression Analysis & Experimental Design
200023.3	Analysis

Spring session

| 300924.1 | Science Research Project |

One Level 3 elective unit

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Hawkesbury Campus

Choose at least two of

300905.1	Advanced Immunology
300826.1	Medical Microbiology
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology

Capstone units

300927.1	Molecular Medicine
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change
300883.1	Laboratory Quality Management

Parramatta Campus

Choose at least two of

300905.1	Advanced Immunology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
200038.3	Time Series and Forecasting
200022.3	Mathematical Modelling
300826.1	Medical Microbiology

Capstone units

300927.1	Molecular Medicine
300855.1	Conservation Biology

Campbelltown Campus

Choose at least two of

300905.1	Advanced Immunology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
200038.3	Time Series and Forecasting
200022.3	Mathematical Modelling
300826.1	Medical Microbiology

Capstone units

300927.1	Molecular Medicine

Key Program - Chemistry

KT3091.1

A Bachelor of Science (Chemistry) will prepare you to take part in a process of inquiry, by both contributing to it and by using scientific knowledge to solve current problems. The Chemistry program provides a strong background in the key topic areas of contemporary chemistry, including aspects of chemical theory in analytical, inorganic, organic and physical chemistry, with a strong emphasis on practical laboratory skills, and applications in contemporary research, industry and the environment. A research project is available to students in the final year of the degree preparing you for a professional career in a wide range of chemistry based industries.

Unit Set Structure

Students completing the Bachelor of Science (Advanced Science) (Chemistry) will complete the following course structure.

Year 1

Autumn session

300800.2	Essential Chemistry 1
300811.1	Scientific Literacy
300828.1	Physics 1

Choose one of

300802.1	Biodiversity
300822.1	Introduction to Earth Science
300931.1	Integrated Science
300831.1	Quantitative Thinking
200263.4	Biometry
200025.2	Discrete Mathematics
300580.2	Programming Fundamentals
300134.2	Introduction to Information Technology

Spring session

300803.1	Essential Chemistry 2
300672.2	Mathematics 1A

And one elective

Choose one of

300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300809.1	Introductory Geochemistry
300672.2	Mathematics 1A
300673.2	Mathematics 1B
200263.4	Biometry
200025.2	Discrete Mathematics
300580.2	Programming Fundamentals

Year 2

Autumn session

300937.1	Advanced Science Project A
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry

Choose at least one of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
200027.2	Linear Algebra
200028.3	Advanced Calculus

Spring session

300938.1	Advanced Science Project B
300876.1	Organic Chemistry
300832.1	Analytical Chemistry

Choose at least one of

300848.1	Metabolism

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300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300839.1	Ecology
200030.4	Differential Equations
200033.5	Applied Statistics
300847.1	Immunology

Year 3

Autumn session

300910.1	Advanced Science Project C
300907.1	Advanced Inorganic Chemistry

Choose one of

300926.1	Advanced Physical Chemistry
300912.1	Molecular Pharmacokinetics

And one level 3 elective

Spring session

300924.1	Science Research Project
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry

And one elective

Key Program - Environmental Science

KT3092.1

Solving the world's environmental problems will require professionals who are trained in the sciences underlying these issues and who understand the wider human and social contexts of the challenges faced. A Bachelor of Science (Environmental Science) will open up a wide range of career opportunities for those with environmental, conservation and ecological interests. A solid grounding in the underlying science is essential for people intending to work in this field, who will need to integrate knowledge across a range of disciplines, to devise solutions spanning the scientific and social issues involved. Some of the key areas in this degree include conservation biology, environmental analysis, regulation and policy, environmental chemistry, climate change science, microbiological and spatial data analysis, environmental geochemistry, biodiversity and adaptation, and ecology including aquatic ecology. There are a range of majors (climate change and environmental management) and sub-majors (sustainability) offered in Science that can add diversity and/or focus to your degree. There are also a range of sub-majors from other disciplines such as the arts, business, humanities and social sciences to choose from, although these may require cross campus study and are subject to availability and timetabling.

Unit Set Structure

Students completing the Bachelor of Science (Advanced Science) (Environmental Science) will complete the following course structure.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300800.2	Essential Chemistry 1
300824.1	Management of Aquatic Environments

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
101646.2	Analysis of Spatial Data
300823.1	Soils

Year 2

Autumn session

300937.1	Advanced Science Project A
300837.1	Climate Change Science
300843.1	Forensic and Environmental Analysis

Choose one of

300672.2	Mathematics 1A
200263.4	Biometry

Spring session

300938.1	Advanced Science Project B
300839.1	Ecology
300841.1	Environmental Regulation and Policy

Choose one of

300836.1	Botany
300838.1	Comparative Physiology

Year 3

Autumn session

300910.1	Advanced Science Project C
300929.1	Aquatic Ecology
300857.1	Environmental Geochemistry
300833.1	Microbiology 1

Spring session

300924.1	Science Research Project
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change

Choose one of

300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology

Key Program - Forensic Science

KT3093.1

This is a three year program that produces scientists who have a good background in the biological and chemical

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sciences, coupled with specialised expertise in forensic science, including methods of forensic analysis, crime scene investigation, forensic photography, forensic investigation, crime and criminal justice and complex case. Students may opt to further specialise in forensic biology, chemistry or microbiology by selecting additional electives or studies in a related or unrelated discipline. Career opportunities include forensic scientists, crime scene investigators, private investigators and consultants, police officers, drug analysts, researchers and academics, and specialised forensic science practitioners. The main employers of forensic scientists are State and Federal police services, State and Commonwealth Government Health Departments and analytical chemical laboratories. Graduates will be versatile with a wide skills base with (depending on their choice of electives) potential for employment in analytical chemistry and microbiology, quality control and assurance, biochemistry and molecular biology, scientific research, education and the chemical industry.

Unit Set Structure

Students completing the Bachelor of Science (Advanced Science) (Forensic Science) will complete the following course structure.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300800.2	Essential Chemistry 1
300806.1	Forensic Science

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Choose one of

200263.4	Biometry
300672.2	Mathematics 1A

Choose one of

101567.3	Evidence, Investigations and Police Intelligence
101568.3	Legislation, Courts and Policing

Year 2

Autumn session

300937.1	Advanced Science Project A
300843.1	Forensic and Environmental Analysis
300845.1	Genetics
300874.1	Digital Forensic Photography

Spring session

300938.1	Advanced Science Project B
300873.1	Crime Scene Investigation
300817.1	Molecular Biology

Choose one of

300864.1	Imaging Science & Photographic Evidence
300823.1	Soils

Year 3

Autumn session

300910.1	Advanced Science Project C
300881.1	Forensic Biology
300868.1	Forensic Chemistry
300882.1	Forensic Archaeology

Spring session

300924.1	Science Research Project
300911.1	Complex Forensic Studies
300877.1	Toxicology
300918.1	Invertebrate Biology

Key Program - Nutrition and Food Science

KT3094.1

Healthy eating is a vital part of good health. There is more to healthy eating than you realise. A Bachelor of Science (Nutrition and Food Science) will prepare you for the future by developing the skills and knowledge to solve future challenges in nutrition and health, food quality and security. The majors will allow further specialisation in your studies in Nutrition and Food Science and allow a wide range of careers in community nutrition and health promotion ensuring healthy diets and lifestyles for good health. The program has strong industry and community links, well-equipped facilities including food processing pilot plant and modern kitchen facilities. A major in Human Nutrition investigates healthy eating as a vital part of maintaining good health and health promotion. The major covers specialised studies in applied and community nutrition, metabolism and human physiology, preparing students for careers in community nutrition, health promotion and education, or work in a range of food and nutrition related businesses, including new product development of healthy foods A major in Food Science explores the science behind food, its preparation, manufacture, storage and preservation. The major covers specialised topics in food processing, quality assurance, product development, postharvest, packaging, microbiological and chemical analysis of foods preparing you for a wide range of careers in the food and beverage related industries, including food product development, quality assurance, food regulations, research and development, plus management of fresh food supply. A major in Food Technology Secondary Teaching brings together food science and nutrition with education studies to meet the graduate requirements for teaching food technology. The major includes specialised studies in food processing, food product development, nutrition, contemporary food issues, and growing crops for school garden projects. It will also address issues in the food marketplace relevant to the Australian food industry and prepare you to teach biology, chemistry or design and technology as additional first or second teaching areas, or design and technology depending on electives selected.

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Unit Set Structure

Students completing the Bachelor of Science (Advanced Science) (Nutrition and Food Science) will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above. (Some students may need to take an elective as a Level 3 unit)

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300800.2	Essential Chemistry 1

Choose one of

300672.2	Mathematics 1A
200263.4	Biometry

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300805.1	Food Science 1
300937.1	Advanced Science Project A

Note: 300937 Advanced Science Project A is situated in Semester 2 for administrative purposes only. This unit will be completed at an appropriate time in Semester 3 or 5 after consultation with the Director of Academic Programs.

Year 2

Autumn session

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300842.2	Food Science 2
300933.1	Nutrition and Health 1

Spring session

300938.1	Advanced Science Project B
300879.1	Experimental Foods

Human Nutrition Major

300934.1	Nutrition and Health 2
300818.1	Introduction to Physiology

Food Science Major

300859.1	Food Safety
300815.1	Crop Production

Food Technology Major

Choose one of

300859.1	Food Safety
300815.1	Crop Production

And one elective

Year 3

Autumn session

300910.1	Advanced Science Project C
300922.1	Quality Assurance and Food Analysis

Human Nutrition Major

300928.1	Consumer Issues in Nutrition

Choose one of

300851.1	Advanced Physiology
300871.1	Culinary Science

Food Science Major

300869.1	Postharvest

Choose one of

300866.1	Analytical Microbiology
300843.1	Forensic and Environmental Analysis

Food Technology Major

300871.1	Culinary Science

And one elective

Spring session

300924.1	Science Research Project
300915.1	Food Product Development

Human Nutrition Major

300908.1	Applied Nutrition

Choose one of

300848.1	Metabolism
300917.1	Global Nutrition, Food and Community

Food Science Major

300904.1	Advanced Food Science and Technology
300883.1	Laboratory Quality Management

Food Technology Major

300904.1	Advanced Food Science and Technology

And one elective

All students must satisfactorily complete the unit 300655 - Approved Industrial Experience (10 weeks), comprising a minimum of ten weeks Approved Industrial Experience.

300655.1	Approved Industrial Experience

Key Program - Mathematical Sciences

KT3095.1

A Bachelor of Science (Mathematical Science) provides you with a strong background in key analytical techniques

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that have contemporary applications such as the treatment and interpretation of data and the modelling of real-world problems such as global warming. You will develop skills that allow you to model and solve real world problems using mathematical techniques and have the opportunity to specialise in mathematics, statistics or a combination of both. This will provide you with a wide range of career options in commercial and government institutions, which require highly-skilled problem-solvers. There are also a range of majors (e.g. biology, chemistry) and sub-majors offered in Science that can add diversity and/or focus to your degree. There are also a range of sub-majors from other disciplines such as the arts, business, humanities and social sciences to choose from, although these may require cross campus study and are subject to availability and timetabling.

Unit Set Structure

Students completing the Bachelor of Science (Advanced Science) (Mathematical Sciences) will complete the following course structure.

Year 1

Autumn session

300672.2	Mathematics 1A
300811.1	Scientific Literacy
200025.2	Discrete Mathematics

Choose one of

300802.1	Biodiversity
300800.2	Essential Chemistry 1
300828.1	Physics 1
300822.1	Introduction to Earth Science

Spring session

Choose one Information Technology unit, except 300134 Introduction to Information Technology

300673.2	Mathematics 1B
200263.4	Biometry

And one elective

Year 2

Autumn session

300937.1	Advanced Science Project A
200027.2	Linear Algebra
200028.3	Advanced Calculus
300580.2	Programming Fundamentals

Spring session

300938.1	Advanced Science Project B
200030.4	Differential Equations
200033.5	Applied Statistics

Choose one of

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300829.1	Physics 2
300809.1	Introductory Geochemistry

Year 3

Autumn session

300910.1	Advanced Science Project C
200193.2	Abstract Algebra
200037.4	Regression Analysis & Experimental Design
200023.3	Analysis

Spring session

300924.1	Science Research Project
200038.3	Time Series and Forecasting
200022.3	Mathematical Modelling

And one elective

Key Program - Zoology

KT3096.1

A Bachelor of Science (Zoology) recognises the increased demand for scientific knowledge of how to conserve, protect and care for animals, including native wildlife, and companion and production animals. It will enable you to develop an in-depth scientific understanding of how animals function and interact with their environment; from their ecology and evolution; to physiology and biochemistry of tissues and major organs systems, as well as the structure and function of biomolecules and cells. The key learning and research areas embodied in this degree are ecology, evolution, physiology, growth, reproduction, genetics, and conservation biology. On-campus animal facilities include those for reptiles, small marsupials, small rodents, horses, sheep and cattle, as well as over 1,000ha of native, rural and aquatic habitats.

Unit Set Structure

Students completing the Bachelor of Science (Advanced Science) (Zoology) will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300800.2	Essential Chemistry 1
300813.1	Wildlife Studies

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300801.1	Animal Science
300672.2	Mathematics 1A

Year 2

Autumn session

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300834.1	Animal Health and Welfare
300936.1	Functional Proteins and Genes
200263.4	Biometry
300937.1	Advanced Science Project A

Spring session

300861.1	Vertebrate Biodiversity
300838.1	Comparative Physiology
300839.1	Ecology
300938.1	Advanced Science Project B

Year 3

Autumn session

300910.1	Advanced Science Project C
300878.1	Animal Behaviour
300851.1	Advanced Physiology

And one elective

Spring session

300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change
300918.1	Invertebrate Biology
300924.1	Science Research Project

Key Program - Animal Science

KT3097.1

Unit Set Structure

Students completing the Bachelor of Natural Science (Advanced) (Animal Science) will complete the following course structure.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300807.1	Human Animal Interactions
300813.1	Wildlife Studies

Spring session

300810.1	Resource Sustainability
300801.1	Animal Science

Choose one of

300672.2	Mathematics 1A
200263.4	Biometry

And one elective

Year 2

Autumn session

300931.1	Integrated Science
300834.1	Animal Health and Welfare
300853.1	Animal Nutrition and Feeding
300937.1	Advanced Science Project A

Spring session

300932.1	Natural Science Research Methods
300835.1	Animal Reproduction
300938.1	Advanced Science Project B

Choose one of

300836.1	Botany
300838.1	Comparative Physiology

Year 3

Autumn session

300913.1	Field Project 1
300878.1	Animal Behaviour
300854.1	Animal Production
300910.1	Advanced Science Project C

Spring session

300914.1	Field Project 2
300861.1	Vertebrate Biodiversity

And two electives

Key Program - Environmental Management

KT3098.1

Unit Set Structure

Students completing the Bachelor of Natural Science (Advanced) (Environmental Management) will complete the following course structure.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300813.1	Wildlife Studies
300824.1	Management of Aquatic Environments

Spring session

300810.1	Resource Sustainability
300814.1	Water Quality Assessment and Management
300812.1	Understanding Landscape

Choose one of

300672.2	Mathematics 1A
200263.4	Biometry

Year 2

Autumn session

300931.1	Integrated Science
101878.1	Indigenous Landscapes
300840.1	Environmental Planning and Climate Change
300937.1	Advanced Science Project A

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Spring session

300932.1	Natural Science Research Methods
300875.1	Landuse and the Environment
300841.1	Environmental Regulation and Policy
300938.1	Advanced Science Project B

Year 3

Autumn session

300913.1	Field Project 1
300858.1	Environmental Risk Management
300910.1	Advanced Science Project C

And one elective

Spring session

300914.1	Field Project 2
300860.1	Urban Environment
300870.1	Water in the Landscape

And one elective

Key Program - Sustainable Agriculture and Food Security

KT3099.1

Unit Set Structure

Students completing the Bachelor of Natural Science (Advanced) (Sustainable Agriculture and Food Security) will complete the following course structure.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300804.1	Feeding the Planet
300808.2	Introductory Chemistry

Spring session

300810.1	Resource Sustainability
300815.1	Crop Production
300805.1	Food Science 1

Choose one of

300672.2	Mathematics 1A
200263.4	Biometry

Year 2

Autumn session

300931.1	Integrated Science
300863.1	Agronomy
300937.1	Advanced Science Project A

Choose one of

300853.1	Animal Nutrition and Feeding
300865.1	Plant Physiology

Spring session

300932.1	Natural Science Research Methods
300823.1	Soils
300875.1	Landuse and the Environment
300938.1	Advanced Science Project B

Year 3

Autumn session

300913.1	Field Project 1
300869.1	Postharvest
300921.1	Plant Health and Biosecurity
300910.1	Advanced Science Project C

Spring session

300914.1	Field Project 2
300870.1	Water in the Landscape
300917.1	Global Nutrition, Food and Community

And one elective

Key Program - Electrical

KT3100.1

This program includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control in public utilities, telecommunications, manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

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Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Year 3

Autumn session

300007.2	Communication Systems
300666.2	Advanced Engineering Topic 1
300071.2	Electrical Machines 1
300009.3	Control Systems

Spring session

300053.3	Professional Practice
300771.1	Power Systems
300070.4	Electrical Drives
300069.3	Digital Signal Processing

Industrial experience

300741.2	Industrial Experience (Engineering)

Honours Stream

Refer to the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3024)

Autumn session

300668.2	Advanced Engineering Thesis
300772.1	Power Electronics

Spring session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Key Program - Telecommunications

KT3101.1

This program emphasises the hardware issues related to telecommunications, including digital systems, antenna design, communication hardware, data transfer and management and signal processing. Graduates will work in a variety of situations, such as communications in offices, communications between machines, and intercontinental communication issues. There is a high demand for telecommunications engineers as providers struggle to

meet the rapid increase demand for both personal and business use of different modes of communications, including the mobile telephone and Internet.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time

Year 1

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300674.2	Engineering, Design and Construction Practice

Spring session

200238.2	Mathematics for Engineers 2
300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Year 3

Autumn session

300007.2	Communication Systems
300010.3	Data Networks
300029.3	Engineering Visualization
300666.2	Advanced Engineering Topic 1

Spring session

300053.3	Professional Practice
300069.3	Digital Signal Processing

Choose one of

300065.4	Wireless Communications
300887.1	Digital Communication and Coding

Choose one of

300068.3	Communication Electronics

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300489.2	Radio and Satellite Communication

Industrial experience

300741.2	Industrial Experience (Engineering)

Honours Stream

Refer to the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream) (Honours stream - H3015)

Autumn session

300668.2	Advanced Engineering Thesis
300667.2	Advanced Engineering Topic 2

Spring session

300668.2	Advanced Engineering Thesis

Choose one of

300887.1	Digital Communication and Coding
300065.4	Wireless Communications

Key Program - Electrical

KT3102.1

This program includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control in public utilities, telecommunications, manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn intake

Year 2

Autumn session

200242.3	Mathematics for Engineers 3
300018.2	Digital Systems 1
300005.2	Circuit Theory
300025.3	Electronics

Spring session

300076.3	Microprocessor Systems
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Year 3

Autumn session

300007.2	Communication Systems
300071.2	Electrical Machines 1
300009.3	Control Systems

And one elective

Spring session

300771.1	Power Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing

And one elective

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4 (Non-honours stream)

Autumn session

300483.4	Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300075.4	Instrumentation and Measurement
300010.3	Data Networks
300772.1	Power Electronics

Spring session

300483.4	Engineering Project
300070.4	Electrical Drives

And two electives

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3006)

Autumn session

300675.2	Honours Thesis
300772.1	Power Electronics

And one elective

Spring session

300675.2	Honours Thesis
300070.4	Electrical Drives

And one elective

Full-time - Spring intake

Year 1

Spring intake

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200237.3   Mathematics for Engineers 1
300463.2   Fundamentals of Mechanics
300021.2   Electrical Fundamentals
300462.2   Engineering and Design Concepts

Autumn session

200238.2   Mathematics for Engineers 2
300464.2   Physics and Materials
300027.2   Engineering Computing
300005.2   Circuit Theory

Year 2

Spring session

200242.3   Mathematics for Engineers 3
300057.3   Signals and Systems
300481.2   Engineering Electromagnetics
300052.2   Power and Machines

Autumn session

300071.2   Electrical Machines 1
300018.2   Digital Systems 1
300674.2   Engineering, Design and Construction Practice
300025.3   Electronics

Year 3

Spring session

300053.3   Professional Practice
300771.1   Power Systems
300069.3   Digital Signal Processing
300076.3   Microprocessor Systems

Autumn session

300007.2   Communication Systems
300009.3   Control Systems

And two electives

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4   Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.

300070.4   Electrical Drives

And two electives

Autumn session

300483.4   Engineering Project
300010.3   Data Networks
300772.1   Power Electronics
300075.3   Instrumentation and Measurement

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3006)

Spring session

300675.2   Honours Thesis
300070.4   Electrical Drives

And one elective

Autumn session

300675.2   Honours Thesis
300772.1   Power Electronics

And one elective

Key Program - Telecommunications

KT3103.1

This program emphasises the hardware issues related to telecommunications, including digital systems, antenna design, communication hardware, data transfer and management and signal processing. Graduates will work in a variety of situations, such as communications in offices, communications between machines, and intercontinental communication issues. There is a high demand for telecommunications engineers as providers struggle to meet the rapid increase demand for both personal and business use of different modes of communications, including the mobile telephone and Internet.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn intake

Year 2

Autumn session

200242.3   Mathematics for Engineers 3
300018.2   Digital Systems 1
300005.2   Circuit Theory
300025.3   Electronics

Spring session

300076.3   Microprocessor Systems
300057.3   Signals and Systems
300481.2   Engineering Electromagnetics
300052.2   Power and Machines

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Year 3

Autumn session

300007.2   Communication Systems
300029.3   Engineering Visualization

Choose one of

300075.4   Instrumentation and Measurement
300009.3   Control Systems

And one elective

Spring session

300053.3   Professional Practice
300069.3   Digital Signal Processing

Choose one of

300065.4   Wireless Communications
300887.1   Digital Communication and Coding

And one elective (unit must be a Level 3 unit)

Industrial Experience:

300741.2   Industrial Experience (Engineering)

Year 4 (Non-honours stream)

Autumn session

300483.4   Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Autumn and Spring sessions.

300010.3   Data Networks

Choose one of

300019.3   Digital Systems 2
300046.2   Multimedia Signal Processing

And one elective

Spring session

300483.4   Engineering Project

Choose one of

300068.3   Communication Electronics
300489.2   Radio and Satellite Communication

Choose one of

300887.1   Digital Communication and Coding
300065.4   Wireless Communications

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Autumn session

300675.2   Honours Thesis
300010.3   Data Networks

And one elective

Spring session

300675.2   Honours Thesis

Choose one of

300887.1   Digital Communication and Coding
300065.4   Wireless Communications

And one elective

Full-time - Spring intake

Year 1

Spring intake

200237.3   Mathematics for Engineers 1
300463.2   Fundamentals of Mechanics
300021.2   Electrical Fundamentals
300462.2   Engineering and Design Concepts

Autumn session

200238.2   Mathematics for Engineers 2
300464.2   Physics and Materials
300027.2   Engineering Computing
300005.2   Circuit Theory

Year 2

Spring session

200242.3   Mathematics for Engineers 3
300057.3   Signals and Systems
300481.2   Engineering Electromagnetics
300052.2   Power and Machines

Autumn session

300007.2   Communication Systems
300018.2   Digital Systems 1
300674.2   Engineering, Design and Construction Practice
300025.3   Electronics

Year 3

Spring session

300076.3   Microprocessor Systems
300053.3   Professional Practice
300069.3   Digital Signal Processing

Choose one of

300065.4   Wireless Communications
300887.1   Digital Communication and Coding

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Autumn session

300029.3   Engineering Visualization

Choose one of

300009.3   Control Systems
300075.4   Instrumentation and Measurement

And two electives
One elective in Year 3 must be at least a Level 3 unit

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 4 (Non-Honours stream)

Spring session

300483.4   Engineering Project

Please note: Students must enrol in 300483 Engineering Project in both Spring and Autumn sessions.
And choose one of

300068.3   Communication Electronics
300489.2   Radio and Satellite Communication

Choose one of

300887.1   Digital Communication and Coding
300065.4   Wireless Communications

And one elective

Autumn session

300483.4   Engineering Project
300010.3   Data Networks

Choose one of

300019.3   Digital Systems 2
300046.2   Multimedia Signal Processing

And one elective

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3003)

Spring session

300675.2   Honours Thesis

And choose one of

300887.1   Digital Communication and Coding
300065.4   Wireless Communications

And one elective

Autumn session

300675.2   Honours Thesis
300010.3   Data Networks

And one elective

Key Program - Electrical

KT3104.1

This program includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control in public utilities, telecommunications, manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

200238.2   Mathematics for Engineers 2
300018.2   Digital Systems 1
300005.2   Circuit Theory
300025.3   Electronics

Spring session

200242.3   Mathematics for Engineers 3
300057.3   Signals and Systems
300481.2   Engineering Electromagnetics
300052.2   Power and Machines

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 3

Autumn session

300007.2   Communication Systems
300071.2   Electrical Machines 1
300009.3   Control Systems

And one elective

Spring session

300771.1   Power Systems
300053.3   Professional Practice
300069.3   Digital Signal Processing
300076.3   Microprocessor Systems

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Full-time - Spring Intake

Year 1

Spring session

300743.2   Mathematics for Engineers Preliminary

or Elective*

300463.2   Fundamentals of Mechanics
300021.2   Electrical Fundamentals
300462.2   Engineering and Design Concepts

Autumn session

200237.3   Mathematics for Engineers 1
300464.2   Physics and Materials
300027.2   Engineering Computing
300005.2   Circuit Theory

Year 2

Spring session

200238.2   Mathematics for Engineers 2
300057.3   Signals and Systems
300481.2   Engineering Electromagnetics
300052.2   Power and Machines

Autumn session

200242.3   Mathematics for Engineers 3
300018.2   Digital Systems 1
300674.2   Engineering, Design and Construction Practice
300025.3   Electronics

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 3

Spring session

300771.1   Power Systems
300053.3   Professional Practice
300069.3   Digital Signal Processing
300076.3   Microprocessor Systems

Autumn session

300007.2   Communication Systems
300071.2   Electrical Machines 1
300009.3   Control Systems

And one elective

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Key Program - Telecommunications

KT3105.1

This program emphasises the hardware issues related to telecommunications, including digital systems, antenna design, communication hardware, data transfer and management and signal processing. Graduates will work in a variety of situations, such as communications in offices, communications between machines, and intercontinental communication issues. There is a high demand for telecommunications engineering technologists as providers struggle to meet the rapid increase demand for both personal and business use of different modes of communications, including the mobile telephone and Internet.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Full-time - Autumn Intake

Year 2

Autumn session

200238.2   Mathematics for Engineers 2
300018.2   Digital Systems 1
300005.2   Circuit Theory
300025.3   Electronics

Spring session

200242.3   Mathematics for Engineers 3
300057.3   Signals and Systems
300481.2   Engineering Electromagnetics
300052.2   Power and Machines

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 3

Autumn session

300007.2   Communication Systems
300029.3   Engineering Visualization

Choose one of

300075.4   Instrumentation and Measurement
300009.3   Control Systems

And one elective (elective must be at least a Level 3 unit)

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Spring session

300053.3	Professional Practice
300069.3	Digital Signal Processing
300076.3	Microprocessor Systems

Choose one of

300065.4	Wireless Communications
300887.1	Digital Communication and Coding

Full-time - Spring Intake

Year 1

Spring session

300743.2	Mathematics for Engineers Preliminary

or Elective*

300463.2	Fundamentals of Mechanics
300021.2	Electrical Fundamentals
300462.2	Engineering and Design Concepts

Autumn session

200237.3	Mathematics for Engineers 1
300464.2	Physics and Materials
300027.2	Engineering Computing
300005.2	Circuit Theory

Year 2

Spring session

200238.2	Mathematics for Engineers 2
300057.3	Signals and Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines

Autumn session

300007.2	Communication Systems
300018.2	Digital Systems 1
300674.2	Engineering, Design and Construction Practice
300025.3	Electronics

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Spring session

300076.3	Microprocessor Systems
300053.3	Professional Practice
300069.3	Digital Signal Processing

Choose one of

300065.4	Wireless Communications
300887.1	Digital Communication and Coding

Autumn session

200242.3	Mathematics for Engineers 3
300029.3	Engineering Visualization

Choose one of

300075.4	Instrumentation and Measurement
300009.3	Control Systems

And one elective (elective must be at least a Level 3 unit)

*Elective - Students without a HSC Mathematics band 5 or higher should complete 300743 Mathematics for Engineers Preliminary as an elective

Key Program - Health Promotion

KT4000.1

Health Promotion extends beyond raising awareness of healthcare issues to developing and implementing strategies for communities, individuals and policy-makers to improve their health and wellbeing. Health Promotion graduates help communities and individuals to change their behaviour, working with employers, not-for-profit foundations, disability councils, the public health sector, community health centres, youth centres, schools and local government. Health promotion projects are as diverse as injury prevention, skin cancer prevention, HIV/AIDS awareness and community development. The program combines studies of health politics and planning, health promotion practice, injury prevention, public health with a comprehensive foundation of the health sciences to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program. There is room for electives in particular areas of interest opening up a richer experience of university life or a double major in two of the areas of Health Promotion, Health Services Management or Therapeutic Recreation.

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Qualification for this Key Program requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time - Start Year Intake

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

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101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

And one elective

Recommended elective

400277.3	Health Services Management

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

And one elective

Recommended elective

400244.2	Introduction to Leisure and Recreation Theory

Spring session

400966.2	Health Politics, Policy and Planning
400286.3	Injury Prevention
400285.2	Public Health

And one elective

Year 3

Autumn session

400275.2	Health Planning Project
400784.2	Health Promotion Practice 1

And two electives

Spring session

400785.2	Health Promotion Practice 2
400249.2	Ethical and Legal Issues in Health Care
400786.2	Professional Transition Project

And one elective

Full-time - Mid Year Intake

Year 1

Spring session

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

And one elective

Recommended elective

400277.3	Health Services Management

Year 2

Autumn session

300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

And one elective

Spring session

400966.2	Health Politics, Policy and Planning
400286.3	Injury Prevention
400285.2	Public Health

And one elective

Year 3

Autumn session

400867.2	Approaches to Health Promotion
400870.2	Population Health and Society
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

400785.2	Health Promotion Practice 2
400249.2	Ethical and Legal Issues in Health Care
400786.2	Professional Transition Project

And one elective

Year 4

Autumn session

400275.2	Health Planning Project
400784.2	Health Promotion Practice 1

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Health Services Management

KT4001.1

Health Services Management plays a vital role in society, in ensuring that public investment in health is well spent, and that private healthcare businesses deliver effective, efficient services. It puts management studies in the distinctive context of the health sector to integrate clinical understanding, management skills and knowledge of the health care system and policy development. Health Services Management graduates are in demand to work in quality improvement, financial management and occupational health and safety. Two areas of growth are in mental health services and the aged care sector. Graduates will be skilled in managing and responding to

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rapid changes within the health care system and in areas that deal with policy initiative, development and evaluation. The program combines studies of managing people, resources and finances with a comprehensive foundation of the health sciences to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program. There is room for electives in particular areas of interest opening up a richer experience of university life or a double major in two of the areas of Health Promotion, Health Services Management or Therapeutic Recreation.

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Professional Accreditation

The Bachelor of Health Science (Health Service Management) has Professional Accreditation with the Australasian College of Health Service Management.

Qualification for this Key Program requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time - Start Year Intake

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

101614.2	Psychology and Health
400277.3	Health Services Management
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

And one elective

Recommended elective

400244.2	Introduction to Leisure and Recreation Theory

Spring session

400966.2	Health Politics, Policy and Planning

400788.2	Health Services Workforce Management

And two electives

Year 3

Autumn session

400275.2	Health Planning Project
400787.2	Health Services Management Practice

And two electives

Spring session

400279.3	Health Services Financial Management
400249.2	Ethical and Legal Issues in Health Care
400786.2	Professional Transition Project

And one elective

Full-time - Mid Year Intake

Year 1

Spring session

101614.2	Psychology and Health
400277.3	Health Services Management
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

400966.2	Health Politics, Policy and Planning
400788.2	Health Services Workforce Management

And two electives

Year 3

Autumn session

400867.2	Approaches to Health Promotion
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

And one elective

Recommended elective

400244.2	Introduction to Leisure and Recreation Theory

Spring session

400279.3	Health Services Financial Management
400249.2	Ethical and Legal Issues in Health Care
400786.2	Professional Transition Project

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And one elective

Year 4

Autumn session

400275.2	Health Planning Project
400787.2	Health Services Management Practice

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Key Program - Therapeutic Recreation

KT4002.1

Therapeutic Recreation is the link between leisure and health improvement, using recreation as a way to improve quality of life. Therapeutic Recreation graduates work with patients to use leisure activities to improve health and life quality, for example in rehabilitation centres and psychiatric units, special schools, day care centres. aged care facilities, or in local government or community settings. The program combines theory and practice in learning, education programming, aged care, disability and mental health with a comprehensive foundation of the health sciences to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program. There is room for electives in particular areas of interest opening up a richer experience of university life or a double major in two of the areas of Health Promotion, Health Services Management or Therapeutic Recreation.

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Professional Accreditation

Accreditation from the Diversional Therapy Association of Australia (for Therapeutic Recreation Key Program) has been granted.

Qualification for this Key Program requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Recommended Sequence

Full-time - Start Year Intake

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

And one elective

Recommended elective

400277.3	Health Services Management

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400244.2	Introduction to Leisure and Recreation Theory
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

400968.2	Professional Practice in Aged Care and Disability
400246.3	Workplace Learning 1 (Therapeutic Recreation)

And two electives

Year 3

Autumn session

400789.3	Leisure Education Programming and Mental Health
400252.2	Workplace Learning 2 (Community Placement)

And two electives

Spring session

400786.2	Professional Transition Project
400249.2	Ethical and Legal Issues in Health Care
400254.2	Therapeutic Recreation Professional Project

And one elective

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Full-time - Mid Year Intake

Year 1

Spring session

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

And one elective

Recommended elective

400277.3	Health Services Management

Year 2

Autumn session

300361.3	Introduction to Human Biology
400244.2	Introduction to Leisure and Recreation Theory
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

400968.2	Professional Practice in Aged Care and Disability
400246.3	Workplace Learning 1 (Therapeutic Recreation)

And two electives

Year 3

Autumn session

400867.2	Approaches to Health Promotion
400870.2	Population Health and Society
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

400786.2	Professional Transition Project
400249.2	Ethical and Legal Issues in Health Care
400254.2	Therapeutic Recreation Professional Project

And one elective

Year 4

Autumn session

400789.3	Leisure Education Programming and Mental Health
400252.2	Workplace Learning 2 (Community Placement)

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Major - Religion, Anthropology and Philosophy

M1024.1

This multidisciplinary major pursues critical and rational analysis of questions about individuals and societies; about human knowledge, culture and existence. It inquires into issues about human nature; the scope and limits of knowledge and belief; God and ethics; conflict and violence; ritual and myth; and religion, politics and culture. The major provides students with rigorous training in analytic and creative thinking, intellectual independence and cultural and ethical awareness.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

101686.2	Anthropology and Philosophy Look at Religion

and seven units from the following pools with no less than three units at Level 3

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

101462.2	Understanding Islam and Muslim Societies

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100850.2	Buddhism in the Contemporary World
100852.2	Classics of Modern Philosophy
101856.1	Film and Philosophy
101464.3	Great Texts of Islam: Qur'an and Hadith
101843.2	Philosophy and Environment
101881.1	Philosophy and the Good Life
101867.1	The Ethical Life
101294.3	The Western Philosophical Tradition

Level 3 Unit Pool

101295.2	Aesthetics
101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
100863.3	Ethical Cultures
100998.4	Evolutionary Thinking
100961.4	Humanities Internship
101467.2	Islam in Southeast Asia

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101463.4	Islam in the Modern World
101465.2	Islamic Law in a Changing World
101724.2	Literary Animals
100875.4	Literature and Philosophy
100275.4	Philosophies of Love and Death
101761.2	Philosophy and the Visual
100879.2	Philosophy Today
101665.3	Politics and Religion
101003.2	Religion and Culture
101359.5	Sociology of Religion
100969.2	Theories of Conflict and Violence
101880.1	The Space of Literature
101798.2	Understanding Freedom
101010.3	What is the Human?
101471.2	Women in Arabic and Islamic Literature

Major - Media and Visual Cultures

M1025.1

The rapid flow of visual images with which we communicate today – on the internet, by web and moblogs – is a contemporary manifestation of the importance of visual cultures in everyday life. The Media and Visual Cultures major area equips students with multidisciplinary knowledge and skills in critical art history and theory, digital media, film and television studies, philosophy, and cultural studies. It aims to create career ready graduates with the skills necessary to interpret the production and dissemination of visual images and their meanings in a variety of media as well as cultural and institutional contexts.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

101734.2	Media and Visual Cultures: Case Studies

and the Level 3 unit

101295.2	Aesthetics

Students must also complete six of the Level 2/3 units from the following pools with no less than two at Level 3:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100245.2	Asian Cinema
101248.3	Australian Art 1
101626.4	Children's Literature: Image and Text
101250.3	Digital Futures
101856.1	Film and Philosophy
10157.2	History and Theory of the Avant-Garde
100964.2	Introduction to Film Studies
101254.3	The Animated Image: Histories and Theories
10371.3	The Art Museum - from the Prince to the Public

100890.2	The Art of Landscape
101795.2	The Musical
10158.2	Writings on Art

Level 3 Unit Pool

400087.5	Applied Critical Methods
100959.2	Australian Art II
100989.2	Cinema and Realism
100990.2	Cinema, Culture, Memory
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
101001.3	Modernity and Cinema
101761.2	Philosophy and the Visual
101253.3	Public Memory and Commemoration
101006.2	Social Semiotics
101738.2	The Art Game: Fraud, Forgery, Theft and Perfidy
101266.2	The Art of Modern Life
101717.2	The Italian Renaissance Unpacked
101668.2	World Cinema

Major - Arabic

M1026.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Arabic comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

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Level 1 unit pool

100041.2	Arabic 101
100042.2	Arabic 102

Level 2 unit pool

101699.2	Language and Communication Skills 2A: Arabic
101704.2	Language and Communication Skills 2B: Arabic

Level 3 unit pool

400087.5	Applied Critical Methods
100048.2	Arabic 302 - Arabic Advanced Language and Grammar
100049.2	Arabic 303: Advanced Writing Skills
100050.2	Arabic 304: Arabic Advanced Speaking
100052.2	Arabic 306: Arabic Novel and Short Story
100054.2	Arabic 308:Language Past and Present
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101792.2	Texts in Contemporary Arab Society and Culture
101668.2	World Cinema

Major - Chinese

M1027.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Chinese comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100056.2	Chinese 101
100057.2	Chinese 102

Level 2 unit pool

101700.2	Language and Communication Skills 2A: Chinese
101705.2	Language and Communication Skills 2B: Chinese

Level 3 unit pool

400087.5	Applied Critical Methods
100063.2	Chinese 302
100064.2	Chinese 303: Twentieth-Century Chinese Literature
100065.2	Chinese 304: Chinese Classical Literature
100066.2	Chinese 305: Chinese Cinema
100067.2	Chinese 307: The Cultural Context of China
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101710.2	Languages and Grammatical Concepts 3A: Chinese
101668.2	World Cinema

Major - Japanese

M1028.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Japanese comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

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- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100085.2	Japanese 101
100086.2	Japanese 102

Level 2 unit pool

101702.2	Language and Communication Skills 2A: Japanese
101707.2	Language and Communication Skills 2B: Japanese

Level 3 unit pool

400087.5	Applied Critical Methods
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
100092.3	Japanese 302
100093.2	Japanese 303: Contemporary Culture and Society
100094.1	Japanese 304: Discourse in Japanese
100096.2	Japanese 306: Japanese for Business
100098.1	Japanese 308: Japanese Textual Studies
101712.2	Languages and Grammatical Concepts 3A: Japanese
101668.2	World Cinema
101669.2	World Literature in Translation

Major - Italian

M1029.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Italian comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100130.2	Italian 101
100131.2	Italian 102

Level 2 unit pool

101701.2	Language and Communication Skills 2A: Italian
101706.2	Language and Communication Skills 2B: Italian

Level 3 unit pool

400087.5	Applied Critical Methods
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
100138.2	Italian 303: Contemporary Italy in European and International Contexts
100140.1	Italian 305: Modern Literature
100141.2	Italian 306: Classical Literature
100143.2	Italian 308: Italian Cinema
101711.2	Languages and Grammatical Concepts 3A: Italian
101668.2	World Cinema
101669.2	World Literature in Translation

Major - Spanish

M1030.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A major in Spanish comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner''s level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

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- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100145.2	Spanish 101
100146.2	Spanish 102

Level 2 unit pool

101703.2	Language and Communication Skills 2A: Spanish
101708.2	Language and Communication Skills 2B: Spanish

Level 3 unit pool

400087.5	Applied Critical Methods
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101713.2	Languages and Grammatical Concepts 3A: Spanish
101791.2	Short Fiction in the Americas
100153.2	Spanish 303: Advanced Writing Skills
100154.2	Spanish 304: Advanced Speaking Skills
100155.2	Spanish 305: Contemporary Literature
100156.2	Spanish 306: Contemporary History
100157.2	Spanish 307: Classical Literature
100158.2	Spanish 308: Spanish Sociolinguistics
101668.2	World Cinema
101669.2	World Literature in Translation

Major - Global Studies

M1031.1

What does it mean to live in an increasingly globalised world? Global Studies offers students the opportunity to acquire key competencies in cross-cultural communication and global issues to act as socially aware global citizens in international settings. Global Studies addresses issues such as consumer and popular culture, global histories of food and technology, the interconnection of race, identity and transnational migration and intercultural pragmatics. Students have the opportunity to complete a semester of study abroad.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the Level 1 unit

101673.2	The First Globalisation

And seven units from the following pools with no less than three Level 3 units in order to complete the major.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

101737.2	World Politics: An Introduction

Level 2 unit pool

101857.2	Doing Business in China
101543.2	India: Global Contexts
100871.3	International Texts and Contexts
101797.2	Political Terror

Level 3 unit pool

400087.5	Applied Critical Methods
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100994.2	Consumer Culture
100858.3	Culture and Globalisation
101674.2	Global Histories of Food
101735.2	Global Politics
101736.2	Governing the Globe
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101468.2	Islam, Media and Conflict
101733.2	Looking at Global Politics Through Film
101732.2	Media, The Everyday and Uneven Modernities
101666.2	Race, Identity and Globalisation
101717.2	The Italian Renaissance Unpacked
101848.1	Transnationalism and Migration
101831.2	Transport and the Making of the Modern World
101668.2	World Cinema
101669.2	World Literature in Translation
101830.2	WWII in Asia and the Pacific

Major - Asian Studies and International Relations

M1032.1

This major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study modern and contemporary Asia, the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The major area includes a range of units concerned with the United States, Europe and Australia as well as with Asia itself, and units in international relations. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Students are encouraged to undertake a submajor in an Asian language in conjunction with the major. Employment opportunities may be found in the State and Commonwealth public service, overseas organisations,

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trade and tourist organisations, business and industry, education and research.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

101442.2   Asia in the World

and seven units from the following pools with no less than three Level 3 units in order to pass the major:

Level 1 Unit Pool

101737.2   World Politics: An Introduction

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100245.2	Asian Cinema
100847.2	Asia and the West: The Imperial Encounter
100850.2	Buddhism in the Contemporary World
100855.2	Contemporary Japan: Culture and Society
101857.2	Doing Business in China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101543.2	India: Global Contexts
100872.2	International Politics of North Asia
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
63111.3	Special Topics in Asian and International Studies
101404.3	The History of Modern Indonesia
101871.1	War

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
400087.5	Applied Critical Methods
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100962.2	International Politics of the Southeast Asian Region
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
101866.1	United States Government and Politics
101375.3	War and Peace

100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Major - History and Political Thought

M1033.1

Since the revival of humanist studies in Renaissance Europe in the 15th century, universities have placed history and political thought at the heart of studies in the humanities. Through study of the political thought and social, political and cultural history of Australian, Asian and European societies, students gain knowledge and critical skills relevant to a variety of careers in education, government and non-governmental organizations. Study of the writings of political thinkers from ancient Greece and Rome, such as Plato and Cicero, and the early modern period, such as Hobbes and Machiavelli, to noted 19th century figures, such as Hegel and Marx, prepare students to engage with contemporary issues of governance, such as sovereignty, power, opportunity, property, civic freedom and social justice.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students would be eligible for this major having successfully completed 80 credit points with no less than three Level 3 units.

Students must complete the compulsory Level 1 unit

100873.3   Inventing Modernity

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100848.2	Australian Politics
100868.2	Foundations of Modern Australia
101737.2	World Politics: An Introduction

Level 2 unit pool

101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100869.2	Foundations of Modern Europe 1500-1800
101543.2	India: Global Contexts
100001.3	Keeping the Past
101843.2	Philosophy and Environment
101797.2	Political Terror
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations

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100882.3	Politics of Sex and Gender
63111.3	Special Topics in Asian and International Studies
101867.1	The Ethical Life
101404.3	The History of Modern Indonesia
101294.3	The Western Philosophical Tradition
101871.1	War
100293.3	War and Society: 20th Century Australia

Level 3 unit pool

400087.5	Applied Critical Methods
100966.3	American History, 1898-1945
100986.2	Australian History 1860-1920
100987.3	Australian History Since 1920
101685.3	Australian Indigenous History
101872.1	Australian Indigenous History from Federation to Reconciliation
100991.2	Citizenship Ancient and Modern
100852.2	Classics of Modern Philosophy
101799.2	Convicts and Settlers - Australian History 1788 - 1840
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100863.3	Ethical Cultures
100254.3	Exploring Local History
100864.2	Europe in the Twentieth Century
101844.2	Feminist Theories
101674.2	Global Histories of Food
101735.2	Global Politics
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100963.3	Interpreting Australia: Australian Historians and Historiography
101801.2	Interpreting Fascism
101823.2	Lay Participation in Justice Processes
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
101665.3	Politics and Religion
100278.2	Politics of Post-War Japan
100908.2	Race Politics
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
100969.2	Theories of Conflict and Violence
101831.2	Transport and the Making of the Modern World
101798.2	Understanding Freedom
101731.3	Understanding Power
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Major - Cultural and Social Analysis

M1034.1

Cultural and Social Analysis is an interdisciplinary major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic productions, and education, communication, welfare or health services, in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the compulsory Level 1 unit

100897.2	Everyday Life

and seven units from the following pools with no less than three Level 3 units in order to complete the major.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101409.2	Aboriginal Cultural Texts
100854.3	Contemporary Popular Cultures
100871.3	International Texts and Contexts
101251.2	Introduction to Psychoanalysis
100273.3	New Ethnicities, Old Racisms
100882.3	Politics of Sex and Gender
100281.3	Sexual Culture/s
100884.2	Social Inequalities
100886.2	Special Topics in Cultural and Social Analysis
100889.2	Technocultures
101867.1	The Ethical Life
100291.5	Urban Life/Urban Culture
100298.2	Youth Cultures and Moral Panics
101879.1	Women with Muslim Identity

Level 3 Unit Pool

400087.5	Applied Critical Methods
101265.2	Children's Culture

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100990.2	Cinema, Culture, Memory
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100858.3	Culture and Globalisation
100996.3	Death and Culture
100860.3	Emotions, Culture and Community
100998.4	Evolutionary Thinking
101844.2	Feminist Theories
101716.3	Healing and Culture
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101739.3	Literature and Trauma
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
100877.3	Multicultural Studies
101252.2	Psychoanalytic Criticism
101253.3	Public Memory and Commemoration
101003.2	Religion and Culture
101005.4	Representing Crime
101006.2	Social Semiotics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101008.2	Technologies of Racism
101009.3	The Body in Culture
101848.1	Transnationalism and Migration
101798.2	Understanding Freedom
101731.3	Understanding Power
101898.1	Violence in Everyday Life
101010.3	What is the Human?

Major - English, Text and Writing

M1035.1

The English, Text and Writing major invites students to explore contemporary approaches to language, literary study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. English, Text and Writing focuses on the imaginative workings of language, and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points with no less than three Level 3 units.

Students must complete the compulsory Level 1 unit

| 100862.2 | English, Text & Writing |

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

| 100641.3 | Approaches to Text |

Level 2 unit pool

101626.4	Children's Literature: Image and Text
100900.3	Comedy and Tragedy
101408.2	Critical Discourse Analysis
101452.2	History of the English Language
100870.2	Hypertext Fictions
100871.3	International Texts and Contexts
100964.2	Introduction to Film Studies
100505.2	Special Topics in English, Text and Writing
101795.2	The Musical
100893.4	The Novel
101455.3	The Structure of English
100896.3	Writing Fiction
101869.1	Studies in Postcolonial Literature
101873.1	The Sound of Language

Level 3 unit pool

400087.5	Applied Critical Methods
100845.3	American Literature
100849.4	Australian Textual Studies
101242.3	Children's Literature
100856.4	Creative Non-Fiction
100859.3	Creative Writing Project
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101724.2	Literary Animals
100875.4	Literature and Philosophy
101739.3	Literature and Trauma
100874.4	Literature, History and Culture
101033.4	Modernism
101001.3	Modernity and Cinema
101406.2	Queering Text
101650.3	Race in Literature
101005.4	Representing Crime
101791.2	Short Fiction in the Americas
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English
101471.2	Women in Arabic and Islamic Literature
101668.2	World Cinema
101669.2	World Literature in Translation
101670.3	Writing and Society
100895.4	Writing For Performance
101011.3	Writing Poetry
100582.2	Writing Portfolio
101796.1	19th Century American Literature
101880.1	The Space of Literature

Major - Islamic Studies

M1036.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of

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study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches. Students are encouraged to undertake a sub-major in Arabic to complement the Islamic Studies major.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

An Islamic Studies major must include the following Level 1 unit

101462.2	Understanding Islam and Muslim Societies

The remaining seven units must include at least three Level 3 units drawn from the following pools:

Level 2 unit pool

101464.3	Great Texts of Islam: Qur'an and Hadith
100273.3	New Ethnicities, Old Racisms

Level 3 unit pool

101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
101466.2	Ethical Traditions in Islam
100961.4	Humanities Internship
101822.3	Islam in the West
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101468.2	Islam, Media and Conflict
101465.2	Islamic Law in a Changing World
100877.3	Multicultural Studies
101359.5	Sociology of Religion
101792.2	Texts in Contemporary Arab Society and Culture
101783.2	The International Relations of the Middle East Since 1945
101471.2	Women in Arabic and Islamic Literature

Major - Linguistics

M1037.1

Through study of what language is and how it works, students gain conceptual tools and knowledge relevant to the relationship of language and society as well linguistics-related disciplines, such as Sociolinguistics, Psycholinguistics, Developmental Linguistics, Bilingualism, and other applied linguistics areas. Understanding of the relationship between language learning, communicative competence and cultural practices, both in the Australian context and in a global context, provides a foundation for

many careers including primary and secondary teaching, policy analysis, communication, social and welfare services in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete eight units from the following pools, with no less than three units at Level 3.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100194.2	Introduction to Interpreting
100195.2	Introduction to Translation

Level 2 unit pool

101452.2	History of the English Language
100928.3	Linguistics
101873.1	The Sound of Language
101302.2	Translation Technologies

Level 3 unit pool

400087.5	Applied Critical Methods
101449.2	Bilingualism and Biculturalism
101441.2	English Semantics and Pragmatics
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101710.2	Languages and Grammatical Concepts 3A: Chinese
101711.2	Languages and Grammatical Concepts 3A: Italian
101712.2	Languages and Grammatical Concepts 3A: Japanese
101713.2	Languages and Grammatical Concepts 3A: Spanish
101451.2	Second Language Acquisition
101721.2	Second Language Learning and Teaching
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English

Major - Indigenous Australian Studies

M1041.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian

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Studies Major addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

Students must complete the following level one unit

101751.2	Contextualising Indigenous Australia (Day Mode)

Choose seven of the following units including three Level 3 units

Level 1 units

101878.1	Indigenous Landscapes
101762.1	Who do you think you are? (Day Mode)

Level 2 units

101754.2	From Corroborees to Curtain Raisers (Day Mode)
101755.1	From Ochre to Acrylics to New Technologies
101752.1	Pigments of the Imagination
101753.2	Revaluing Indigenous Economics (Day Mode)

Level 3 units - choose three of

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101757.1	The Making of the `Aborigines'
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Major - Psychological Studies

M1050.1

The Psychological Studies major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to to enrol in an accredited Psychology sequence need to complete the Psychology key program of 200 credit points.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
100013.3	Experimental Design and Analysis
101676.2	Human Learning
101680.3	Perception
101184.2	Psychology: Human Behaviour
101183.2	Psychology: Behavioural Science

Major - Computer Systems

M3000.1

This major is available to students who commenced prior to 2013. This major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300103.3	Data Structures and Algorithms
300096.5	Computer Organisation
300092.1	Computer Architecture
300167.3	Systems Programming 1
300149.3	Operating Systems
300121.2	Formal Languages and Automata

Choose two of

300128.3	Information Security
300165.3	Systems Administration Programming
300368.2	Intelligent Systems
300093.3	Computer Graphics

Major - Advanced Programming

M3001.1

This major is available to students who commenced prior to 2013. This major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

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Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300096.5	Computer Organisation
300103.3	Data Structures and Algorithms
300404.2	Formal Software Engineering
300149.3	Operating Systems
300167.3	Systems Programming 1
300168.2	Systems Programming 2

Choose two of

300115.2	Distributed Systems and Programming
300130.3	Internet Programming
300165.3	Systems Administration Programming

Major - Information Technology

M3002.1

This major is available to all students except those enrolled in the Networks or Information Systems Key Programs within the Bachelor of Computing course, and the Bachelor of Information and Communications Technology course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300565.2	Computer Networking
300095.4	Computer Networks and Internets
300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design
300582.2	Technologies for Web Applications
300583.2	Web Systems Development

Choose one of

300575.2	Networked Systems Design
300166.2	Systems and Network Management

Choose one of

300569.2	Computer Security
300104.4	Database Design and Development
300570.3	Human-Computer Interaction

Major - Web Systems Development

M3003.1

This major is available to all students except those enrolled in the Bachelor of Computing, Bachelor of Computer

Science or the Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units

300104.4	Database Design and Development
300111.2	Developing Web Applications with XML
300570.3	Human-Computer Interaction
300572.2	Information Systems Deployment and Management
300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design
300582.2	Technologies for Web Applications
300583.2	Web Systems Development

Major - Health Informatics

M3004.1

This major is available to all students except those enrolled in the Health Informatics key program within the Bachelor of Computing course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300104.4	Database Design and Development
300567.3	e-Health
300566.2	Introduction to Health Informatics
300580.2	Programming Fundamentals
300568.2	Services Computing in Healthcare
300582.2	Technologies for Web Applications

Choose one of

300700.5	Statistical Decision Making
300585.2	Systems Analysis and Design

Choose one of

200036.3	Data Mining and Visualisation
300570.3	Human-Computer Interaction

Note: Students in the Bachelor of Computing (Information Systems) are required to select 300585 Systems Analysis and Design in order to comply with course major guidelines.

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Major - Entertainment Computing

M3005.1

This major is available to all students

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300093.3	Computer Graphics
300565.2	Computer Networking
300104.4	Database Design and Development
300491.2	Games Technology
300578.3	Professional Development
300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design

Choose one of

300492.2	Games Theory and Design
300862.1	Video Games Development

Please note 300492 Games Theory and Design will be replaced by 300862 Video Games Development from 2012.

Major - Mathematics

M3021.1

This major is available to students who commenced prior to 2012. M3021 Mathematics replaced by M3054 Mathematics from 2012. This major may meet the NSW Institute of Teachers accreditation requirements for teaching Mathematics as a first subject in NSW state high schools.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

200028.3	Advanced Calculus
200025.2	Discrete Mathematics
300672.2	Mathematics 1A
300673.2	Mathematics 1B

Choose two of

200030.4	Differential Equations
200027.2	Linear Algebra
200029.2	Numerical Analysis

Choose two of

200193.2	Abstract Algebra
200023.3	Analysis
200022.3	Mathematical Modelling

Students enrolled in the Bachelor of Information and Communications Technology may replace 200025 Discrete Mathematics with Discrete Structures and Complexity.

Note: For students who want to complete the Mathematics Major but may not necessarily want to quality for NSW Institute of Teachers accreditation, 200024 Mathematical Finance would be added to the list of Level 3 units.

Major - Statistics

M3022.1

This major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

200033.5	Applied Statistics
300606.2	Foundations of Statistical Modelling and Decision Making
200036.3	Data Mining and Visualisation
300104.4	Database Design and Development
200037.4	Regression Analysis & Experimental Design
200039.2	Surveys and Multivariate Analysis
200038.3	Time Series and Forecasting

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Major - Computational Decision Making

M3023.1

This major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300606.2	Foundations of Statistical Modelling and Decision Making
200042.3	Introduction to Operations Research
200027.2	Linear Algebra

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300670.2	Optimisation Techniques
300671.2	Principles and Practice of Decision Making
200044.1	Simulation Techniques

Choose one of

200263.3	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Choose one of

200025.2	Discrete Mathematics
300672.2	Mathematics 1A

Major - Knowledge Discovery and Data Mining

M3024.1

This major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

200033.5	Applied Statistics
200036.3	Data Mining and Visualisation
300104.4	Database Design and Development
300117.3	Enterprise Database
300606.2	Foundations of Statistical Modelling and Decision Making
300585.2	Systems Analysis and Design

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Choose one of

200042.3	Introduction to Operations Research
300670.2	Optimisation Techniques
300671.2	Principles and Practice of Decision Making
200037.4	Regression Analysis & Experimental Design
200039.2	Surveys and Multivariate Analysis
200038.3	Time Series and Forecasting

Major - Networking

M3025.1

This major is only available to students enrolled in 3633 Bachelor of Computing, 3639 Bachelor of Information and Communications Technology and 3685 Bachelor of Computing (Information Systems) Advanced courses.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows

300565.2	Computer Networking
300095.4	Computer Networks and Internets
300143.3	Network Security
300575.2	Networked Systems Design
300576.2	Networking Workshop
300166.2	Systems and Network Management
300582.2	Technologies for Web Applications

Choose one of

300088.1	Broadband Networking
300112.1	Digital Communication Technology
300583.2	Web Systems Development

Major - Systems Programming

M3043.1

This major aims to develop graduates with sound skills in the discipline of programming. The focus is on programming at the level of system calls to the underlying operating system and many of the units use the industry standard language for systems programming, namely C/C++, as the vehicle of instruction. There is a strong emphasis on the development of highly efficient and reliable code that can provide support services for higher level application oriented programs, as well as the development of programs suitable for systems administration and management. Practical work utilises the Unix environment. This major is appropriate where a career in systems programming or systems administration is planned, or where the student wishes to develop advanced systems programming skills.

Unit Set Structure

Students must complete the following eight units

300569.2	Computer Security
300115.2	Distributed Systems and Programming
300128.3	Information Security
300368.2	Intelligent Systems
300130.3	Internet Programming
300143.3	Network Security
300149.3	Operating Systems
300165.3	Systems Administration Programming

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Major - Networked Systems

M3044.1

This major aims to develop graduates with sound skills in the discipline of networked computer systems. Recent advances in computer and telecommunications networked systems, particularly those based on TCP/IP, have increased the importance of network technologies in the discipline of computer science. This major covers a wide range of topics including computer communication network concepts and protocols, multimedia systems, Internet standards and technologies, network security, wireless and mobile computing, and distributed systems. The candidates are also introduced to some of the relevant current key research issues of the field.

Unit Set Structure

Students must complete the following eight units

300095.4	Computer Networks and Internets
300115.2	Distributed Systems and Programming
300128.3	Information Security
300138.3	LAN Workshop
300143.3	Network Security
300575.2	Networked Systems Design
300149.3	Operating Systems
300166.2	Systems and Network Management

Major - Biochemistry and Molecular Biology

M3045.1

This major will equip students with knowledge and skills in fundamental biology and chemistry, biochemistry and molecular biology to allow students to enter industrial or research-based employment in this area (biotech companies, pathology, quality assurance, university and hospital labs and scientific sales, government policy analysis). As this area has expanding knowledge and technologies, outcomes also include the ability to read, critique and evaluate emerging research with the view to becoming a life-long learner in the field. The outcomes of this major would support honours or masters level research in this area.

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete eight units as follows

Note: Three units must be at Level 3.

Level 1

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Level 2

300936.1	Functional Proteins and Genes
300848.1	Metabolism

Choose one of

300817.1	Molecular Biology
300847.1	Immunology
300845.1	Genetics

Level 3

300927.1	Molecular Medicine

Choose two of

300820.1	Genes, Genomics and Human Health
300905.1	Advanced Immunology
300850.1	Advanced Cell Biology

Major - Aquatic Biology

M3046.1

Aquatic and marine environments play vital roles in providing food, water, recreation and other ecosystem services to human society, as well as providing habitat for important species that make up global biodiversity. This major will equip students with the background knowledge and training to work in aquatic and marine environments, to learn skills in inquiry and problem solving, so that they can contribute beneficially to management and/or conservation of waterways and oceans and the biodiversity within them.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

Students must complete the following eight units

Level 1

300802.1	Biodiversity
300824.1	Management of Aquatic Environments

Level 2

300838.1	Comparative Physiology
300839.1	Ecology
300877.1	Toxicology

Level 3

300929.1	Aquatic Ecology

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| 300918.1 | Invertebrate Biology |
| 300870.1 | Water in the Landscape |

Major - Chemistry

M3047.1

This major will give students a solid grounding in chemistry as a scientific discipline; units can be selected to specialise in inorganic, organic, analytical or physical chemistry. Completion of the major will also qualify students as secondary school chemistry teachers.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete eight units as follows

Level 1

| 300800.2 | Essential Chemistry 1 |
| 300803.1 | Essential Chemistry 2 |

Level 2

Choose three of

300876.1	Organic Chemistry
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry

*Students may only choose one unit 300832 - Analytical Chemistry or 300843 - Forensic and Environmental Analysis

| 300832.1 | Analytical Chemistry |
| 300843.1 | Forensic and Environmental Analysis |

Level 3

Choose one of the following capstone units

| 300924.1 | Science Research Project |
| 300883.1 | Laboratory Quality Management |

And choose two of

300925.1	Advanced Analytical Chemistry
300907.1	Advanced Inorganic Chemistry
300906.1	Advanced Organic Chemistry
300926.1	Advanced Physical Chemistry
300891.1	Advanced Medicinal Chemistry
300920.1	Pharmacological Chemistry

Major - Climate Change

M3048.1

A factual understanding of climate, the components that go to make it up, and how climate has varied in the past, is essential for any person working in the climate change area. This unit will introduce students to the concept of climate, our understanding of how it works, and how it has changed through time. Topics in basic atmospheric science will give students a critical understanding of current environmental concerns and debates about the greenhouse effect and climate change, and the science behind greenhouse gas accounting. Students will be introduced to current atmosphere-related research at UWS and elsewhere.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

Students must complete eight units as follows

Level 1

| 300802.1 | Biodiversity |

Choose one of

| 300800.2 | Essential Chemistry 1 |
| 300808.2 | Introductory Chemistry |

Level 2

| 300839.1 | Ecology |
| 300837.1 | Climate Change Science |

Choose one of

| 300865.1 | Plant Physiology |
| 300838.1 | Comparative Physiology |

Level 3

| 300909.1 | Biological Adaptation to Climate Change |

Choose two of

300857.1	Environmental Geochemistry
300855.1	Conservation Biology
300856.1	Ecosystem Carbon Accounting

Major - Conservation Biology

M3049.1

Conservation biology has emerged as a field of study from a synthesis of the ecological, demographic, genetic and societal risks faced by small natural populations. This major equips students with skills in fundamental biology, in the ecology of populations and communities, in population genetics and in the legal conservation framework to enable them to work in this area.

Location

Campus	Mode
Hawkesbury Campus	Internal

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Unit Set Structure

Students must complete eight units as follows. Five units must be from the Level 1 and 2 pools, with no more than three units at Level 1. Students must also complete three units at Level 3.

Level 1

300802.1	Biodiversity
300816.1	Cell Biology
300813.1	Wildlife Studies
300824.1	Management of Aquatic Environments

Level 2

300839.1	Ecology
300845.1	Genetics
300836.1	Botany

Level 3

Students must complete

300855.1	Conservation Biology

And choose two of

300929.1	Aquatic Ecology
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity

Major - Environmental Management

M3050.1

Solution to environmental problems requires both a technical/scientific 'fix', and an agreed social implementation, or management 'fix'. This major covers environmental management as an academic discipline, giving students knowledge and skills in the social, legislative and planning frameworks within which environmental practitioners must work to implement solutions to environmental problems.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

Students must complete eight units as follows

Level 1

300824.1	Management of Aquatic Environments
300823.1	Soils
101646.2	Analysis of Spatial Data

Level 2

Choose two of

300840.1	Environmental Planning and Climate Change
101878.1	Indigenous Landscapes
300875.1	Landuse and the Environment

Level 3

Choose three of

300841.1	Environmental Regulation and Policy
300858.1	Environmental Risk Management
300860.1	Urban Environment
300919.1	Occupational Health and Safety

Major - Forensic Science

M3051.1

This major gives a systematic introduction to the principles and practice of forensic science, emphasising the importance of maintaining the integrity of physical evidence during its recovery and analysis. The major is designed to complement a science-based degree, but it may also be taken by students who are studying a different discipline or profession. It includes the relevant pre-requisites for the Level 2 and 3 units, and the forensic content and principles are sequenced through the curriculum. This major in may be complemented by units from other disciplines such as the biological sciences, statistics, policing, criminology and law. Students who are interested in the analysis of DNA evidence may take Functional Genes and Proteins and Molecular Biology, or equivalent units. Other relevant science units include Biometry, Botany, Genetics, Introduction to Anatomy and Histology, Invertebrate Biology, Ecology and Physics 1.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

This Major is only available to students enrolled in 3675 Bachelor of Science and to students in 3562 Bachelor of Science (Advanced Science) who are undertaking the Forensic Science program. This unit set is not available to students enrolled in the course 3589 Bachelor of Science (Forensic Science).

Students must complete eight units as follows

Level 1

300800.2	Essential Chemistry 1
300803.1	Essential Chemistry 2
300806.1	Forensic Science

Level 2

300843.1	Forensic and Environmental Analysis
300935.1	Evidence and Crime Scene Management

Level 3

300882.1	Forensic Archaeology
300868.1	Forensic Chemistry
300883.1	Laboratory Quality Management

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Major - General Biology

M3052.1

The major in General Biology gives students a broad training in biology, with the opportunity to select a program that ranges across the scale from macro- to micro- to molecular level processes. Completion of the major meets the requirements for secondary school biology teaching (post-graduate study is required to qualify as a teacher).

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete a maximum of three units from Level 1 and at least three units from Level 3.

Students must complete eight units as follows

Level 1

300802.1	Biodiversity
300816.1	Cell Biology

Choose six of the following units, including at least three at Level 3.

Level 1

300800.2	Essential Chemistry 1
300803.1	Essential Chemistry 2

Level 2

300936.1	Functional Proteins and Genes
300848.1	Metabolism
300817.1	Molecular Biology
300847.1	Immunology
300845.1	Genetics
300833.1	Microbiology 1
300896.1	Microbiology 2
300838.1	Comparative Physiology
300839.1	Ecology
300865.1	Plant Physiology
300836.1	Botany

Level 3

300851.1	Advanced Physiology
300866.1	Analytical Microbiology
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology
300855.1	Conservation Biology
300905.1	Advanced Immunology
300820.1	Genes, Genomics and Human Health
300826.1	Medical Microbiology
300927.1	Molecular Medicine
300929.1	Aquatic Ecology

300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology
300924.1	Science Research Project
300883.1	Laboratory Quality Management
300919.1	Occupational Health and Safety

Major - Geochemistry

M3053.1

This major is available to students who commenced prior to 2013.This major recognises the relevance of geochemistry in our rapidly expanding mining and minerals industries, and its importance in the understanding of related environmental issues. It offers a strong grounding in key areas of geochemistry and chemistry, and emphasises the integration of theory and practical skills and their relevance to real world applications in industry, research and the environment.

Location

Campus	Mode
Parramatta Campus	Internal

Unit Set Structure

Students must complete eight units as follows

Level 1

300803.1	Essential Chemistry 2
300822.1	Introduction to Earth Science
300809.1	Introductory Geochemistry

Level 2

300846.1	Geochemical Systems
300832.1	Analytical Chemistry

Level 3

300857.1	Environmental Geochemistry
300925.1	Advanced Analytical Chemistry
300924.1	Science Research Project

Major - Mathematics

M3054.1

This major covers topics in the traditional areas of calculus and algebra. Single and multivariable calculus are covered, as well as topics in linear algebra, analysis and mathematical modelling. This major is available to all UWS students and may meet the NSW Institute of Teachers accreditation requirements for teaching Mathematics as a first subject in NSW state high schools.

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Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete eight units as follows

Level 1

300672.2	Mathematics 1A
300673.2	Mathematics 1B
200025.2	Discrete Mathematics

Level 2

Choose two units from the level 2 units below

200030.4	Differential Equations
200028.3	Advanced Calculus
200027.2	Linear Algebra

Level 3

200193.2	Abstract Algebra
200022.3	Mathematical Modelling
200023.3	Analysis

Major - Microbiology

M3055.1

Microorganisms impact on all aspects of our lives. A microbiology major will equip students with the skills and knowledge of microbiology and molecular microbiology relevant to employment in research laboratories and industries including biotechnology companies, medical and environmental laboratories, food, wine and pharmaceutical companies, quality assurance and scientific sales. The major, which includes the study of bacteria, fungi, protists and viruses and their roles in medicine, industry and the environment, will also provide a foundation for research at Honours and postgraduate levels. (Students from Parramatta and Campbelltown will have to travel to Hawkesbury to complete some of the units in the major).

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete eight units, including three units at Level 3

Note: Students undertaking this major at Parramatta and Campbelltown campus need to travel to Hawkesbury to complete one or two Level 3 units.

Level 2

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300896.1	Microbiology 2
300817.1	Molecular Biology
300847.1	Immunology

Level 3

Choose three of

300866.1	Analytical Microbiology
300826.1	Medical Microbiology
300905.1	Advanced Immunology
300883.1	Laboratory Quality Management

Major - Zoology

M3056.1

This major trains students in how to best care for and protect our animals, by covering scientific knowledge of native wildlife, companion animals, and production animals. This major will allow students to develop scientific understanding of how animals function and interact with their environment; from their ecology and evolution; to physiology and biochemistry of tissues and major organ systems, as well as down to structure and function of biomolecules and cells. On-campus animal facilities include those for reptiles, small marsupials, small rodents, horses, sheep and cattle, as well as over 1000ha of native, rural and aquatic habitat.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

Students must complete eight units as follows

Level 1

Choose two of

300802.1	Biodiversity
300816.1	Cell Biology
300813.1	Wildlife Studies

Level 2

300838.1	Comparative Physiology

Choose two of

300839.1	Ecology
300845.1	Genetics
300853.1	Animal Nutrition and Feeding
300835.1	Animal Reproduction

Level 3

300909.1	Biological Adaptation to Climate Change

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Choose two of

300929.1	Aquatic Ecology
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity
300878.1	Animal Behaviour

Major - Food Science & Technology

M3057.1

A major in Food Science and Technology explores the science behind food, its preparation and manufacture. The program covers specialised topics in food processing, quality assurance, new product development, postharvest, packaging, microbiological and chemical analysis of foods. The program aims to develop in depth scientific understanding of processes involved in food manufacture and requirements to produce safe, nutritious and palatable food. The major prepares students for a wide range of careers in the food and beverage related industries, including food product development, quality assurance, food regulations, research and development, plus management of fresh food supply. Students seeking to be secondary Food Technology teachers are advised to also select a Sub-major in Education Studies in preparation for Master of Teaching in their fourth year of study. This program will satisfy the requirements of the NSW Institute of Teachers for first teaching areas of 'Food Technology' and 'Biology', with further teaching areas possible in 'chemistry', 'physics', or 'design and technology' depending on the electives selected.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

Standard Food Science and Technology Major

Students must complete eight units as follows

300904.1	Advanced Food Science and Technology
300871.1	Culinary Science
300915.1	Food Product Development
300859.1	Food Safety
300883.1	Laboratory Quality Management
300869.1	Postharvest
300922.1	Quality Assurance and Food Analysis

And choose one of

300866.1	Analytical Microbiology
300843.1	Forensic and Environmental Analysis

Food Science and Technology Major for Students undertaking the Education Studies Sub Major

Students must complete eight units as follows, plus be enrolled in the Education Studies Sub Major

300805.1	Food Science 1
300842.2	Food Science 2
300859.1	Food Safety

300869.1	Postharvest
300922.1	Quality Assurance and Food Analysis
300871.1	Culinary Science
300915.1	Food Product Development
300904.1	Advanced Food Science and Technology

Major - Nutrition and Physiology

M3058.1

The study of nutrition and human physiology incorporates knowledge of human biology and biochemistry to understand how the body utilizes nutrients and related substances for optimal health throughout the lifecycle. This major also addresses the physiological and nutritional foundations for understanding the nature of food and the physiological and epidemiological relationships between food, nutrients and components of food and common diet-related diseases prevalent in Australia. This major is recommended for students seeking an in-depth understanding of diet-related health issues and intending to work in allied or community health, education, or seeking further graduate studies in nutrition, dietetics or public health.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

Students must complete eight units from the following, with at least three units from Level 3

Level 1

300818.1	Introduction to Physiology

Level 2

300936.1	Functional Proteins and Genes
300848.1	Metabolism

Choose two of

300933.1	Nutrition and Health 1
300934.1	Nutrition and Health 2
300928.1	Consumer Issues in Nutrition

Level 3

300851.1	Advanced Physiology

Choose two of

300908.1	Applied Nutrition
300917.1	Global Nutrition, Food and Community
300871.1	Culinary Science

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Major - Human Nutrition

M3059.1

A major in Human Nutrition investigates healthy eating as a vital part of good health. This major offers a human nutrition specialisation for students enrolled in the Nutrition and Food Science degree. The major covers nutrition and health, with specialised studies in community nutrition, public health nutrition, human physiology, health promotion and food studies. The program aims to develop understanding of human nutrition as it applies to the various stages of life, as well as examining the development of Australian dietary practices and diet related disorders. Students will explore the role of community food systems; developing strategies for social research methods and applications in public health nutrition and health promotion. The major prepares students for careers in community nutrition, health promotion and education, or work in a range of food and nutrition related businesses, including new product development of healthy foods. Those students' seeking postgraduate studies in dietetics with the objective of becoming an accredited practising dietician should select a double major of 'Nutrition and Physiology' with the 'Human Nutrition' major and complete further studies in metabolism and advanced physiology.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

Students must complete eight units as follows

Year 2

Autumn session

300933.1	Nutrition and Health 1
300936.1	Functional Proteins and Genes

Spring session

300934.1	Nutrition and Health 2
300818.1	Introduction to Physiology

Year 3

Autumn session

300928.1	Consumer Issues in Nutrition
300871.1	Culinary Science

Spring session

300908.1	Applied Nutrition
300917.1	Global Nutrition, Food and Community

Major - Medicinal Chemistry

M3060.1

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Note - At least 60 credit points must be at Level 3 or above (two electives/Schedule C units must be at least a Level 3 unit)

Year 2

Autumn session

300936.1	Functional Proteins and Genes

Two Schedule C Units
And one elective

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease
300876.1	Organic Chemistry

And one elective

Year 3

Autumn session

300891.1	Advanced Medicinal Chemistry

Two Schedule C Units
And one elective

Spring session

300893.1	Topics in Medical Science
300920.1	Pharmacological Chemistry
300906.1	Advanced Organic Chemistry

And one elective

Schedule C Units

Choose four of

300907.1	Advanced Inorganic Chemistry
300899.1	Inorganic Chemistry
300925.1	Advanced Analytical Chemistry
300832.1	Analytical Chemistry
300912.1	Molecular Pharmacokinetics
300849.1	Physical Chemistry

Mid Year Intake

Note - At least 60 credit points must be at Level 3 or above (two electives/Schedule C units must be at least a Level 3 unit)

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Year 1

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300811.1	Scientific Literacy

Autumn session

300802.1	Biodiversity
300800.2	Essential Chemistry 1
300825.1	Introduction to Anatomy

Choose one of

300830.1	Analysis of Change
300831.1	Quantitative Thinking
300672.2	Mathematics 1A
200263.3	Biometry

Year 2

Spring session

| 300889.1 | Pathological Basis of Disease |
| 300876.1 | Organic Chemistry |

One Schedule C Unit

And one elective

Autumn session

| 300936.1 | Functional Proteins and Genes |

One Schedule C Unit

And two electives

Year 3

Spring session

300848.1	Metabolism
300893.1	Topics in Medical Science
300920.1	Pharmacological Chemistry
300906.1	Advanced Organic Chemistry

Autumn session

| 300891.1 | Advanced Medicinal Chemistry |

Two Schedule C Units

And one elective

Schedule C Units

300832.1	Analytical Chemistry
300925.1	Advanced Analytical Chemistry
300899.1	Inorganic Chemistry
300849.1	Physical Chemistry
300907.1	Advanced Inorganic Chemistry
300912.1	Molecular Pharmacokinetics

Note: Students wishing to take Analytical Chemistry will need to adjust their pattern of electives.

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Major - Anatomy and Physiology

M3061.1

Location

| Campus | Mode |
| Campbelltown Campus | External |

Unit Set Structure

Note - At least 60 credit points must be at Level 3 or above (two electives/Schedule B units must be at least a Level 3 unit)

Year 2

Autumn session

| 300936.1 | Functional Proteins and Genes |
| 300894.1 | Anatomy of the Thorax and Abdomen |

One Schedule B Unit

And one elective

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease
300884.1	Pharmacology

And one elective

Year 3

Autumn session

| 300819.1 | Topics in Physiology |
| 300851.1 | Advanced Physiology |

One Schedule B Unit

And one elective

Spring session

| 300754.1 | Neuroanatomy |
| 300893.1 | Topics in Medical Science |

One Schedule B Unit

And one elective

Schedule B Units

Choose three of

300905.1	Advanced Immunology
300898.1	The Appendicular Skeleton
300817.1	Molecular Biology

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300897.1	Anatomy of the Head and Neck
300838.1	Comparative Physiology
300927.1	Molecular Medicine
300845.1	Genetics
300820.1	Genes, Genomics and Human Health

Mid Year Intake

Year 1

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300811.1	Scientific Literacy

Autumn session

300936.1	Functional Proteins and Genes
300800.2	Essential Chemistry 1
300825.1	Introduction to Anatomy

Choose one of

300830.1	Analysis of Change
300831.1	Quantitative Thinking
300672.2	Mathematics 1A
200263.3	Biometry

Year 2

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease
300884.1	Pharmacology

One Schedule B Unit

Autumn session

300802.1	Biodiversity
300894.1	Anatomy of the Thorax and Abdomen

One Schedule B Unit
And one elective

Year 3

Spring session

300893.1	Topics in Medical Science
300754.1	Neuroanatomy

One Schedule B Unit
And one elective

Autumn session

300819.1	Topics in Physiology
300851.1	Advanced Physiology

One Schedule B Unit
And one elective

Schedule B Units

Choose three of

300905.1	Advanced Immunology
300898.1	The Appendicular Skeleton
300817.1	Molecular Biology
300897.1	Anatomy of the Head and Neck
300838.1	Comparative Physiology
300927.1	Molecular Medicine
300845.1	Genetics
300820.1	Genes, Genomics and Human Health

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Major - Biomedical Science

M3062.1

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal

Unit Set Structure

Note - At least 60 credit points must be at Level 3 or above (five electives/ Schedule A units must be at least a Level 3 unit)

Year 2

Autumn session

300936.1	Functional Proteins and Genes

Two Schedule A Units
And one elective

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease

One Schedule A Unit
And one elective

Year 3

Autumn session

Three Schedule A Units
And one elective

Spring session

300893.1	Topics in Medical Science

Two Schedule A Units
And one elective

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Schedule A Units

Choose eight of

300833.1	Microbiology 1
300896.1	Microbiology 2
300845.1	Genetics
300820.1	Genes, Genomics and Human Health
300826.1	Medical Microbiology
300905.1	Advanced Immunology
300817.1	Molecular Biology
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology
300927.1	Molecular Medicine
300847.1	Immunology

Mid Year Intake

Note - At least 60 credit points must be at Level 3 or above (five electives/ Schedule A units must be at least a Level 3 unit)

Year 1

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300811.1	Scientific Literacy

Autumn session

300802.1	Biodiversity
300800.2	Essential Chemistry 1
300825.1	Introduction to Anatomy

Choose one of

300830.1	Analysis of Change
300831.1	Quantitative Thinking
300672.2	Mathematics 1A
200263.3	Biometry

Year 2

Spring session

300889.1	Pathological Basis of Disease

Two Schedule A Units

And one elective

Autumn session

300936.1	Functional Proteins and Genes

Two Schedule A Units

And one elective

Year 3

Spring session

300848.1	Metabolism
300893.1	Topics in Medical Science

One Schedule A Unit

And one elective

Autumn session

Three Schedule A Units

And one elective

Schedule A Units

Choose eight of

300833.1	Microbiology 1
300896.1	Microbiology 2
300845.1	Genetics
300820.1	Genes, Genomics and Human Health
300905.1	Advanced Immunology
300817.1	Molecular Biology
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology
300847.1	Immunology

Mid Year Intake - Alternate pattern

Note - At least 60 credit points must be at Level 3 or above (five electives/ Schedule A units must be at least a Level 3 unit)

Year 1

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300811.1	Scientific Literacy

Autumn session

300936.1	Functional Proteins and Genes
300800.2	Essential Chemistry 1
300825.1	Introduction to Anatomy

Choose one of

300830.1	Analysis of Change
300831.1	Quantitative Thinking
300672.2	Mathematics 1A
200263.3	Biometry

Year 2

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease

One Schedule A Unit

And one elective

Autumn session

300802.1	Biodiversity

Two Schedule A Units

And one elective

Year 3

Spring session

300893.1	Topics in Medical Science

SCHOOL OF SCIENCE AND HEALTH

Two Schedule A Units
And one elective

Autumn session
Three Schedule A Units
And one elective

Schedule A Units
Choose eight of

300833.1	Microbiology 1
300896.1	Microbiology 2
300845.1	Genetics
300820.1	Genes, Genomics and Human Health
300905.1	Advanced Immunology
300817.1	Molecular Biology
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology
300847.1	Immunology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points). UWS offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Refer to the Unit Set Index.

Students can apply for an elective major or sub-major via MySR in the Unit Sets section under Enrolment.

Major - Medicinal Chemistry

M3063.1

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Students completing the Bachelor of Medical Science (Advanced) with a major in Medicinal Chemistry will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above (one Schedule C unit must be at least a Level 3 unit)

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300800.2	Essential Chemistry 1
300825.1	Introduction to Anatomy

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300672.2	Mathematics 1A

Year 2

Autumn session

300937.1	Advanced Science Project A
300936.1	Functional Proteins and Genes

And two Schedule C Units

Spring session

300938.1	Advanced Science Project B
300848.1	Metabolism
300889.1	Pathological Basis of Disease
300876.1	Organic Chemistry

Year 3

Autumn session

300910.1	Advanced Science Project C
300891.1	Advanced Medicinal Chemistry

And two Schedule C Units

Spring session

300893.1	Topics in Medical Science
300920.1	Pharmacological Chemistry
300906.1	Advanced Organic Chemistry
300892.1	Medical Science Project

Schedule C Units
Choose four of

300907.1	Advanced Inorganic Chemistry
300899.1	Inorganic Chemistry
300925.1	Advanced Analytical Chemistry
300832.1	Analytical Chemistry
300912.1	Molecular Pharmacokinetics
300849.1	Physical Chemistry

Note: Students wishing to take Analytical Chemistry will need to adjust their pattern of electives.

Major - Anatomy and Physiology

M3064.1

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

Students completing the Bachelor of Medical Science (Advanced) with a major in Anatomy and Physiology will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above (one Schedule B unit must be at least a Level 3 unit)

Year 1

Autumn session

300802.1	Biodiversity

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300811.1	Scientific Literacy
300800.2	Essential Chemistry 1
300825.1	Introduction to Anatomy

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300672.2	Mathematics 1A

Year 2

Autumn session

300937.1	Advanced Science Project A
300936.1	Functional Proteins and Genes
300894.1	Anatomy of the Thorax and Abdomen

And one Schedule B Unit

Spring session

300938.1	Advanced Science Project B
300848.1	Metabolism
300889.1	Pathological Basis of Disease
300884.1	Pharmacology

Year 3

Autumn session

300910.1	Advanced Science Project C
300819.1	Topics in Physiology
300851.1	Advanced Physiology

And one Schedule B Unit

Spring session

300892.1	Medical Science Project
300754.1	Neuroanatomy
300893.1	Topics in Medical Science

And one Schedule B Unit

Schedule B Units

Choose three of

300905.1	Advanced Immunology
300898.1	The Appendicular Skeleton
300817.1	Molecular Biology
300897.1	Anatomy of the Head and Neck
300838.1	Comparative Physiology
300927.1	Molecular Medicine
300845.1	Genetics
300820.1	Genes, Genomics and Human Health

Major - Biomedical Science

M3065.1

Location

Campus	Mode
Campbelltown Campus	Internal

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

Students completing the Bachelor of Medical Science (Advanced) with a major in Medicinal Chemistry will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above (four Schedule A units must be at least a Level 3 unit)

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300800.2	Essential Chemistry 1
300825.1	Introduction to Anatomy

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300672.2	Mathematics 1A

Year 2

Autumn session

| 300937.1 | Advanced Science Project A |
| 300936.1 | Functional Proteins and Genes |

And two Schedule A Units

Spring session

300938.1	Advanced Science Project B
300848.1	Metabolism
300889.1	Pathological Basis of Disease

And one Schedule A Unit

Year 3

Autumn session

| 300910.1 | Advanced Science Project C |

And three Schedule A Units

Spring session

| 300892.1 | Medical Science Project |
| 300893.1 | Topics in Medical Science |

And two Schedule A Units

Schedule A Units

Choose eight of

300833.1	Microbiology 1
300896.1	Microbiology 2
300845.1	Genetics
300820.1	Genes, Genomics and Human Health
300826.1	Medical Microbiology
300905.1	Advanced Immunology
300817.1	Molecular Biology
300850.1	Advanced Cell Biology

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300866.1   Analytical Microbiology
300927.1   Molecular Medicine
300847.1   Immunology

Major - Innovation Design Management

M3503IDM.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 80 credit points as follows
The following are core units.

300014.3   Design Management 3: Organisational Skills for Designers
200083.2   Marketing Principles

The following are drawn from alternate Industrial Design units.

100800.2   Consumer Psychology
300012.3   Design Management 1: Product Design Audit
300013.3   Design Management 2: Corporate Image and Identity
300015.3   Design Management 4: Design Process
200154.3   Entrepreneurial Management and Innovation
200163.1   Innovation and Product Development

Major - Interactive Industrial Graphics

M3503IIG2.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units
The following are core units.

300302.2   Industrial Graphics 1: Presentation
300282.2   Industrial Graphics 2: Transition
300310.3   Industrial Graphics 3: 3D Solids

The following are drawn from alternative/elective units

300312.3   Industrial Graphics 4: Surface
300315.3   Industrial Graphics 5: Integrated
100789.3   Interactive Design I
100949.3   Interactive Design II
101180.3   Web and Time Based Design

From 2013 unit 300315 Industrial Graphics 5: Integrated will no longer be offered.

Major - International Design Management

M3503INTDM.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following eight units.
The following are core units.

300014.3   Design Management 3: Organisational Skills for Designers
200083.2   Marketing Principles

The following are drawn from alternate Industrial Design units.

200088.2   Brand and Product Management
300012.3   Design Management 1: Product Design Audit
300013.3   Design Management 2: Corporate Image and Identity
300015.3   Design Management 4: Design Process
200154.3   Entrepreneurial Management and Innovation
61671.1   International Management

Major - Therapeutic Recreation

M4000.1

Unit Set Structure

Students must complete the following eight units

400249.2   Ethical and Legal Issues in Health Care
400244.2   Introduction to Leisure and Recreation Theory
400789.3   Leisure Education Programming and Mental Health
400968.2   Professional Practice in Aged Care and Disability
400786.2   Professional Transition Project
400254.2   Therapeutic Recreation Professional Project
400246.3   Workplace Learning 1 (Therapeutic Recreation)
400252.2   Workplace Learning 2 (Community Placement)

Major - Health Promotion

M4001.1

Unit Set Structure

Students must complete the following eight units

400249.2   Ethical and Legal Issues in Health Care
400275.2   Health Planning Project
400966.2   Health Politics, Policy and Planning

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400784.2	Health Promotion Practice 1
400785.2	Health Promotion Practice 2
400286.3	Injury Prevention
400786.2	Professional Transition Project
400285.2	Public Health

Major - Health Services Management

M4002.1

Unit Set Structure

Students must complete the following eight units

400249.2	Ethical and Legal Issues in Health Care
400275.2	Health Planning Project
400966.2	Health Politics, Policy and Planning
400279.3	Health Services Financial Management
400277.3	Health Services Management
400787.2	Health Services Management Practice
400788.2	Health Services Workforce Management
400786.2	Professional Transition Project

Sub-major - Design Management

S3502DM.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units.

The following is a core unit.

| 300014.3 | Design Management 3: Organisational Skills for Designers |

The following are drawn from alternate Industrial Design units.

300012.3	Design Management 1: Product Design Audit
300013.3	Design Management 2: Corporate Image and Identity
300015.3	Design Management 4: Design Process

Sub-major - Industrial Graphics

S3502IG.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following five units

The following are core units.

300302.2	Industrial Graphics 1: Presentation
300282.2	Industrial Graphics 2: Transition
300310.3	Industrial Graphics 3: 3D Solids

The following are drawn from alternate Industrial Design units.

| 300312.3 | Industrial Graphics 4: Surface |
| 300315.3 | Industrial Graphics 5: Integrated |

From 2013 unit 300315 Industrial Graphics 5: Integrated will no longer be offered.

Sub-major - Sustainable Design

S3502SD.1

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units.

The following are core units.

300309.3	Sustainable Design: Life Cycle Analysis
300304.3	Sustainable Design: Materials Technology
300306.3	Sustainable Design: Sustainable Futures

Note: Unit 300309 Sustainable Design: Life Cycle Analysis to be replaced by unit 300570 Human-Computer Interaction from 2013.

The following unit is drawn from alternate Industrial Design units.

| 300735.2 | Automated Manufacturing |

Sub-major - Geography and Urban Studies

SM1027.1

Students in this Sub-major examine the geography of contemporary Australian cities and regions. Geography is the integrated study of people, places and environments. The cutting edge interests of today's Geographers include post-colonialism, the emergence of global information economies, indigenous issues, class and cultural disparities, population movement, sexuality and space, and the global diffusion of popular culture. Urban Studies is a newer discipline focused on social justice within the city, through its critical assessments of peoples' access to scarce urban resources, such as housing, transport, education and employment. The political, economic, and cultural forces that shape cities and urban policy are the key concerns of the Urban Studies curriculum. These applied interests in urban well-being and city structure are the intellectual basis for the Urban Planning profession. The Geography and Urban Studies Sub-major is a compulsory component of the University's accredited Planning course.

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Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete four of the following units

Autumn session

101589.2	Cities: Introduction to Urban Studies
101590.2	Cultural and Social Geographies
101593.2	Planning the City: Development, Community and Systems
101645.2	Transport, Access and Equity

Spring session

101646.2	Analysis of Spatial Data
101694.2	Geographies of Migration
101592.2	Housing Markets and Policy
101591.2	The Economics of Cities and Regions

Sub-major - Religion, Anthropology and Philosophy

SM1032.1

This multidisciplinary sub-major pursues critical and rational analysis of questions about individuals and societies; about human knowledge, culture and existence. It inquires into issues about human nature; the scope and limits of knowledge and belief; God and ethics; conflict and violence; ritual and myth; and religion, politics and culture. The sub-major provides students with rigorous training in analytic and creative thinking, intellectual independence and cultural and ethical awareness.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pool with no more than one unit at Level 1

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

101462.2	Understanding Islam and Muslim Societies

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100850.2	Buddhism in the Contemporary World
100852.2	Classics of Modern Philosophy
101856.1	Film and Philosophy
101464.3	Great Texts of Islam: Qur'an and Hadith
101843.2	Philosophy and Environment
101881.1	Philosophy and the Good Life
101867.1	The Ethical Life
101294.3	The Western Philosophical Tradition

Level 3 Unit Pool

101295.2	Aesthetics
101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
100863.3	Ethical Cultures
100998.4	Evolutionary Thinking
100961.4	Humanities Internship
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101465.2	Islamic Law in a Changing World
101724.2	Literary Animals
100875.4	Literature and Philosophy
100275.4	Philosophies of Love and Death
101761.2	Philosophy and the Visual
100879.2	Philosophy Today
101665.3	Politics and Religion
101003.2	Religion and Culture
101359.5	Sociology of Religion
100969.2	Theories of Conflict and Violence
101880.1	The Space of Literature
101798.2	Understanding Freedom
101010.3	What is the Human?
101471.2	Women in Arabic and Islamic Literature

Sub-major - Media and Visual Cultures

SM1033.1

The rapid flow of visual images with which we communicate today – on the internet, by web and moblogs – is a contemporary manifestation of the importance of visual cultures in everyday life. The Media and Visual Cultures sub-major area equips students with multidisciplinary knowledge and skills in critical art history and theory, digital media, film and television studies, philosophy, and cultural studies. It aims to create career ready graduates with the skills necessary to interpret the production and dissemination of visual images and their meanings in a variety of media as well as cultural and institutional contexts.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100245.2	Asian Cinema

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101248.3	Australian Art 1
101626.4	Children's Literature: Image and Text
101250.3	Digital Futures
101856.1	Film and Philosophy
10157.2	History and Theory of the Avant-Garde
100964.2	Introduction to Film Studies
101254.3	The Animated Image: Histories and Theories
10371.3	The Art Museum - from the Prince to the Public
100890.2	The Art of Landscape
101795.2	The Musical
10158.2	Writings on Art

Level 3 Unit Pool

400087.5	Applied Critical Methods
100959.2	Australian Art II
100989.2	Cinema and Realism
100990.2	Cinema, Culture, Memory
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
101001.3	Modernity and Cinema
101761.2	Philosophy and the Visual
101253.3	Public Memory and Commemoration
101006.2	Social Semiotics
101738.2	The Art Game: Fraud, Forgery, Theft and Perfidy
101266.2	The Art of Modern Life
101717.2	The Italian Renaissance Unpacked
101668.2	World Cinema

Sub-major - Chinese

SM1035.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

A sub-major in Chinese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100056.2	Chinese 101
100057.2	Chinese 102

Level 2 unit pool

101700.2	Language and Communication Skills 2A: Chinese
101705.2	Language and Communication Skills 2B: Chinese

Level 3 unit pool

100063.2	Chinese 302
100064.2	Chinese 303: Twentieth-Century Chinese Literature
100065.2	Chinese 304: Chinese Classical Literature
100066.2	Chinese 305: Chinese Cinema
100067.2	Chinese 307: The Cultural Context of China Intercultural Pragmatics
101454.2	Languages and Grammatical Concepts 3A: Chinese
101668.2	World Cinema

Sub-major - Italian

SM1036.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A sub-major in Italian is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

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- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100130.2	Italian 101
100131.2	Italian 102

Level 2 unit pool

101701.2	Language and Communication Skills 2A: Italian
101706.2	Language and Communication Skills 2B: Italian

Level 3 unit pool

101454.2	Intercultural Pragmatics
100138.2	Italian 303: Contemporary Italy in European and International Contexts
100140.1	Italian 305: Modern Literature
100141.2	Italian 306: Classical Literature
100143.2	Italian 308: Italian Cinema
101711.2	Languages and Grammatical Concepts 3A: Italian
101668.2	World Cinema
101669.2	World Literature in Translation

Sub-major - Japanese

SM1037.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

A sub-major in Japanese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100085.2	Japanese 101
100086.2	Japanese 102

Level 2 unit pool

101702.2	Language and Communication Skills 2A: Japanese
101707.2	Language and Communication Skills 2B: Japanese

Level 3 unit pool

101454.2	Intercultural Pragmatics
100093.2	Japanese 303: Contemporary Culture and Society
100094.1	Japanese 304: Discourse in Japanese
100096.2	Japanese 306: Japanese for Business
100098.1	Japanese 308: Japanese Textual Studies
101712.2	Languages and Grammatical Concepts 3A: Japanese
101668.2	World Cinema
101669.2	World Literature in Translation

Sub-major - Spanish

SM1038.1

Second language skills are a key competency for employment in an increasingly globalised society. Students undertake study of a language other than English (Arabic, Chinese, Italian, Japanese, Spanish) suited to their level of language proficiency and career aspirations. The major area includes units about specialized topics, including literature, cinema and culture. Competence in a modern language other than English opens doors to many careers in education, government and community-based industries and businesses.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

A sub-major in Spanish is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 unit pool

100145.2	Spanish 101
100146.2	Spanish 102

Level 2 unit pool

101703.2	Language and Communication Skills 2A: Spanish

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101708.2	Language and Communication Skills 2B: Spanish

Level 3 unit pool

400087.5	Applied Critical Methods
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101713.2	Languages and Grammatical Concepts 3A: Spanish
101791.2	Short Fiction in the Americas
100153.2	Spanish 303: Advanced Writing Skills
100154.2	Spanish 304: Advanced Speaking Skills
100155.2	Spanish 305: Contemporary Literature
100156.2	Spanish 306: Contemporary History
100157.2	Spanish 307: Classical Literature
100158.2	Spanish 308: Spanish Sociolinguistics
101668.2	World Cinema
101669.2	World Literature in Translation

100994.2	Consumer Culture
100858.3	Culture and Globalisation
101674.2	Global Histories of Food
101735.2	Global Politics
101736.2	Governing the Globe
100961.4	Humanities Internship
101454.2	Intercultural Pragmatics
101468.2	Islam, Media and Conflict
101733.2	Looking at Global Politics Through Film
101732.2	Media, The Everyday and Uneven Modernities
101666.2	Race, Identity and Globalisation
101717.2	The Italian Renaissance Unpacked
101848.1	Transnationalism and Migration
101831.2	Transport and the Making of the Modern World
101668.2	World Cinema
101669.2	World Literature in Translation
101830.2	WWII in Asia and the Pacific

Sub-major - Global Studies

SM1040.1

What does it mean to live in an increasingly globalised world? Global Studies offers students the opportunity to acquire key competencies in cross-cultural communication and global issues to act as socially aware global citizens in international settings. Global Studies addresses issues such as consumer and popular culture, global histories of food and technology, the interconnection of race, identity and transnational migration and intercultural pragmatics. Students have the opportunity to complete a semester of study abroad.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at Level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

101737.2	World Politics: An Introduction

Level 2 unit pool

101857.2	Doing Business in China
101543.2	India: Global Contexts
100871.3	International Texts and Contexts
101797.2	Political Terror

Level 3 unit pool

400087.5	Applied Critical Methods
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice

Sub-major - History and Political Thought

SM1041.1

Since the revival of humanist studies in Renaissance Europe in the 15th century, universities have placed history and political thought at the heart of studies in the humanities. Through study of the political thought and social, political and cultural history of Australian, Asian and European societies, students gain knowledge and critical skills relevant to a variety of careers in education, government and non-governmental organizations. Study of the writings of political thinkers from ancient Greece and Rome, such as Plato and Cicero, and the early modern period, such as Hobbes and Machiavelli, to noted 19th century figures, such as Hegel and Marx, prepare students to engage with contemporary issues of governance, such as sovereignty, power, opportunity, property, civic freedom and social justice.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100848.2	Australian Politics
100868.2	Foundations of Modern Australia
100873.3	Inventing Modernity
101737.2	World Politics: An Introduction

Level 2 unit pool

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101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100869.2	Foundations of Modern Europe 1500-1800
101543.2	India: Global Contexts
100001.3	Keeping the Past
101843.2	Philosophy and Environment
101797.2	Political Terror
100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
100882.3	Politics of Sex and Gender
63111.3	Special Topics in Asian and International Studies
101867.1	The Ethical Life
101404.3	The History of Modern Indonesia
101294.3	The Western Philosophical Tradition
101871.1	War
100293.3	War and Society: 20th Century Australia

Level 3 unit pool

400087.5	Applied Critical Methods
100966.3	American History, 1898-1945
100986.2	Australian History 1860-1920
100987.3	Australian History Since 1920
101685.3	Australian Indigenous History
101872.1	Australian Indigenous History from Federation to Reconciliation
100991.2	Citizenship Ancient and Modern
100852.2	Classics of Modern Philosophy
101799.2	Convicts and Settlers - Australian History 1788 - 1840
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100863.3	Ethical Cultures
100864.2	Europe in the Twentieth Century
100254.3	Exploring Local History
101844.2	Feminist Theories
101674.2	Global Histories of Food
101735.2	Global Politics
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100963.3	Interpreting Australia: Australian Historians and Historiography
101801.2	Interpreting Fascism
101823.2	Lay Participation in Justice Processes
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
101665.3	Politics and Religion
100278.2	Politics of Post-War Japan
100908.2	Race Politics
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
100969.2	Theories of Conflict and Violence
101831.2	Transport and the Making of the Modern World
101798.2	Understanding Freedom

101731.3	Understanding Power
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Sub-major - Asian Studies and International Relations

SM1042.1

This sub-major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study modern and contemporary Asia, the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The sub-major area includes a range of units concerned with the United States, Europe and Australia as well as with Asia itself, and units in international relations. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Students are encouraged to undertake a sub-major in an Asian language in conjunction with the major. Employment opportunities may be found in the State and Commonwealth public service, overseas organisations, trade and tourist organisations, business and industry, education and research

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools:

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 Unit Pool

101737.2	World Politics: An Introduction

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100847.2	Asia and the West: The Imperial Encounter
100245.2	Asian Cinema
100850.2	Buddhism in the Contemporary World
100855.2	Contemporary Japan: Culture and Society
101857.2	Doing Business in China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101543.2	India: Global Contexts
100872.2	International Politics of North Asia

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100904.2	Politics and Business in Asia
100277.4	Politics of Australia and Asia Relations
63111.3	Special Topics in Asian and International Studies
101404.3	The History of Modern Indonesia
101871.1	War

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
400087.5	Applied Critical Methods
101249.2	Culture and Thought in Twentieth-Century China
100903.2	Democracy in Asia
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
100962.2	International Politics of the Southeast Asian Region
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
101667.3	The External Relations of the European Union
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
101405.2	The Politics of Contemporary Indonesia
101866.1	United States Government and Politics
101375.3	War and Peace
100294.3	Warlords, Artists and Emperors: Power and Authority in Premodern Japan
100971.2	Which New World Order?
101830.2	WWII in Asia and the Pacific

Sub-major - Cultural and Social Analysis

SM1043.1

Cultural and Social Analysis is an interdisciplinary sub-major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This sub-major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic productions, and education, communication, welfare or health services, in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the Level 2/3 units from the following pools

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101409.2	Aboriginal Cultural Texts
100854.3	Contemporary Popular Cultures
100871.3	International Texts and Contexts
101251.2	Introduction to Psychoanalysis
100273.3	New Ethnicities, Old Racisms
100882.3	Politics of Sex and Gender
100281.3	Sexual Culture/s
100884.2	Social Inequalities
100886.2	Special Topics in Cultural and Social Analysis
100889.2	Technocultures
101867.1	The Ethical Life
100291.5	Urban Life/Urban Culture
101879.1	Women with Muslim Identity
100298.2	Youth Cultures and Moral Panics

Level 3 Unit Pool

400087.5	Applied Critical Methods
101265.2	Children's Culture
100990.2	Cinema, Culture, Memory
101870.1	Climate Change and Culture
100992.3	Communication: Power and Practice
100858.3	Culture and Globalisation
100996.3	Death and Culture
100860.3	Emotions, Culture and Community
100998.4	Evolutionary Thinking
101844.2	Feminist Theories
101716.3	Healing and Culture
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101739.3	Literature and Trauma
101732.2	Media, The Everyday and Uneven Modernities
101800.2	Media, Violence, Protest, Terror
100877.3	Multicultural Studies
101252.2	Psychoanalytic Criticism
101253.3	Public Memory and Commemoration
101003.2	Religion and Culture
101005.4	Representing Crime
101006.2	Social Semiotics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101008.2	Technologies of Racism
101009.3	The Body in Culture
101848.1	Transnationalism and Migration
101798.2	Understanding Freedom
101731.3	Understanding Power
101010.3	What is the Human?

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Sub-major - English, Text and Writing

SM1044.1

The English, Text and Writing sub-major invites students to explore contemporary approaches to language, literary study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. English, Text and Writing focuses on the imaginative workings of language, and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at Level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100641.3	Approaches to Text

Level 2 unit pool

101626.4	Children's Literature: Image and Text
100900.3	Comedy and Tragedy
101408.2	Critical Discourse Analysis
101452.2	History of the English Language
100870.2	Hypertext Fictions
100871.3	International Texts and Contexts
100964.2	Introduction to Film Studies
100505.2	Special Topics in English, Text and Writing
101869.1	Studies in Postcolonial Literature
101795.2	The Musical
100893.4	The Novel
101873.1	The Sound of Language
101455.3	The Structure of English
100896.3	Writing Fiction

Level 3 unit pool

400087.5	Applied Critical Methods
100845.3	American Literature
100849.4	Australian Textual Studies
101242.3	Children's Literature
100856.4	Creative Non-Fiction
100859.3	Creative Writing Project
100256.4	Film and Affect
100866.3	Film and Drama
100961.4	Humanities Internship

101724.2	Literary Animals
100875.4	Literature and Philosophy
101739.3	Literature and Trauma
100874.4	Literature, History and Culture
101033.4	Modernism
101001.3	Modernity and Cinema
101406.2	Queering Text
101650.3	Race in Literature
101005.4	Representing Crime
101791.2	Short Fiction in the Americas
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English
101471.2	Women in Arabic and Islamic Literature
101668.2	World Cinema
101669.2	World Literature in Translation
101670.3	Writing and Society
100895.4	Writing For Performance
101011.3	Writing Poetry
100582.2	Writing Portfolio
101796.1	19th Century American Literature
101880.1	The Space of Literature

Sub-major - Islamic Studies

SM1045.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches.

Location

Campus	Mode
Bankstown Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at level 1

Level 2 unit pool

101464.3	Great Texts of Islam: Qur'an and Hadith
100273.3	New Ethnicities, Old Racisms

Level 3 unit pool

101688.2	Anthropology of Religion
400087.5	Applied Critical Methods
101466.2	Ethical Traditions in Islam
100961.4	Humanities Internship
101822.3	Islam in the West
101463.4	Islam in the Modern World
101467.2	Islam in Southeast Asia
101468.2	Islam, Media and Conflict
101465.2	Islamic Law in a Changing World

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100877.3	Multicultural Studies
101359.5	Sociology of Religion
101792.2	Texts in Contemporary Arab Society and Culture
101783.2	The International Relations of the Middle East Since 1945
101471.2	Women in Arabic and Islamic Literature

Sub-major - Linguistics

SM1046.1

Through study of what language is and how it works, students gain conceptual tools and knowledge relevant to the relationship of language and society as well linguistics-related disciplines, such as Sociolinguistics, Psycholinguistics, Developmental Linguistics, Bilingualism, and other applied linguistics areas. Understanding of the relationship between language learning, communicative competence and cultural practices, both in the Australian context and in a global context, provides a foundation for many careers including primary and secondary teaching, policy analysis, communication, social and welfare services in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	External

Unit Set Structure

Students must complete 40 credit points from the following pools with no more than one unit at level 1.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1 unit pool

100194.2	Introduction to Interpreting
100195.2	Introduction to Translation

Level 2 unit pool

101452.2	History of the English Language
100928.3	Linguistics
101873.1	The Sound of Language
101302.2	Translation Technologies

Level 3 unit pool

400087.5	Applied Critical Methods
101449.2	Bilingualism and Biculturalism
101441.2	English Semantics and Pragmatics
101454.2	Intercultural Pragmatics
101709.2	Languages and Grammatical Concepts 3A: Arabic
101710.2	Languages and Grammatical Concepts 3A: Chinese
101711.2	Languages and Grammatical Concepts 3A: Italian
101712.2	Languages and Grammatical Concepts 3A: Japanese

101713.2	Languages and Grammatical Concepts 3A: Spanish
101451.2	Second Language Acquisition
101721.2	Second Language Learning and Teaching
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics
101832.2	Talking Normal: Sociolinguistics and Modern Literature
101453.2	Text and Discourse in English

Sub-major - Indigenous Australian Studies

SM1049.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101751.2	Contextualising Indigenous Australia (Day Mode)
101752.1	Pigments of the Imagination

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)
101757.1	The Making of the `Aborigines'

Sub-major - Indigenous Economics

SM1050.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work

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more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101751.2	Contextualising Indigenous Australia (Day Mode)
101753.2	Revaluing Indigenous Economics (Day Mode)
101757.1	The Making of the `Aborigines'

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Sub-major - Indigenous Australian Creative Expressions

SM1051.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

101751.2	Contextualising Indigenous Australia (Day Mode)
101754.2	From Corroborees to Curtain Raisers (Day Mode)
101755.1	From Ochre to Acrylics to New Technologies

Choose one of

101758.1	Learning through Indigenous Australian Community Service (Day Mode)
101759.1	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Sub-major - Education Studies

SM1067.1

The Education Studies sub-major comprises a foundation pool of units which addresses key issues in contemporary educational thinking and practice. Education has a key role to play in bridging the gap between social advantage and disadvantage, in transforming the lives of individuals and their families and building capacity within communities.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points from the following units

101263.1	Education and Transformation
101663.1	Education for Sustainability
101661.1	Education in a Cosmopolitan Society
101874.2	Experiential Learning in Communities (ELC)
101259.2	Learning and Creativity
101662.1	Young People, Their Futures and Education

Sub-major - Psychological Studies

SM1069.1

The Psychological Studies sub-major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies sub-major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to to enrol in an accredited Psychology sequence need to complete the Psychology key program of 200 credit points.

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Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Unit Set Structure

This sub-major is restricted to students enrolled in 1604 - Bachelor of Arts, 1706 - Bachelor of Arts, 1652 - Bachelor of Arts (Pathway to Teaching Secondary) or 1655 - Bachelor of Arts (Dean''s Scholars).

Students must complete 40 credit points as follows

100013.3	Experimental Design and Analysis
101183.2	Psychology: Behavioural Science
101184.2	Psychology: Human Behaviour

Choose one of

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
101676.2	Human Learning
101680.3	Perception

Sub-major - Property Investment

SM2020.1

The Property Investment sub-major is available to all undergraduate students other than those completing the Property Key Program or Major. This sub-major is useful to students in the finance and related areas who want to expand their expertise in property investment.

Location

Campus	Mode
Parramatta Campus	External
Parramatta Campus	Internal

Unit Set Structure

Students must complete the following four units.

200598.2	Property Development
200597.2	Property Finance and Tax
200749.2	Property Investment
200750.2	Property Portfolio Analysis (V2)

Sub-major - Computer Systems

SM3000.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300092.1	Computer Architecture
300096.5	Computer Organisation
300149.3	Operating Systems
300167.3	Systems Programming 1

Sub-major - Systems Administration

SM3001.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300103.3	Data Structures and Algorithms
300149.3	Operating Systems
300165.3	Systems Administration Programming
300167.3	Systems Programming 1

Sub-major - Systems Security

SM3002.1

This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300128.3	Information Security
300143.3	Network Security
300149.3	Operating Systems
300167.3	Systems Programming 1

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Sub-major - Systems Programming

SM3003.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300103.3	Data Structures and Algorithms
300149.3	Operating Systems
300167.3	Systems Programming 1

Choose one of

300115.2	Distributed Systems and Programming
300168.2	Systems Programming 2

Sub-major - Formal Systems

SM3004.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300103.3	Data Structures and Algorithms
300121.2	Formal Languages and Automata
300404.2	Formal Software Engineering

Choose one of

200193.2	Abstract Algebra
200033.5	Applied Statistics
300093.3	Computer Graphics
300368.2	Intelligent Systems
200042.3	Introduction to Operations Research
200237.3	Mathematics for Engineers 1

Sub-major - Applied Mathematics

SM3005.1

This sub major is available to students who commenced prior to 2013. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

200237.3	Mathematics for Engineers 1

Choose three of

200193.2	Abstract Algebra
200023.3	Analysis
200033.5	Applied Statistics
200042.3	Introduction to Operations Research
200027.2	Linear Algebra
200238.2	Mathematics for Engineers 2
200242.3	Mathematics for Engineers 3

Sub-major - Web Application Development (for Computing Students)

SM3006.1

Note: Unit 300574 Internet Structures and Web Servers will no longer be available from 2013 and students are advised to enrol in unit 300130 Internet Programming in its place. This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300111.2	Developing Web Applications with XML
300574.2	Internet Structures and Web Servers
300582.2	Technologies for Web Applications
300583.2	Web Systems Development

Note: Unit 300574 Internet Structures and Web Servers will no longer be available from 2013 and students are advised to enrol in unit 300130 Internet Programming in its place.

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Sub-major - Web Application Development (for Non-Computing Students)

SM3007.1

This sub-major is available to all UWS students except those enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300580.2	Programming Fundamentals
300582.2	Technologies for Web Applications
300583.2	Web Systems Development

Choose one of

300569.2	Computer Security
300104.4	Database Design and Development
300111.2	Developing Web Applications with XML
300570.3	Human-Computer Interaction
300574.2	Internet Structures and Web Servers

Sub-major - Networking

SM3008.1

This sub-major is available to all students except those enrolled in the Bachelor of Computing (Networks).

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300565.2	Computer Networking
300095.4	Computer Networks and Internets
300575.2	Networked Systems Design

Choose one of

300088.1	Broadband Networking
300143.3	Network Security
300166.2	Systems and Network Management

Sub-major - Health Information Management

SM3009.1

This sub-major deals with the management of Health Information and the management and analysis of that data via databases. This sub-major is available to all students except those enrolled in the Health Informatics key program within the Bachelor of Computing course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

200036.3	Data Mining and Visualisation
300104.4	Database Design and Development
300567.3	e-Health
300566.2	Introduction to Health Informatics

Sub-major - Health Information Applications

SM3010.1

This sub-major will deal with the application of approaches, tools and techniques and the development of programs appropriate for Health Information systems. This sub-major is available to all students except those enrolled in the Health Informatics key program within the Bachelor of Computing course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300567.3	e-Health
300566.2	Introduction to Health Informatics
300568.2	Services Computing in Healthcare
300582.2	Technologies for Web Applications

Note: 300582 Technologies for Web Applications requires 300580 Programming Fundamentals as a pre-requisite.

Sub-major - Entertainment Computing

SM3011.1

This sub-major is available to all students.

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Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300093.3	Computer Graphics
300491.2	Games Technology
300580.2	Programming Fundamentals

Choose one of

300492.2	Games Theory and Design
300862.1	Video Games Development

Please note 300492 Games Theory and Design will be replaced by 300862 Video Games Development from 2012.

Sub-major - Mathematics

SM3025.1

This sub-major is available to all students. This sub-major may meet the NSW Institute of Teachers accreditation requirements for teaching Mathematics as a second subject in NSW state high schools.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300672.2	Mathematics 1A
300673.2	Mathematics 1B

Choose two of

200028.3	Advanced Calculus
200030.4	Differential Equations
200027.2	Linear Algebra

Sub-major - Statistics

SM3026.1

This sub major is available to students who commenced prior to 2012. SM3026 Statistics replaced by SM3039 Statistics from 2012.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Choose at least one of

200033.5	Applied Statistics
300104.4	Database Design and Development
300606.2	Foundations of Statistical Modelling and Decision Making

Choose at least one of

200036.3	Data Mining and Visualisation
200037.4	Regression Analysis & Experimental Design
200039.2	Surveys and Multivariate Analysis
200038.3	Time Series and Forecasting

Sub-major - Computational Decision Making

SM3027.1

This sub major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

200025.2	Discrete Mathematics

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Choose two of

300606.2	Foundations of Statistical Modelling and Decision Making
200042.3	Introduction to Operations Research
200027.2	Linear Algebra
300670.2	Optimisation Techniques
300671.2	Principles and Practice of Decision Making
200044.1	Simulation Techniques

Students enrolled in Bachelor of Information and Communications Technology course may replace 200025 Discrete Mathematics with 300699 Discrete Structures and Complexity.

Note: For students who want to complete a Mathematics sub-major, but may not necessarily want to qualify for NSW Institute of Teachers accreditation, 200029 Numerical Analysis would be added to the list of Level 2 units and

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200024 Mathematical Finance would be added to the list of Level 3 units.

Sub-major - Knowledge Discovery and Data Mining

SM3028.1

This sub major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete 40 credit points as follows

200036.3	Data Mining and Visualisation
300104.4	Database Design and Development
300606.2	Foundations of Statistical Modelling and Decision Making

Choose one of

200263.4	Biometry
300700.5	Statistical Decision Making
200032.5	Statistics for Business

Sub-major - Construction Economics

SM3029.1

This sub-major is a requirement for membership of the Australian Institute of Quantity Surveyors and is a useful course of study for those interested in the area of cost control and project planning.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

200503.2	Construction Information Systems
300726.2	Estimating 2
200487.3	Quantity Surveying 2
300748.2	Quality and Value Management

Sub-major - IT Support

SM3031.1

This sub-major is only available to students enrolled in the Bachelor of Information and Communications Technology course.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300136.4	I.T. Support Practicum
300576.2	Networking Workshop
300150.3	PC Workshop

Choose one of

200120.1	E-Business Fundamentals and Systems
200083.2	Marketing Principles
300167.3	Systems Programming 1

Sub-major - Computer Engineering

SM3032.1

This sub-major is available to students other than those enrolled in B Engineering (Computer) Key Program. This sub-major includes core subjects of computer engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300096.5	Computer Organisation
300029.3	Engineering Visualization
300167.3	Systems Programming 1

Choose one of

300092.1	Computer Architecture
300044.2	Microcontrollers and PLCs
300149.3	Operating Systems

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Sub-major - Construction

SM3033.1

This sub-major is available to any student in UWS other than those enrolled in Bachelor of Construction Management or Bachelor of Housing. This sub-major includes core subjects of construction. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300707.2	Building 2
BG302A.1	Building Regulation Studies
200471.3	Construction Technology 5 (Envelope)
MG313A.1	Project Management

Sub-major - Electrical Engineering

SM3034.1

This sub-major is available to students other than those enrolled in B Engineering (Electrical) Key Program. This sub-major includes core subjects of electrical engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300071.2	Electrical Machines 1
300481.2	Engineering Electromagnetics

Choose two of

300070.4	Electrical Drives
300024.2	Electronic Systems Design
300026.3	Energy Systems

Sub-major - Environmental Engineering

SM3035.1

This sub-major is available to students other than those enrolled in B Engineering (Environmental) Key Program. This sub-major includes core subjects of environmental

engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

EH321A.1	Air Quality Assessment & Management (UG)
300469.2	Introductory Chemistry
EY101A.1	Terrestrial Environment Management
MG309A.2	Water and Waste Management

Sub-major - Food Technology - Secondary Teaching

SM3038.1

The food technology sub-major brings together food science and nutrition with education studies to meet the graduate requirements for teaching in food technology as a second teaching area. This sub-major includes specialised studies in food processing, new food product development, nutrition, contemporary food issues, and the food marketplace relevant to the Australian food industry. The program has strong industry links, well-equipped facilities including food processing pilot plant and modern kitchen facilities.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

Students must complete four units as follows

Year 1

Spring session

300805.1	Food Science 1

Year 2

Autumn session

300842.2	Food Science 2

Choose two of

Year 2

Autumn session

300933.1	Nutrition and Health 1

Year 2

Spring session

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300879.1   Experimental Foods

Year 3

Autumn session

300871.1   Culinary Science

Year 3

Spring session

300915.1   Food Product Development
300904.1   Advanced Food Science and Technology

Sub-major - Statistics

SM3039.1

This sub-major covers topics in statistics from an introductory level to exploring complex statistical techniques that are used to analyse and interpret data generated in many disciplines. Thus students contemplating honours in any discipline should seriously consider taking this sub-major as part of their undergraduate degree. It is open to all UWS students.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

The Statistics sub major is available to all UWS undergraduate students except those enrolled in the 3679 Bachelor of Science (Mathematical Science) course.

Students must complete four units as follows

200033.5   Applied Statistics
200037.4   Regression Analysis & Experimental Design
200038.3   Time Series and Forecasting

Choose one of

200263.4   Biometry
200032.5   Statistics for Business
300700.5   Statistical Decision Making

Sub-major - Aquatic Environments

SM3040.1

Aquatic and marine environments play vital roles in providing food, water, recreation and other ecosystem services to human society, as well as providing habitat for important species that make up global biodiversity. This submajor will equip students with the background knowledge and training to work in aquatic and marine environments, assess water quality to learn skills in inquiry and problem solving and understand legislation on water, so that they can contribute beneficially to management and/or conservation of waterways and oceans and the biodiversity within them.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

The Aquatic Environments sub major is available to all UWS undergraduate students except those enrolled in the M3046 Aquatic Biology Major

Students must complete the following four units

Level 1

300824.1   Management of Aquatic Environments
300814.1   Water Quality Assessment and Management

Level 3

300929.1   Aquatic Ecology
300870.1   Water in the Landscape

Sub-major - Biochemistry and Molecular Biology

SM3041.1

This sub-major will develop knowledge and skills in biochemistry and molecular biology important in industrial or research-based employment (biotech companies, pathology, quality assurance, university and hospital labs and scientific sales, government policy analysis). Students will read, critique and evaluate research so that they develop independent learning skills and the confidence needed to deal with the rapid expansion of content in this area of Biology.

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

The Biochemistry and Molecular Biology sub major is available to all UWS undergraduate students except those enrolled in the M3045 Biochemistry and Molecular Biology Major.

Students must complete four units as follows

Level 2

300936.1   Functional Proteins and Genes
300848.1   Metabolism
300817.1   Molecular Biology

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Level 3

Choose one of

300927.1	Molecular Medicine
300820.1	Genes, Genomics and Human Health

Sub-major - Conservation Biology

SM3042.1

Conservation biology has emerged as a field of study from a synthesis of the ecological, demographic, genetic and societal risks faced by small natural populations. This submajor equips students with skills in fundamental biology, in the ecology of populations and communities, in population genetics and in the legal conservation framework to enable them to work in this area.

Location

Campus	**Mode**
Hawkesbury Campus	Internal

Unit Set Structure

The Conservation Biology sub major is available to all UWS undergraduate students except those enrolled in the M3049 Conservation Biology Major

Students must complete four units as follows

Level 1

Choose one of

300802.1	Biodiversity
300813.1	Wildlife Studies

Level 2

300839.1	Ecology
300845.1	Genetics

Level 3

300855.1	Conservation Biology

Sub-major - Geochemistry

SM3043.1

This submajor is available to students who commenced prior to 2013. This submajor recognises the relevance of geochemistry in our rapidly expanding mining and minerals industries, and its importance in the understanding of related environmental issues. It offers a strong grounding in key areas of geochemistry and chemistry, and emphasises the integration of theory and practical skills and their relevance to real world applications in industry, research and the environment.

Location

Campus	**Mode**
Parramatta Campus	Internal

Unit Set Structure

The Geochemistry sub major is available to all UWS undergraduate students except those enrolled in the M3053 Geochemistry Major

Students must complete four units as follows

Level 1

300822.1	Introduction to Earth Science
300809.1	Introductory Geochemistry

Level 2

300846.1	Geochemical Systems

Level 3

300857.1	Environmental Geochemistry

Sub-major - Microbiology

SM3044.1

Microorganisms impact on all aspects of our lives. A microbiology submajor will equip students with the skills and knowledge of microbiology and molecular microbiology relevant to employment in research laboratories and industries including biotechnology companies, medical and environmental laboratories, food, wine and pharmaceutical companies, quality assurance and scientific sales.

Location

Campus	**Mode**
Hawkesbury Campus	Internal

Unit Set Structure

The Microbiology sub major is available to all UWS undergraduate students except those enrolled in the M3055 Microbiology Major.

Students must complete four units as follows

Level 2

300833.1	Microbiology 1
300896.1	Microbiology 2

Level 3

300866.1	Analytical Microbiology
300826.1	Medical Microbiology

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Sub-major - Zoology

SM3045.1

This submajor will allow students to develop scientific understanding of how animals function and interact with their environment; from their ecology and evolution; to physiology and biochemistry of tissues and major organ systems, as well as down to structure and function of biomolecules and cells.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

The Zoology sub major is available to all UWS undergraduate students except those enrolled in the M3056 Zoology Major.

Students must complete four units as follows

Level 1

300813.1	Wildlife Studies

Level 2

300834.1	Animal Health and Welfare

Level 3
Choose two of

300878.1	Animal Behaviour
300855.1	Conservation Biology
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity

Sub-major - Sustainable Environmental Management

SM3046.1

Solution to environmental problems requires both a technical/scientific 'fix', and an agreed social implementation, or management 'fix'. This submajor covers the essentials of environmental management as an academic discipline, giving students knowledge and skills in the social, legislative and planning frameworks within which environmental practitioners must work to implement solutions to environmental problems.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

The Sustainable Environmental Management sub major is available to all UWS undergraduate students except those enrolled in the M3050 Environmental Management Major.

Students must complete four units as follows

Level 2

300840.1	Environmental Planning and Climate Change

Level 3

300841.1	Environmental Regulation and Policy
300858.1	Environmental Risk Management
300860.1	Urban Environment

Sub-major - Climate Change

SM3048.1

One of the major problems society faces is how to move to an economy and way of life that is sustainable for our planet. This submajor equips students with the skills to address the scientific issues behind global climate change; what makes it happen, and how we can reduce or mitigate its impacts on the earth and its biota.

Location

Campus	Mode
Hawkesbury Campus	Internal

Unit Set Structure

The Climate Change sub major is available to all UWS undergraduate students except those enrolled in the M3048 Climate Change Major.

Students must complete four units as follows

Level 2

300837.1	Climate Change Science
300840.1	Environmental Planning and Climate Change

Level 3

300909.1	Biological Adaptation to Climate Change
300856.1	Ecosystem Carbon Accounting

Sub-major - Immunology and Cell Biology

SM3049.1

This sub-major will equip students with knowledge and skills in immunology, cell and molecular biology to allow students to enter industrial or research-based employment in this area (biotech companies, pathology, quality assurance, university and hospital labs and scientific sales, government policy analysis). As this area has expanding knowledge and technologies, outcomes also include the

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ability to read, critique and evaluate emerging research with the view to becoming a life-long learner in the field.

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Unit Set Structure

Students must complete four units as follows

Level 2

300847.1	Immunology
300817.1	Molecular Biology

Level 3

300850.1	Advanced Cell Biology
300905.1	Advanced Immunology

Sub-major - Physics

SM3050.1

The physics sub-major is designed to provide the basic curriculum for students who have an interest in physics while intending to pursue a degree in some other field. The sub-major offers units that practicing physicists would normally be expected to have studied. Consequently, those who already have in mind a career in teaching,research, industry or education will graduate with a basic, solid preparation in Physics.

Location

Campus	Mode
Campbelltown Campus	Internal

Unit Set Structure

The Physics sub major is available to all UWS undergraduate students. These are core units from 3674 Bachelor of Medical Science (Nanotechnology).

Students must complete four units as follows

Level 1

300828.1	Physics 1
300829.1	Physics 2

Level 2

300930.1	Classical Physics and Advanced Technologies

Level 3

300923.1	Quantum Physics

Sub-major - Civil Engineering

SM3621CIVE.1

This sub-major is available to students other than those enrolled in the B Engineering (Civil) Key Program. This sub-major includes core subjects of civil engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300736.2	Concrete Structures (UG)
300730.2	Steel Structures
300732.2	Structural Analysis
300739.2	Timber Structures (UG)

Sub-major - Ecological Engineering

SM3621ECOE.1

This sub-major is available to students other than those enrolled in the B Engineering (Civil) or (Environmental) Key Program. This sub-major includes core subjects of ecological engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300482.2	Engineering Geology and Concrete Materials
300737.3	Environmental Engineering
300486.2	Infrastructure Engineering
300738.3	Surveying for Engineers

Sub-major - Robotics and Mechatronics

SM3621R&M.1

This sub-major is available to students other than those enrolled in B Engineering (Robotics and Mechatronics) Key Program. The units forming this sub-major provide a comprehensive introduction to essential aspects of mechatronics and robotics. It is intended as a coherent set of units in mechanics of machines, automation and robotics that can add to engineering knowledge gained in other

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fields of engineering. The sub-major may be taken by students in non-engineering areas provided they satisfy the unit prerequisites and assumed knowledge.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Student must complete 40 credit points as follows

300735.2	Automated Manufacturing
300035.3	Kinematics and Kinetics of Machines
300044.2	Microcontrollers and PLCs

Choose one of

300043.3	Mobile Robotics
300056.3	Robotics

Sub-major - Soil Engineering

SM3621SOE.1

This sub-major is available to students other than those enrolled in B Engineering (Civil) or (Environmental) Key Programs. This sub-major includes core subjects of soil engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300482.2	Engineering Geology and Concrete Materials
300485.3	Foundation Engineering
200237.3	Mathematics for Engineers 1
300731.2	Soil Engineering

Sub-major - Structural Engineering

SM3621STRE.1

This sub-major is available to students other than those enrolled in the B Engineering (Civil) or (Environmental) Key Programs. This sub-major includes core subjects of structural engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300463.2	Fundamentals of Mechanics
300733.2	Introduction to Structural Engineering
300040.2	Mechanics of Materials
300732.2	Structural Analysis

Sub-major - Water Engineering

SM3621WATE.1

This sub-major is available to students other than those enrolled in B Engineering (Civil) or (Environmental) Key Programs. This sub-major includes core subjects of water engineering. It provides a comprehensive introduction to essential aspects of the discipline.

Location

Campus	Mode
Penrith Campus	Internal

Unit Set Structure

Students must complete the following four units

300479.1	Drainage Engineering
200237.3	Mathematics for Engineers 1
300740.1	Water Engineering
300734.1	Water Resources Engineering (UG)

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Units

101796.1 19th Century American Literature

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit focuses on literature from the American Renaissance through to the end of the Civil War. Issues to be examined will include some of the following: the construction of a national literature, the ideology of American Exceptionalism, the tension between the religious and the secular, and the clash between freedom and slavery. Texts may include fiction, poetry, and drama.

400958.1 A Field Study: Comparative Studies of Health Care Delivery

Credit Points 10 **Level** 2

Special Requirements

Students enrolled in this unit will be visiting health care facilities, and may require a criminal record check, and working with children check. Students will need a valid passport and visa that qualify them to travel to the country of study Students will be required to travel as a member in the study group to the country of study. Course charges are available only as a package deal, including accommodation and airfare, travel and health insurance. A deposit is to be paid at the time of registration. In the event of late withdrawal, this deposit is non-refundable.

....

This unit is designed to enable students studying health courses to gain insight into, and develop an understanding of health care delivery and contemporary issues confronting health care in Australia and in the study country in this study-abroad unit.

101882.1 A History of Modern Global Buddhism

Credit Points 10 **Level** 2

Equivalent Units

63120 - Communication and Culture in Asia 2: Performing Asian Cultures and Identities

Incompatible Units

100850 - Buddhism in the Contemporary World

Special Requirements

Successful completion of 40 credit points at Level 1.

....

A history of Buddhism and its spread through Asian and more recently to the West, introducing its principal beliefs and practices, the diversity of its manifestations, its political, cultural, and social impact. This unit is a history of this current global religion in its social, cultural and political context.

101409.2 Aboriginal Cultural Texts

Credit Points 10 **Level** 2

Equivalent Units

G2004 - Aboriginal Cultural Texts

Special Requirements

Successful completion of 60 credit points at Level 1.

....

Representations of Indigenous Australians are to be found within a broad range of texts produced by both Indigenous and non-Indigenous people. The texts give us access to the shifting conceptualisations about both the nature of Aboriginality, and the relations between Indigenous and non-Indigenous Australians. Examination and comparison of dominant as well as self-representations of Indigenous Australians in a variety of texts and films will enable students to deconstruct the cultural processes through which their own identities are produced. Texts and their readings; textual deconstruction; Saussure's basic semiotic analysis; signification and the production of cultural meaning; Barthes' myth and second level significations; function of the metaphor; genre and intertextuality; narrative form the 'realism' effect; grand narratives and ideology; narrator function and audience positioning.

200193.2 Abstract Algebra

Credit Points 10 **Level** 3

Prerequisite

200025.2 Discrete Mathematics

Equivalent Units

14702 - Advanced Algebra, 14383 - Algebra 3

....

This unit develops algebraic thought to a high level. The abstract concepts involved in the main topics (group theory and number theory) have many applications in science and technology, and the unit includes an application to cryptography.

700056.2 Academic English (UWSCFS)

Credit Points 10 **Level** Z

Equivalent Units

900021 - Academic English (UWSC)

Special Requirements

Students must be enrolled at UWS College.

....

This unit is designed to improve English proficiency across the four macro skills, of overseas and local students who wish to progress to university studies. In particular, the course aims to help students access the conventions of academic English by focusing on attitudes to knowledge, the ways in which ideas are structured and presented and surface language correctness. In addition, the course encourages students to develop strategies to maximize their learning and to reflect on their own learning styles.

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University of Western Sydney

200101.3 Accounting Information for Managers

Credit Points 10 **Level** 1

Corequisite

200336.3 Business Academic Skills

Equivalent Units

61111 - Intro Financial Accounting, AC105A - Finance and Accounting, H1746 - Financial and Management Accounting 1, MG324A - Management 3.2, 200103 - Accounting Reports and Decisions

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major. Co-requisite 200336 - Business Academic Skills only applies to students in courses 2739 Bachelor of Business and Commerce, 2741 Bachelor of Business and Commerce (Advanced Business Leadership) and 2740 Bachelor of Business and Commerce/Bachelor of Laws.

....

This unit provides exposure to financial and management accounting information from a user of accounting information viewpoint. The unit aims to provide breadth of awareness and knowledge in relevant fields of accounting essential to decision making for managers.

700005.1 Accounting Information for Managers (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

200101 - Accounting Information for Managers; 700078 Accounting Information for Managers (Creative Industries)

Special Requirements

Students must be enrolled at UWS College.

....

This unit provides exposure to financial and management accounting information from a user of accounting information viewpoint. The unit aims to provide breadth of awareness and knowledge in relevant fields of accounting essential to decision making for managers.

200534.3 Accounting Information Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Basic financial and management accounting fundamentals, including use of spreadsheets in accounting and the use of a computerised accounting package.

Prerequisite

200116.4 Management Accounting Fundamentals

Equivalent Units

AC202A - Accounting Information Systems, H3331 - Accounting Information Systems, 61141 - Accounting Information Systems, 200114 - Issues in Accounting Information Systems

....

This unit considers the design and implementation of accounting information systems as a data model for resource allocation and management of an organisation. It includes consideration of current trends in information management and the changing regulatory requirements.

400873.1 Acupuncture Techniques

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge equivalent to Channels and Points 1 and 2.

Equivalent Units

400350 - Acupuncture 2

....

This unit consolidates and extends students' knowledge of acupuncture theory and practice, and provides further opportunity to develop practical skills. Students are introduced to the theory of point combinations and the development of acupuncture prescriptions and treatment plans. Practical sessions include moxibustion, cupping. This unit also expands upon the student's understanding of the theory and practice principles of traditional Chinese medicine.

200267.2 Advanced Accounting

Credit Points 10 **Level** 3

Prerequisite

200109.4 Corporate Accounting Systems

Equivalent Units

200102 - Accounting Philosophies and Theories, AC304A - Advanced Financial Accounting (V1)

....

This unit addresses the advanced aspects of accounting with particular emphasis on accounting theories and how they assist us in understanding current accounting practice and accounting standards. This unit focuses on the relationship between the theoretical concepts and current news and events.

300925.1 Advanced Analytical Chemistry

Credit Points 10 **Level** 3

Prerequisite

300832.1 Analytical Chemistry

Equivalent Units

300298 - Analytical Chemistry 3, 300537 - Advanced Chemical Analysis

....

This unit builds on Analytical Chemistry 2 and focuses more on instrumental analysis, isolation and cleanup techniques and aspects of quality control and quality assurance in an analytical laboratory and in manufacturing are discussed. The instrumental methods covered include atomic spectroscopy (for example, atomic absorption and emission, x-ray fluorescence), molecular spectroscopy (for example, UV-Vis, IR, fluorometry, mass spectrometry),

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chromatography, electrochemistry, thermal methods and automated methods. The theory of the instrumental methods, their construction, operation and applications are covered. The theory and application of isolation and cleanup techniques in inorganic and organic residue analysis are given.

200028.3   Advanced Calculus

Credit Points 10 **Level** 2

Prerequisite

300673.1 Mathematics 1B

Equivalent Units

14504 - Mathematics 4, 14379 - Advanced Calculus, 14385 - Calculus 3, J2764 - Mathematics 2.1, J2765 Mathematics 2.2

Incompatible Units

200238 - Mathematics for Engineers 2

Special Requirements

Students enrolled in 3621 Bachelor of Engineering or 3664 Bachelor of Engineering Science may not enrol in this unit.

....

This unit is designed for students undertaking studies in mathematics, statistics, operations research and mathematical finance. It provides further mathematical training in the areas of multivariable and vector calculus, which is essential to the understanding of many areas of both pure and applied mathematics.

300850.1   Advanced Cell Biology

Credit Points 10 **Level** 3

Prerequisite

300848.1 Metabolism OR **300936.1** Functional Proteins and Genes OR **300817.1** Molecular Biology OR **300847.1** Immunology

Equivalent Units

300408 - Mammalian Cell Biology and Biotechnology; 300544 - Cell Signalling

Incompatible Units

300223 - Cell Signalling and Molecular Immunology

....

Cells of the body are studied in the context of health and disease, including mechanisms by which cells respond to the environment and integrate in and around tissue. Fundamental cellular processes are discussed that are important in embryonic development, stem cells, haematology and cancer. This unit investigates the action of hormones, growth factors and morphogens; their receptors and signalling pathways and the cellular responses they trigger. This unit covers modern techniques in cell culture, tissue engineering, advanced microscopy and other modern experimental approaches that enable dynamic understanding of live cell function.

300586.2   Advanced Computer Science Activities 1

Credit Points 0 **Level** 1

Special Requirements

Students must be enrolled in course 3634 Bachelor of Computer Science (Advanced).

....

This unit is only for Bachelor of Computer Science (Advanced) students in year one of their studies. Students will participate in industry and research based extension activities (non-assessable). These activities will be identified with the goal of exposing students early in their degree and integrating them into a culture of academic enquiry, problem solving, knowledge generation and scholarship and an awareness of the challenges and current issues confronting the computing/IT industry. The unit will be used to record student activities and a satisfactory/ unsatisfactory grade will be applied at the end of each semester.

300587.2   Advanced Computer Science Activities 2

Credit Points 0 **Level** 2

Special Requirements

Students must be enrolled in course 3634 Bachelor of Computer Science (Advanced).

....

This unit is only for Bachelor of Computer Science (Advanced) students in year two of their studies. Students will participate in industry and research based extension activities (non-assessable). These activities will be identified with the goal of exposing students early in their degree and integrating them into a culture of academic enquiry, problem solving, knowledge generation and scholarship and an awareness of the challenges and current issues confronting the computing/IT industry. The unit will be used to record student activities and a satisfactory/ unsatisfactory grade will be applied at the end of each semester.

300588.2   Advanced Computer Science Activities 3

Credit Points 0 **Level** 3

Special Requirements

Students must be enrolled in course 3634 Bachelor of Computer Science (Advanced).

....

This unit is only for Bachelor of Computer Science (Advanced) students in year three of their studies. Students will participate in industry and research based extension activities (non-assessable). These activities will be identified with the goal of exposing students early in their degree and integrating them into a culture of academic enquiry, problem solving, knowledge generation and scholarship and an awareness of the challenges and current issues confronting the computing/IT industry. The unit will be used to record student activities and a

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satisfactory/ unsatisfactory grade will be applied at the end of each semester.

300763.1   Advanced Dynamics

Credit Points 10 **Level** 3

Prerequisite

300480.1 Dynamics of Mechanical Systems

Incompatible Units

300009 - Control Systems

....

This unit covers the analysis and control of dynamical behaviour of mechanical systems. It discusses the fundamental principles in controlling mechanical dynamic systems. In particular, the unit will cover contents in: multi-degree of freedom vibration analysis and modelling; open and closed loop systems; transfer function and state variable methods in mechanical system modelling; concepts of stability; design and analyse control systems using root-locus, bode diagram and state-space methods for mechanical systems.

300668.2   Advanced Engineering Thesis

Credit Points 60 **Level** 5

Assumed Knowledge

Students should have achieved at least 240 Credit Points because this is an honours level unit. Students must have a course GPA equal to or greater than 5.5, which is required to maintained their candidature in course 3636 Bachelor of Engineering (Advanced).

Prerequisite

300053.3 Professional Practice

Corequisite

81999.1 Industrial Experience (Engineering) OR **300741.2** Industrial Experience (Engineering)

Incompatible Units

300484 - Engineering Thesis, 300483 - Engineering Project

Special Requirements

This unit is only available to students in course 3636 Bachelor of Engineering (Advanced). An eligible student must enrol in this unit in two consecutive halves (e.g. 1H and 2H in 2009, or 2H in 2009 and 1H in 2010).

....

This unit provides students with the opportunity to conduct original research on their chosen topics under the supervision of academics. Students are encouraged to disseminate their research results as refereed publications.

300666.2   Advanced Engineering Topic 1

Credit Points 10 **Level** 3

Assumed Knowledge

Students should have achieved at least 160 Credit Points to be able to study the advanced engineering topics in the unit. Students must have a course GPA equal to or greater than 5.5, which is required to maintained their candidature in course 3636 Bachelor of Engineering (Advanced).

Special Requirements

Students must be enrolled in course 3636 Bachelor of Engineering (Advanced).

....

This unit provides students with the opportunity to tackle challenging engineering problems. They will study advanced topics in selected areas under the supervision of academics. The advanced topics will prepare students for further study and research.

300667.2   Advanced Engineering Topic 2

Credit Points 10 **Level** 4

Assumed Knowledge

Students must have a course GPA equal to or greater than 5.5, which is required to maintained their candidature in course 3636 Bachelor of Engineering (Advanced).

Prerequisite

300666.2 Advanced Engineering Topic 1

Special Requirements

Students must be enrolled in course 3636 Bachelor of Engineering (Advanced).

....

This unit provides students with the opportunity to tackle engineering problems that are more challenging than those in Advanced Engineering Topic 1. They will study advanced topics in selected areas under the supervision of academics. The advanced topics will prepare students for further study and research.

300904.1   Advanced Food Science and Technology

Credit Points 10 **Level** 3

Prerequisite

300842.1 Food Science 2 AND **300922.1** Quality Assurance and Food Analysis

Equivalent Units

300780 - Advanced Food Science and Technology

Incompatible Units

300636 - Food Processing and Analysis, 300641 - Packaging Science and Technology

Special Requirements

Students required to have Personal Protection Equipment e. g. Laboratory coat, safety goggles, enclosed shoes.

....

This unit will extend student understanding of current and emerging food processes and packaging technologies. Students will gain an appreciation of the physicochemical and molecular processes involved in food manufacture and their integration to produce safe, nutritious palatable food. Students will learn to identify likely causes of food spoilage, become familiar with methods to monitor shelf life kinetics, learn about packaging materials science and be able to select the most appropriate packaging solution for a range of food applications. The environmental impact of food processing and packaging will also be explored, along with

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the factors affecting the sustainability of food manufacture. Practical workshops will be conducted to produce and analyse food products, plus factory tours to food manufacturing and packaging sites.

300905.1   Advanced Immunology

Credit Points 10 **Level** 3

Prerequisite

300936.1 Functional Proteins and Genes

Equivalent Units

300757 - Molecular Biological of the Immune System

....

The human immune system is a milieu of cells, cytokines, chemokines, growth factors and cell adhesion molecules which form an elaborate molecular communication network through a number of signalling networks and molecules. The relevance of this knowledge for understanding the pathology and specific diseases of the human immune system are emphasised through the unit. This unit also provides an in depth analysis of the molecular mechanisms of cell to cell communication, cell activation, the immunological synapse, transplant rejection (including adoptive transfer experimentation), antigen presentation, B and T cell recruitment and MHC restriction. Medical and diagnostic applications of hybridoma technology, antibody engineering and advances in vaccine development are discussed. The laboratory course will develop technical and interpretative skills in relevant techniques, in particular the ImmunoCAP technology for asthma and allergy diagnosis.

300907.1   Advanced Inorganic Chemistry

Credit Points 10 **Level** 3

Prerequisite

300545.2 Coordination Chemistry OR **300230.2** Inorganic Chemistry 2 OR **300899.1** Inorganic Chemistry

Equivalent Units

J3668 - Inorganic Chemistry 3, 300231 - Inorganic Chemistry 3, 300538 - Advanced Inorganic Chemistry

Special Requirements

Students are required to have laboratory coat, appropriate shoes and eye protection.

....

Building on the foundations laid in Inorganic Chemistry, this unit focuses on structure and bonding in inorganic chemistry, and the stereochemistry of coordination complexes. Spectroscopic and magnetic properties of inorganic compounds are evaluated as a consequence of structure and bonding, and an introduction to X-ray methods for structure determination is given. Kinetics and mechanism of inorganic reactions are examined, and the area of bioinorganic chemistry is developed. Unique structures and reactions of organotransition metal chemistry are explored. Advanced Modules cover aqueous chemistry of cations and oxyanions, inorganic materials, molecular orbital theory in coordination complexes, group theory; lanthanides and actinides.

300761.1   Advanced Mechanics of Materials

Credit Points 10 **Level** 3

Assumed Knowledge

This subject assumes that the student has undertaken the first and second year studies in UWS engineering courses or equivalent.

Prerequisite

300040.1 Mechanics of Materials

....

Extending upon the unit 300040 Mechanics of Materials, this unit will look at what happens when components undergo non-elastic deformation. It will look at how stresses depend on the orientation of the reference axes, and at how materials fail – including creep, fatigue and stress concentrations. It will then look at properties of metals, including alloys and phase diagrams.

300891.1   Advanced Medicinal Chemistry

Credit Points 10 **Level** 3

Prerequisite

300803.1 Essential Chemistry 2

Special Requirements

Successful completion of 40 credit points at Level 2 or 3 in order to enrol this unit.

....

Medicinal Chemistry is an interdisciplinary science that exists at the intersection of chemistry, pharmacology, physiology and human health. Students will explore the multidisciplinary nature and interconnectedness of medicinal chemistry through in-depth study of topics that relate medicinal chemistry to disciplines such as physiology, natural product science, biochemistry and pharmacology. It will also explore the expectations of a professional medicinal chemist.

300906.1   Advanced Organic Chemistry

Credit Points 10 **Level** 3

Prerequisite

300876.1 Organic Chemistry

Equivalent Units

300546 - Drug Design and Synthesis, 300235 - Organic Chemistry 3

Special Requirements

Students are required to have laboratory coat, appropriate shoes and eye protection.

....

This unit builds on the reactions learnt in the unit Organic Chemistry, extending the range of C-C bond forming reactions to include the most significant in modern synthesis. In the second stage students learn to develop multistep synthetic strategies to produce target molecules using their level 2 organic chemistry and the reactions above. Structural analysis by mass spectroscopy and more advanced NMR techniques is also investigated. The

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students use this chemistry in a lab course designed to highlight a number of these concepts (including the synthesis of 2 pharmaceutical compounds and a team experiment) and to extend their range of practical skills.

300926.1 Advanced Physical Chemistry

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of and competence with the basic principles of physical chemistry including states and properties of matter, thermodynamics, chemical equilibria, kinetics and electrochemistry.

Prerequisite

300849.1 Physical Chemistry

Equivalent Units

300303 - Physical Chemistry 3

Special Requirements

Students are required to have laboratory coat, appropriate shoes and eye protection.

....

Advanced Physical Chemistry builds on the fundamental principals of energy changes in systems (thermodynamics), and the rates and mechanisms of reactions (kinetics) learnt in Physical Chemistry and extends this so that students gain an understanding of polymer and surface chemistries. This unit also will strengthen student's problem solving skills in quantitative chemical analysis , develop experimental techniques and advanced data-analysis skills.

300851.1 Advanced Physiology

Credit Points 10 **Level** 3

Assumed Knowledge

Demonstrated sound understanding of physiological systems of the human body.

Prerequisite

300818.1 Introduction to Physiology OR **300838.1** Comparative Physiology

Equivalent Units

300622 - Human Physiology, 300326 - Topics in Physiology

Special Requirements

Students must have lab coat, and enclosed footwear.

....

Physiology is the study of the way in which a living organism and its bodily parts functions. Fundamental to this are ion channels. With ion channels as a central and unifying core, this unit will examine aspects of neurophysiology, sensory physiology, nutritional physiology, channelopathies, the skeleto-muscular system, the cardiovascular system, environmental adaptation and homeostasis. Students will have the opportunity to independently research, in depth, an area of physiology pertinent to their degree/interest.

300937.1 Advanced Science Project A

Credit Points 10 **Level** 2

Equivalent Units

300591 - Advanced Science Research Project A

Special Requirements

Must be enrolled in 3562 Bachelor of Science (Advanced Science) or 3682 Bachelor of Medical Science (Advanced) or 3683 Bachelor of Natural Science (Advanced) and must have passed 80 credit points.

....

The unit is design to teach students what is required to successfully begin to answer a scientific question. It specially focuses on teaching students how to access and critically review literature on a given topic, chosen in consultation with a supervisor in the student's preferred field of study. Students will present their findings in both written and poster formats. Students also attend a one day workshop where they engage with researchers in a wide variety of fields to broaden their understanding of research.

300938.1 Advanced Science Project B

Credit Points 10 **Level** 2

Prerequisite

300937.1 Advanced Science Project A

Equivalent Units

300592 - Advanced Science Project B

Special Requirements

Must be enrolled in 3562 Bachelor of Science (Advanced Science) or 3682 Bachelor of Medical Science (Advanced Science) or 3683 Bachelor of Natural Science (Advanced Science).

....

This unit continues the students' training in thinking as a research scientist whilst developing analytical and critiquing skills in a range of science disciplines. Students will form hypothetical companies and develop a portfolio of scientific products that they will have to present as prospectus and in oral presentations. The students will have to assess the constraints of research having to address the WHS, gene technology, ethics and other legislative issues impacting their projects. Students will also have to manage budgets, market analyses and intellectual property issues.

300910.1 Advanced Science Project C

Credit Points 10 **Level** 3

Prerequisite

300938.1 Advanced Science Project B

Equivalent Units

300593 - Advanced Science Research Project C

Special Requirements

Students must be enrolled in course 3562 - Bachelor of Science (Advanced Science), 3682 - Bachelor of Medical Science (Advanced) or 3683 - Bachelor of Natural Science (Advanced).

Units

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....

This unit advances the students' training in thinking as a research scientist whilst developing practical skills in a particular area of interest. The student undertakes a minor research project under supervision, during which they plan how to answer a research problem, conduct research and present their findings in a research paper format and seminar.

400888.1 Advanced Sports Physiology

Credit Points 10 **Level** 3

Prerequisite

400326.1 Exercise Prescription for General Populations AND **400883.1** Exercise Bioenergetics AND **400885.1** Sport and Exercise Physiology

Equivalent Units

400329 - Sports Physiology

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science). To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010, possess a current WorkCover Authority approved First Aid Certificate.

....

This unit presents the knowledge and laboratory skills essential to understanding the physiological demands on the sports participant, as well as to develop, implement and evaluate sports-specific training programs. Students will develop the knowledge and skills necessary to perform and interpret results for a number of standard laboratory and field-based physiological tests used in talent identification and the assessment of high performance athletes. Prescription focuses on the development and implementation of sport specific fitness programs. Also covered are the physiology of ergogenic aids, overtraining, muscle fatigue and soreness; physiological factors limiting performance; and physiological responses to exercise in challenging environments.

300799.1 Advanced Theoretical Computer Science

Credit Points 10 **Level** 3

Assumed Knowledge

Students are assumed to be proficient in programming in a language such as Java or C++ to a level equivalent to that covered by 300581 Programming Techniques.

Prerequisite

200025.2 Discrete Mathematics OR **300699.1** Discrete Structures and Complexity

....

This level 3 unit provides a comprehensive study on the logical and computational foundations of computer science. The first part of this unit covers propositional modal logic, logic programming, and basic concepts and methods of computational complexity. The second part of this unit focuses on the application of logical and computational foundations to various computer science areas. This part covers the theory and practice of model checking and system verifications, reasoning about knowledge, and logic based security policy specification and reasoning.

300747.2 Advanced Topics and Research Skills

Credit Points 20 **Level** 5

Assumed Knowledge

Successful completion of a Bachelors degree in a science discipline or tourism. Normally the student will have achieved a grade-point average of greater than 5.0 in Level 2 and 3 units.

Equivalent Units

300410 - Advanced Topics and Research Skills

Special Requirements

Students must be enrolled in an honours or postgraduate degree.

....

This unit will allow students to explore more advanced topics, including wider areas of research and their applications in science, technology, tourism or the environment. It will encompass and build upon subject areas and techniques already encountered in the undergraduate program, and provide students with an appreciation of more sophisticated applications of scientific principles, emphasising the practical, social, environmental and/or economic value of the sciences. In addition, students will further develop competency in the communication of research results and conclusions through participation in seminar series within the College of Science, Technology and Environment.

200411.2 Advanced Topics in Mathematics

Credit Points 30 **Level** 5

Special Requirements

Students must be enrolled in a Bachelors honours course.

....

The Advanced Topics in Mathematics is an integral part of the Bachelor of Science (Honours) course work program. It is structured in such a way that there are extensive links with the other components in the program (Honours Thesis). In undertaking and completing tasks associated with this component the student will be working toward the ultimate goal of completion of the Thesis document. Successful completion of the Advanced Topics in Mathematics Program will allow development of skills, knowledge and a way of thinking to assist in the learning of mathematics/statistics, which will help in the production of the thesis. In this program students will be given the opportunity to present work in assignments and examinations.

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101295.2 Aesthetics

Credit Points 10 **Level** 3

Equivalent Units

63090 - Aesthetics

Special Requirements

Successful completion of 60 credit points.

....

The major philosophies of art will be examined. The Western tradition will be surveyed from the Ancient Greeks through medieval and Renaissance theories of art to modern and postmodern aesthetics beginning with Kant. Marxist and feminist aesthetics will be especially emphasised. The artistic material will primarily come from the visual arts.

300863.1 Agronomy

Credit Points 10 **Level** 2

Equivalent Units

300524 - Agronomy

....

In 2013 this unit will be replacing unit 300524 - Agronomy. This unit enables students to develop understanding of basic crop and pasture agronomy including plant identification, crop/pasture establishment, growth, development, adaptation, plant protection, and grazing management. Students manage a crop in the field and a pot trial in the glasshouse and interact with researchers and industry professionals in understanding broad principles involved in the production and management of crops, pasture and animal production issues. The practical sessions enable students to apply the management principles and become familiar with various measuring techniques.

300852.1 Air Quality and Climate Change

Credit Points 10 **Level** 3

Equivalent Units

300777 - Air Quality and Climate Change, 300628 - Air Quality Management

Special Requirements

Successful completion of 60 credit points at Level 1 and 40 credit points at Level 2. Students must wear enclosed footwear during field visit.

....

Deteriorating air quality and climate change are two major challenges facing humanity and threatening environmental sustainability and human health. As such, air quality and climate change are of International, National, State and local community concern. This unit critically analyses the many issues that relate to air pollution, including its nature, extent, impacts and monitoring. Students will examine an air pollution issue of their choice.

300777.2 Air Quality and Climate Change

Credit Points 10 **Level** 3

Equivalent Units

EH321A - Air Quality Assessment and Management (UG), 300628 - Air Quality Management

....

This unit is designed for students who wish to gain knowledge of air pollution, its causes and control methods. Topics include: Pollution types and sources, ambient air quality ; meteorology and climate change;; emission testing; odour and hydrocarbon control;. At the completion of this unit the student will have a good understanding in the following: Pollution types and sources; Effects of air pollution; Influence of meteorology; Indoor air quality; Dispersion modelling; Monitoring of stationary and mobile sources; Climate Change , and Global air pollution issues.

EH321A.1 Air Quality Assessment & Management (UG)

Credit Points 10 **Level** 3

Equivalent Units

EH302A - Air Quality Assessment and Management

....

From 2009 this unit was replaced by 300628 - Air Quality Management. This unit is designed for students who wish to gain knowledge of air pollution, it's causes and control methods. Topics include: clean air legislation; air pollution; meteorology; ambient air quality; emission testing; odour and hydrocarbon control; control technology; emissions inventory. At the completion of this unit the student will have a good understanding in the following: pollution types and sources; effects of air pollution; influence of meteorology; indoor air quality; dispersion modelling; monitoring and control of pollution from stationary and mobile sources; legislation and standards, and global air pollution issues.

400815.2 Alterations in Breathing, Work/Leisure and Mobility

Credit Points 10 **Level** 2

....

This unit will elaborate the mechanisms of health breakdown and their application to professional nursing practice in supporting people who are affected by alteration in breathing, work/leisure, sexuality and mobility.

400814.2 Alterations in Nutrition, Elimination and Sexuality

Credit Points 10 **Level** 2

Equivalent Units

400754 - Understanding Alterations in Nutrition and Elimination

....

This unit will elaborate the mechanisms of health breakdown and their application to professional nursing

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practice in supporting people who are affected by alteration in eating, drinking, nutrition, elimination and sexuality.

100985.2 American Foreign Policy Since 1945

Credit Points 10 **Level** 3

Equivalent Units

B3845 - American Foreign Policy, 100907 - American Foreign Policy Since 1945

Special Requirements

Successful completion of 60 credit points.

....

This unit will analyse both the major international issues and crises which America confronted after 1945 and how successive American presidents and their policy makers responded to these problems

100966.3 American History, 1898-1945

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit offers a history of the United States of America from 1898 until 1945. It examines the key events and issues from the Spanish-American War to the New Deal and Isolationism which shaped the course of modern America.

100845.3 American Literature

Credit Points 10 **Level** 3

Equivalent Units

100642 - Classic American Literature, 100643 - Modern American Literature, B1326 - Far Horizons and Open Space, 100506 - American Literature

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit explores American literature from its colonial beginnings to the present. Issues to be examined will include some of the following: the construction of a national literature, struggles for justice and human rights, intersection of race, gender, and sexuality, the ideology of American Exceptionalism, and the rise and fall of "The American Dream." Texts may include fiction, poetry, and drama.

200023.3 Analysis

Credit Points 10 **Level** 3

Prerequisite

200028.2 Advanced Calculus

Equivalent Units

14388 - Advanced Mathematical Topics

....

Analysis provides the theoretical basis of real and complex numbers, including differentiation and integration. Topics include: field axioms and completeness, sequences, series, convergence, compactness, continuity, differentiability, integrability, and related theorems in both the real and complex number systems.

300830.1 Analysis of Change

Credit Points 10 **Level** 1

Assumed Knowledge

General Mathematics background achieved at bands 5 or 6, or Mathematics, achieved at band 4, or equivalent or 300831 Quantitative Thinking.

Equivalent Units

200191 - Fundamentals of Mathematics

Special Requirements

Students are required to have a Scientific calculator and access to a computer with mathematical software packages installed. Students may complete the 3 units Quantitative Thinking, Analysis of Change and Maths 1A in the following order: 300831 Quantitative Thinking, 300830 Analysis of Change, 300672 Mathematics 1A. This means that students may complete 300831 before attempting 300830, but not after. 300830 and 300831 may be attempted before 300672, but not after. Students may not enrol in 300831 and 300830 or 300831 and 300672 or 300831 and 300672 in the same teaching session. Students enrolled in the 3621 Bachelor of Engineering or 3664 Bachelor of Engineering Science may not enrol in any of the units 300830, 300831 or 300672.

....

This Level 1 unit introduces students to the mathematical modelling techniques that are used to formulate and solve problems in the physical and biological sciences. To use these techniques successfully, students must develop the ability to formulate a problem mathematically and then be able to use the appropriate knowledge to test conclusions by analytical and numerical means. These skills will be emphasized as each technique in introduced. Apart from some introductory work on logarithms and exponentials (essential concepts in the sciences), the main techniques developed involve aspects of differential calculus, culminating in the use of differential equations to model real phenomena in the sciences.

700108.1 Analysis of Change (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

General Mathematics background achieved at bands 5 or 6, or Mathematics, achieved at band 4, or equivalent to 300831 Quantitative Thinking.

Equivalent Units

200191 - Fundamentals of Mathematics, 300830 - Analysis of Change

Special Requirements

Students must be enrolled at UWSCollege in either 7003 Diploma in Science or 7009 Diploma in Science Fast Track. Students enrolled in 7003 Diploma in Science need to have

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achieved a "Satisfactory" grade in 700069 Mathematics B to proceed to 700108 Analysis of Change.

....

This Level 1 unit introduces students to the mathematical modelling techniques that are used to formulate and solve problems in the physical and biological sciences. To use these techniques successfully, students must develop the ability to formulate a problem mathematically and then be able to use the appropriate knowledge to test conclusions by analytical and numerical means. These skills will be emphasized as each technique in introduced. Apart from some introductory work on logarithms and exponentials (essential concepts in the sciences), the main techniques developed involve aspects of differential calculus, culminating in the use of differential equations to model real phenomena in the sciences.

101646.2   Analysis of Spatial Data

Credit Points 10 **Level** 2

Special Requirements
Successful completion of 40 credit points.

....

The making and the use of maps. This unit involves the critical examination of the way geographical data is produced, analysed, mapped and used to inform both private and public decisions. Natural environment, health, accessibility and residential amenity are examples of phenomena that have an important geographical dimension. Policy responses to these phenomena need to be specific with regard to locations and places. Geographic information systems software and census will be used to produce maps based on the analysis and interpretation of data relating to the student's field of interest.

300832.1   Analytical Chemistry

Credit Points 10 **Level** 2

Prerequisite
300800.1 Essential Chemistry 1 OR **300808.2** Introductory Chemistry

Equivalent Units
300297 - Analytical Chemistry 2

....

In 2013 this unit will be replacing 300297 - Analytical Chemistry 2. This unit provides insight into both classical methods of analytical analysis and an introduction to modern instrumental methods of analysis. Specifically, the classical methods of analysis include volumetric and gravimetric methods, while the modern instrumental methods include separation techniques and spectroscopy. The role of spreadsheets in data analysis and presentation is discussed and applied in the laboratory program.

300866.1   Analytical Microbiology

Credit Points 10 **Level** 3

Assumed Knowledge
A good general knowledge of microbiology and having the technical skills needed to work safely with microorganisms.

Prerequisite
300833.1 Microbiology 1

Equivalent Units
300307 - Analytical Microbiology

Special Requirements
Students are required to have laboratory coat, appropriate shoes and eye protection.

....

The unit provides a theoretical and practical introduction to wide range of microbiological techniques that are commonly used in medical science, industrial and food microbiology, environmental science, and research. Building on a basic understanding of microbiology the unit shows how microorganisms can be isolated, identified, and enumerated using traditional microbiological methods, modern variations on traditional methods, and more recent immunological and molecular methods. The laboratory component is an integral component of the unit as the students use a variety of techniques, methods and commercial systems that are applied in microbiological laboratories, and incorporates problem solving and inquiry based exercises.

300897.1   Anatomy of the Head and Neck

Credit Points 10 **Level** 3

Prerequisite
300825.1 Introduction to Anatomy

Equivalent Units
300316 - Anatomy of the Head and Neck, 300750 - Anatomy of the Head and Neck

Special Requirements
Students must be enrolled in 3577 Bachelor of Medical Science, 3657 Bachelor of Medical Science (Advanced), 3673 - Bachelor of Medical Science or 3682 Bachelor of Medical Science (Advanced) Students must also have a laboratory coat in this unit.

....

This unit builds on the systems anatomy taught during the first year, offering a regional study of the human head & neck. Emphasis is placed on the identification and description of the structures, including the correlation of structure and function. Cadaveric specimens are used to aid the learning of these regions and their three-dimensional aspect, including the anatomical variation found in these regions.

300894.1   Anatomy of the Thorax and Abdomen

Credit Points 10 **Level** 2

Prerequisite
300825.1 Introduction to Anatomy

Equivalent Units
300317 - Anatomy of the Thorax and Abdomen, 300751 - Anatomy of the Thorax and Abdomen

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Special Requirements

Student must be enrolled in course code 3577 - Bachelor of Medical Science, 3673- Bachelor of Medical Science, 3657 - Bachelor of Medical Science/Bachelor of Information and Communications Technology, or 3682 - Bachelor of Medical Science (Advanced). Students must have lab coat in this unit.

....

In 2013 this unit will be replacing 300751 - Anatomy of the Thorax and Abdomen. This unit builds on the systems anatomy studied during first year, and explores the regional anatomy of the contents and walls of the human thorax and abdominopelvic cavities. Emphasis is placed on the relationship between structures, and the nexus between form and function. Cadaveric specimens are used in this unit to illustrate the array of normal anatomical variation.

100244.2   Ancient Western Culture: Periclean Athens

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1.

....

The Athens of Pericles is studied from three perspectives: philosophy, art and history. The use of reason and rhetoric is examined through the works of some pre-Socratics, sophists and Socrates. Architectural style and the artistic representation of the human will be studied with particular reference to the Parthenon. This philosophy and art will be placed in the context of the history of the body, the city-state and democratic citizenship.

300878.1   Animal Behaviour

Credit Points 10 **Level** 3

Equivalent Units

300564 - Animal Behaviour

Special Requirements

Successful completion of 120 credit points in the Bachelor of Science or Bachelor of Natural Sciences.

....

Focusing on a variety of wildlife and domestic animal species, the unit addresses how classic ecological and evolutionary principles shape animal behaviour by weighing the experimental and observational evidence for each idea. We illustrate concepts with examples from a wide range of taxonomic groups of animals in diverse ecosystems. Students will conduct experimental field and laboratory procedures, as well as observe and work with groups of animals on the UWS Hawkesbury campus.

300834.1   Animal Health and Welfare

Credit Points 10 **Level** 2

Prerequisite

300802.1 Biodiversity

Equivalent Units

300424 - Animal Health and Welfare

....

In 2013 this unit will be replacing 300424 - Animal Health and Welfare. This unit will introduce students to the major issues related to animal health and welfare that form essential knowledge for those working with animals. In particular, students will gain an understanding of disease and methods for disease control as well as an introduction to disease diagnosis. In addition, students will gain knowledge about the relationships between animal management and the health and welfare expectations for domesticated and wild animals. The causes of common animal diseases will be introduced as well as the legal obligations of those owning, working or observing animals with respect to maintaining and monitoring their health and welfare.

300853.1   Animal Nutrition and Feeding

Credit Points 10 **Level** 3

Assumed Knowledge

A basic understanding of animals and biology.

Equivalent Units

300562 - Animal Nutrition and Feeding

Special Requirements

Must have completed 60 credit points to enrol in this unit.

....

In 2013 this unit will be replacing 300562 - Animal Nutrition and Feeding. Animal nutrition and feeding is fundamental to many aspects of animal production and wildlife systems. This unit aims to provide students with knowledge of nutrient requirements for different types of animals and the nutrient composition of common feeds. Students will evaluate and formulate rations to meet a range of animal requirements at different stages of growth, reproduction, lactation and production.

300854.1   Animal Production

Credit Points 10 **Level** 3

Equivalent Units

300427 - Animal Production

Special Requirements

Successful completion of 120 credit points of Bachelor of Natural Science or Bachelor of Science units to enrol in this unit.

....

Animal production is about producing animals for food, companionship and conservation. This unit aims to develop an understanding of the major animal production systems used for food and fibre and other resources in Australia (intensive and wildlife), and to apply this knowledge to improving problematic issues and understanding topical issues. Topics will focus on the application of animal production principles to these production systems.

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300835.1   Animal Reproduction

Credit Points 10 **Level** 2

Assumed Knowledge

Some knowledge of biology, including basic animal anatomy, introductory animal physiology and some understanding of reproductive behaviour.

Equivalent Units

AG306A - Equine Reproduction and Stud Management; 300563 - Animal Reproduction

Special Requirements

All activities in the unit involving live animals must be approved by the UWS Animal Care and Ethics Committee. All activities in the unit involving the use of animal specimens must be approved by the UWS Institutional Biosafety and Radiation Safety Committee.

....

In 2013 this unit will be replacing 300563 - Animal Reproduction. Reproduction is the origin of life. The aim of this unit is to provide students with a sound understanding of reproduction of both domestic and non domestic animals so that they can design and manage a breeding program for a species of choice. Topics will include anatomy and physiology of male and female reproductive tracts; hormonal control of reproduction; fertilisation, pregnancy, parturition and lactation and advanced reproductive technologies. These topics will be explored in a range of species across different taxonomic groups.

300801.1   Animal Science

Credit Points 10 **Level** 1

Equivalent Units

300421 - Animal Science

Special Requirements

Students require lab coat, closed in shoes, safety glasses, work boots, long pants and long sleeve shirts in this unit.

....

This unit will provide students with an understanding of comparative physiological and anatomical concepts of a range of mammalian and avian species. Students will develop the skills to apply these concepts in practical situations through the use of field observations and the relationship of these to functional anatomy and physiology of production animals. In addition students will develop many of the principles and concepts employed in animal production. Concepts discussed in lectures are reinforced by practical classes held in the laboratory and in the outdoor laboratories.

101686.2   Anthropology and Philosophy Look at Religion

Credit Points 10 **Level** 1

....

In the 1960s and 70s it was common for social and cultural theorists to talk about the death of God and the eclipse of religion. In social terms at least, this prediction has proved to be wildly inaccurate. Never has religion been so politically and culturally relevant. This unit is the compulsory Level 100 unit for the major Religion, Anthropology and Philosophy. It provides an introduction to some of the key issues and concepts in philosophical and anthropological approaches to the study of religion. Specifically, it employs cultural anthropology and philosophy to engage in an examination of a number of foundational ideas for this major, including reason, religion, knowledge, ethics, and ritual.

101688.2   Anthropology of Religion

Credit Points 10 **Level** 3

....

By looking at culture in a cross-cultural perspective, anthropology assists us in relativising our own values and worldview. When we understand the logic of the other, we perform a double movement: we transform the exotic into familiar and vice versa. With religion taking a centre stage in world order, the anthropological perspective can give us an understanding 'from within' and help us overcome prejudice and fear. In this unit we will discuss topics such as magic, witchcraft, attitudes toward the body, healing, shamanism, and spirit possession. We will also address religion in complex societies by exploring the issue of secularisation and re-enchantment of the world. Finally, we will cover the globalisation of religious practices and beliefs.

400889.1   Applied Biomechanics of Sport and Exercise

Credit Points 10 **Level** 3

Prerequisite

400882.1 Introduction to Biomechanics

Equivalent Units

400330 - Applied Biomechanics of Exercise

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

To fully understand the science underlying the optimisation of human movement, students require a comprehensive working knowledge of Biomechanics. This unit represents a theoretical and applied study of selected topics in Biomechanics. It builds on the basic principles of Biomechanics that are presented in the unit Introduction to Biomechanics and applies this knowledge to the analysis of sporting and human exercise performance. To achieve this, advanced methods and concepts in the biomechanical analysis of human performance are identified and explored.

400087.5   Applied Critical Methods

Credit Points 10 **Level** 3

Assumed Knowledge

At least 40 credit points of level two and level three units in a Humanities Major area.

Special Requirements

Successful completion of 60 credit points

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University of Western Sydney

This unit gives students knowledge of research methods relevant to humanities disciplines. Modules provide advanced instruction in developing a research topic, evidence-based research and Human Research Ethics processes and policy.

300776.2   Applied Ergonomics

Credit Points 10 **Level** 1

....

Ergonomics is the study of the interaction between people, their environments, and their objects. A sound understanding of the principles of ergonomics allows a designer to develop products, systems and environments with optimum usability, comfort, pleasure and productivity for the end user. In this unit, students undertake their own ergonomic study. They are firstly introduced to modelling workshop procedures. They then build and test a model hand-held product, and integrate user feedback into its redesign. Other interchangeable terms for ergonomics are Biomechanics, Ergonometrics, Human Engineering, and Human Factors.

401056.1   Applied Exercise Science for Personal Trainers and Coaches

Credit Points 10 **Level** 3

Prerequisite

300361.3 Introduction to Human Biology AND **400880.2** Fundamentals of Exercise Science AND **400892.2** Physical Activity, Nutrition and Health

Special Requirements

Students must be enrolled in course 4659 - Bachelor of Health Science (PDHPE). First Aid Certificate is also required.

....

Students will learn the functional anatomy, exercise physiology, physical fitness, biomechanics, motor development and exercise training content required to function as competent personal trainers and/or sports coaches. Students will also complete laboratory exercises designed to train and provide experience in key aspects of personal training and coaching.

300908.1   Applied Nutrition

Credit Points 10 **Level** 3

Prerequisite

300933.1 Nutrition and Health 1 AND **300934.1** Nutrition and Health 2

Equivalent Units

300653 - Applied Nutrition

....

This unit builds on basic concepts in human nutrition and facilitates the study of nutrition needs during the life-cycle and for specific lifestyle and nutrition related diseases. This study will incorporate how to assess individuals and diets and to manipulate diets to ensure nutritional sufficiency and to manage nutritional therapy of lifestyle related diseases. This assessment is also applied to the dietary requirements

of specific community groups and covers topics in sports nutrition, food supply and food product development.

200033.5   Applied Statistics

Credit Points 10 **Level** 2

Prerequisite

200032.5 Statistics for Business OR **300700.5** Statistical Decision Making OR **200263.4** Biometry OR **200052.4** Introduction to Economic Methods

Special Requirements

Scientific calculator and access to a computer with appropriate software, using Minitab, Excel and SPSS.

....

The unit builds on the basic statistical concepts introduced in first year, and also prepares students for broader application of statistics for those majoring in science or business. Topics include some common probability distributions; revision of hypothesis testing; analysis of categorical data; analysis of variance; simple and multiple linear regression analysis and correlation; some nonparametric methods; and fundamentals of time-series analysis.

400867.2   Approaches to Health Promotion

Credit Points 10 **Level** 2

Equivalent Units

400782 - Essentials of Health Promotion

....

Health promotion is a process that seeks to enable individuals, carers, communities and populations to increase control over their health by addressing the determinants of health and equity issues, resulting in improved health outcomes. Theoretical underpinnings of the various approaches to health promotion are explored, enhancing and limiting factors analysed and the levels of health promoting actions demonstrated, including the bigger picture approaches of working with policy, environmental and engineering solutions. Health promotion competencies are developed including conducting a needs and stakeholder analysis, also planning and evaluating an intervention. The best practice, evidence base for health promotion is outlined and the need to move beyond education.

700065.2   Approaches to Health Promotion (UWSC)

Credit Points 10 **Level** 2

Equivalent Units

400867 - Approaches to Health Promotion

Special Requirements

Students must be enrolled at UWS College. This is a Level 2 unit and is not to be studied in the first semester of the Diploma.

....

Health promotion is a process that seeks to enable individuals, carers, communities and populations to increase control over their health by addressing the

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determinants of health and equity issues, resulting in improved health outcomes. Theoretical underpinnings of the various approaches to health promotion are explored, enhancing and limiting factors analysed and the levels of health promoting actions demonstrated, including the bigger picture approaches of working with policy, environmental and engineering solutions. Health promotion competencies are developed including conducting a needs and stakeholder analysis, also planning and evaluating an intervention. The best practice, evidence base for health promotion is outlined and the need to move beyond education.

401007.1   Approaches to Professional Nursing Practice

Credit Points 10 **Level** 1

Assumed Knowledge

YR1 Autumn, 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced).

Incompatible Units

400748 - Becoming a Nurse; 400752 - Knowing Nursing

Special Requirements

Studenst must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced).

....

This unit explores the nature and professional context of nursing. The roles and functions of the nurse and their relationship to others are considered in terms of expected competence, responsibilities, accountabilities and scope of practice.

100641.3   Approaches to Text

Credit Points 10 **Level** 1

Equivalent Units

63165 - Approaches to Text

....

The production and reception of texts are central to the ways in which we understand the world and who we are. Texts mediate our relationship to the institutions in which we participate, including the media (print and electronic), education, government, families and our private lives. Approaches to Text provides an introduction to understanding the production and analysis of texts. By an exploration of topics such as rhetoric, semiotics, critical discourse analysis, genre, narrative theory and creative writing, the unit develops a set of skills that are vital for interpreting and critiquing texts and textual practice.

300655.1   Approved Industrial Experience

Credit Points 0 **Level** 2

Equivalent Units

SC204A - Approved Industrial Experience, EH218A - Approved Industrial Experience

....

This is a "Work Experience" unit, for which no student contribution fee is charged, nor will it consume Student Learning Entitlement (SLE). Students are required to obtain

at least ten weeks, vocationally relevant, industrial experience during their course of study. The aim of this is to provide students with opportunities to apply theoretical concepts to real world situations, assisting their personal and professional development. Approved industrial experience aims to provide flexibility for students to pursue areas of interest and to assist in their selection of appropriate elective units in their course and to met the professional accreditation requirements as maybe required in your key program. Students are required to organise, formalise and validate at least ten weeks of university approved industry experience within an industrial, commercial or government situation during the course of their study.

300655.2   Approved Industrial Experience

Credit Points 0 **Level** 2

Equivalent Units

SC204A - Approved Industrial Experience, EH218A - Approved Industrial Experience

....

This is a "Work Experience" unit, for which no student contribution fee is charged, nor will it consume Student Learning Entitlement (SLE). Students are required to obtain at least ten weeks, vocationally relevant, industrial experience during their course of study. The aim of this is to provide students with opportunities to apply theoretical concepts to real world situations, assisting their personal and professional development. Approved industrial experience aims to provide flexibility for students to pursue areas of interest and to assist in their selection of appropriate elective units in their course and to met the professional accreditation requirements as maybe required in your key program. Students are required to organise, formalise and validate at least ten weeks of university approved industry experience within an industrial, commercial or government situation during the course of their study.

300929.1   Aquatic Ecology

Credit Points 10 **Level** 3

Assumed Knowledge

Concepts of classification, evolution, taxonomy, cellular processes plant and animal structure and function, normal distribution, representative sampling, probability and uncertainty.

Equivalent Units

300465 - Aquatic Ecology

Special Requirements

Successful completion of 80 Credit Points at Level 1 and 40 credit points at Level 2. Students must also have covered footwear for field excursions.

....

Temperate freshwater, estuarine and marine aquatic ecosystems play vital roles in providing food, water, recreation and other ecosystem services to human society and habitats for important species that make up global biodiversity. Yet aquatic habitats are the most threatened ecosystems on earth, under threat from global climate change and urbanisation. Through inquiry and problem

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solving this unit will equip students with the necessary techniques in experimental design and analysis needed to investigate aquatic ecosystems and knowledge of the main animal and plants in aquatic and marine ecosystems. The logic and philosophy of science, scientific studies and experimental analyses will be used to understand temperate aquatic ecosystems throughout this unit. On completion students will have the background knowledge and skills communicate to a range of audiences, so that they can contribute beneficially to management and/or conservation of waterways and oceans and the biodiversity within.

400895.1 Aquatic Sports

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in course 4659 - Bachelor of Health Science (PDHPE). To undertake this unit, students must comply with the following special requirements: possess a current WorkCover Authority approved First Aid Certificate.

....

Students will be instructed on how to teach swimming, diving, water aerobics, canoeing, kayaking, rowing, snorkelling and SCUBA diving to individuals of different ages. Students will also train in swimming to improve stroke mechanics and fitness in order to pass the Bronze Medallion Lifesaving certification. Students will also be exposed to each of the aforementioned aquatic activities in order to develop moderate to high competencies to aid their abilities to teach each activity in a school or community recreation setting.

100041.2 Arabic 101

Credit Points 10 **Level** 1

....

This unit is designed as an introduction to the Arabic language as well as the contemporary and popular culture of the Arabic-speaking people. It is intended for students who are at beginner level in Modern Standard Arabic in all four skills -listening, speaking, reading and writing. Components of this unit may be presented in English.

100042.2 Arabic 102

Credit Points 10 **Level** 1

....

This is a post-beginners' level unit in Arabic, intended for students with some background in the language (equivalent to at least 2 Unit HSC Arabic). As part of a major in Arabic this unit will help students to continue in the process of acquisition of Modern Standard Arabic through the study of the language and intensive practice in listening, speaking, reading and writing. This unit also aims to familiarise students with elements of modern Arab culture including issues of Arabic language in Australia.

100048.2 Arabic 302 - Arabic Advanced Language and Grammar

Credit Points 10 **Level** 3

....

This is the second of two units that aim to provide a thorough review of comprehension, speaking, reading and writing skills, as well as grammar and vocabulary of Modern Standard Arabic, its range of registers and its linguistic characteristics. This series is intended for students who have knowledge and skills in Arabic equivalent to two years of tertiary study of the language, and who wish to consolidate, develop and improve these skills and knowledge. This unit is mandatory for students who wish to pursue a major in Arabic.

100049.2 Arabic 303: Advanced Writing Skills

Credit Points 10 **Level** 3

....

This unit is aimed at those who have successfully finished 100044 - Arabic 202, or have an advanced speaking and writing proficiency in Modern Standard Arabic. It is one of the obligatory units for students intending to graduate with Arabic as a major or sub-major. It seeks to develop the writing skills to prepare students to make professional use of the language, and it is particularly recommended for those who wish to involve themselves in areas such as language teaching and translation. Students will be introduced to a full range of text types and language purposes. They will be guided to analyse, interpret and evaluate passages provided, and will be encouraged to extend their ability by experimenting with a variety of writing styles.

100050.2 Arabic 304: Arabic Advanced Speaking

Credit Points 10 **Level** 3

....

This is a compulsory unit for students in the BA (I and T) (Arabic) and for students intending to do Arabic as a major or sub-major. As a companion unit of 100049 - Arabic 303: Advanced Writing Skills, it aims to prepare students to make professional use of the language, in this case by placing particular emphasis on oral skills, and it is also specially recommended for those wishing to pursue careers in areas such as language teaching and translation. Students will be introduced to a full range of oral text types and language purposes. They will be guided to analyse, interpret and evaluate examples of oral discourse, and be encouraged to develop effective public speaking skills.

100052.2 Arabic 306: Arabic Novel and Short Story

Credit Points 10 **Level** 3

....

This is an optional unit in the Arabic major program, which aims to introduce students to the study of the Arabic novel and short story, and which examines the historical, political,

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social and cultural context that this literature reflects. This will be done by studying selected novels and short stories. Students will be able to do a research component on a novel of their choice. This unit will also examine children's literature, including traditional children stories and contemporary Arabic literature, as well as translated western traditional stories.

100054.2 Arabic 308:Language Past and Present

Credit Points 10 **Level** 3

....

This unit aims to give students an understanding of the phonological, morpho-syntactic, semantic and pragmatic changes that have occurred to the Arabic language both spoken and written in the last century. Particular attention will be paid to the different dialects spoken in some of the Arab countries and their relation to Modern Standard Arabic. A special study will be made of the Australian Arabic used by migrant communities.

100847.2 Asia and the West: The Imperial Encounter

Credit Points 10 **Level** 2

Equivalent Units

100251 - East West Encounters

Special Requirements

Successful completion of 60 credit points at Level 1.

....

The encounter between Europe in Asia, propelled by European imperialism, is one of the great events of modern history. The unit ranges widely over Asia and considers issues of contact, perception, and interaction between Asian and European cultures and economies over a period of 500 years. It begins with the origins of Portuguese expansion overseas but there is particular emphasis on the so-called new imperialism of the period after about 1880 and the nationalist and other resistance movements that developed in Asia in response. Case studies will be made of two Asian countries.

101442.2 Asia in the World

Credit Points 10 **Level** 1

Equivalent Units

100867 - Foundations of Asia

....

This unit introduces International Relations and Asian Studies. Considering both traditional and contemporary times, it seeks to place Asia's diverse cultures in a global context. It examines issues such as how to define Asia, the relationship between Asia and Australia, how Asian states related to each other, and how Western ideas of international relations have transformed these relations. The great religions/philosophies of Asian societies - Buddhism, Hinduism, Islam, Christianity and Confucianism - have influenced Asian states and relations between them; and the unit considers their roles. It explores other forces which have shaped the civilisations, polities and

communities of Asia and influenced how they have related to each other and the world beyond.

100245.2 Asian Cinema

Credit Points 10 **Level** 2

Equivalent Units

63026 - Japanese Cinema

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit studies several key Asian cinemas and also examines the work of diasporic film-makers and audiences, with a discussion of the film and video work of Asian-Australian film-makers. Aesthetic trends - questions of form, style, narrative and genre, are explored as part of a study of the historical evolution of these cinemas and the ways in which they address issues of cultural importance. The unit encompasses questions of cultural difference, nationalism, and the hybridisation and globalisation processes at work in contemporary cultures. It will also present a critical evaluation of the assumptions that inform much of western scholarship on Asian cinemas.

200535.2 Auditing and Assurance Services

Credit Points 10 **Level** 3

Assumed Knowledge

A basic knowledge of computing.

Prerequisite

200109.4 Corporate Accounting Systems

Equivalent Units

AC301A - Auditing, H3822 - Auditing, 61151 - Principles of Auditing, 200107 - Auditing Principles

Incompatible Units

61152 - Auditing & Professional Practice

....

This unit studies the roles and responsibilities of the auditor, auditing principles and standards and the application of those standards, particularly in an electronic environment.

101248.3 Australian Art 1

Credit Points 10 **Level** 2

Equivalent Units

10339.1 - Australian Art

Special Requirements

Successful completion of 40 credit points at Level 1.

....

This unit investigates themes in Australian art in the late eighteenth, nineteenth and early twentieth centuries. Topics covered are: images of the colonial world; the contexts involved in reading this new world, maps, illustrations as well as topographical images. The cultural relationships with Great Britain are explored through the contests over the Australian 'eye' with particular focus on the Heidelberg

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school, Federation and the First World War. The subject finishes with the debates over a newly arrived Modernism.

100959.2 Australian Art II

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit investigates the major aesthetic and theoretical events of Australian art in the Twentieth century. Beginning with post First World War art, significant themes surrounding modernism, parochialism, internationalism, conceptualism and contemporary artistic concerns are explored together with aspects of the international art market, museology and indigenous art making.

100986.2 Australian History 1860-1920

Credit Points 10 **Level** 3

Equivalent Units

100247 - Australian History 1860-1920

Special Requirements

Successful completion of 60 credit points.

....

In 2013 this unit replaced by 101999 - Twentieth Century Australia. The unit examines the history of Australia's transformation from a collection of small settler colonies to a modern, industrialising nation. The unit focuses on the creation of a national identity through examination of themes such as race, class, urbanisation, politics, sport gender and culture.

100987.3 Australian History Since 1920

Credit Points 10 **Level** 3

Equivalent Units

100906 - Australian History Since 1920, B3680 - Australian History Since 1920

Special Requirements

Successful completion of 60 credit points

....

In 2013 this unit replaced by 101999 - Twentieth Century Australia. This unit includes a general overview of major developments in Australian political and social history since 1920, and also focuses on particular issues such as the Great Depression, 1949 coal strike, the Petrov Affair and the Whitlam dismissal.

101685.3 Australian Indigenous History

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

In 2013, this unit replaced by 101919 - Australian Indigenous History: From first contact to 'dying race'. Until 1788, Australia was peopled by those who we now call 'Aborigines'. Then Europeans arrived and began to spread across the continent, displacing and marginalising the Aborigines. This unit will tell the stories of that transformation, beginning with an account of the ideas and motivations of British authority in the late eighteenth century and concluding at the moment when six British colonies formed a federated nation. Topics to be covered will include: violence, humanitarianism, Christian missions, institutional authority. The course will emphasise and explain regional and temporal differences in the ways that Indigenous and non-Indigenous interacted. Students will study primary sources and learn to understand them in context.

101872.1 Australian Indigenous History from Federation to Reconciliation

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

This unit aims to explore the history of the relationship between Indigenous and non-Indigenous Australians from Federation (1901) to the present. At the beginning of the twentieth century, Australia became a nation without paying much attention to the first Australians. It was widely assumed that they would die out or at least remain an insignificant welfare problem. Instead, these first Australians survived and grew as a minority population; they also increasingly made themselves heard as a people - so successfully that in 2008 the Parliament of Australia felt obliged formally to apologise for their years of mistreatment. This unit highlights two stories: the non-Indigenous transition from complacency to engagement, and the survival and increasing political effectiveness of the descendants of Australia's first peoples.

100848.2 Australian Politics

Credit Points 10 **Level** 1

Equivalent Units

63284 - Australian Politics, 100266 - Introduction to Australian Politics

....

In 2013 this unit replaced by 101973 - Australian Politics. This unit provides an introduction to Australian Politics. It outlines the central features of the federal political system with attention to both historical background and current debates. In addition to study of the institutional frameworks (the Constitution, parliament, political parties and so on), the unit examines the dynamics of inclusion and exclusion that have shaped Australian politics. It explores what it has meant in the past, what it means in the future, for Australians to live together as members of a political community.

100849.4 Australian Textual Studies

Credit Points 10 **Level** 3

Equivalent Units

63233 - Australian Textual Studies, B3858 - Australian Authors: Special Study, B3856 - Australian Literature: the city and the bush

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Special Requirements

Successful completion of 60 credit points

....

This unit aims to increase students' knowledge of the scope and variety of Australian writing. It examines a range of Australian texts from a number of contexts, usually organised along historical and/or thematic lines, and considers the role of writing - both "high" literature and more popular forms - in constructions of Australian culture. Issues of place, gender and race may be foregrounded, and consideration given to how these influence images of Australia. Film and television texts may also be included or emphasised.

300735.2 Automated Manufacturing

Credit Points 10 **Level** 2

Prerequisite

200237.3 Mathematics for Engineers 1 OR **300463.2** Fundamentals of Mechanics AND **200191.4** Fundamentals of Mathematics AND **300304.3** Sustainable Design: Materials Technology

Equivalent Units

86301 - Automated Manufacturing

....

The aim of this unit is to provide an introduction into the fundamentals of manufacturing operations, automation and control technologies including numerical control and industrial robotics. In addition, material handling and identification technologies will be discussed as well as manufacturing systems. The latter will examine single-station manufacturing cells, manual assembly lines, automated production and assembly lines as well as flexible manufacturing systems. Mechanical behaviour of common materials used in manufacturing will be studied, and their suitability for various manufacturing processes including metal cutting, sheet-metal forming, bulk deformation and abrasion. Other processes such as rapid prototyping and rapid tooling will also be included.

200518.2 Behavioural Finance

Credit Points 10 **Level** 3

Assumed Knowledge

Students should have at least an introductory finance background before entering into this unit.

....

Traditional theories of finance are based the assumption that investors are both rational and utility maximizing. The Efficient Markets Hypothesis in particular has assumptions about investor behaviour which underpin its key predictions. The tenants of beharioural finance disputes the validity of these assumptions. This unit challenges traditional theory by examining how decision making and investor behaviour may be driven by personal and market psychology.

401027.1 Being a Professional Nurse (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of at least 190 credit points in an undergraduate advanced nursing program.

Special Requirements

Only available to students enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit explores the process of transition from student to professional practitioner. Students undertaking the BN Advanced will gain an understanding of the congruence between the principles of Primary Health Care and professional regulatory frameworks. The role of the graduate nurse will be comprehensively explored through a detailed examination of the frameworks governing practice and professional conduct. This unit will build capacity in students to meet their professional responsibilities as practitioners in nursing. Students will also have the opportunity to discuss career planning and ongoing professional development.

401021.1 Being a Professional Nurse or Midwife

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of at least 190 credit points in an undergraduate nursing or midwifery program.

Special Requirements

Must be enrolled in 4691 Bachelor of Nursing, 4692 Bachelor of Nursing Graduate Entry or 4684 Bachelor of Midwifery.

....

This unit explores the process of transition from student to professional practitioner. Students will gain an understanding of the congruence between the principles of Primary Health Care and professional regulatory frameworks. The role of the graduate nurse or midwife will be comprehensively explored through a detailed examination of the frameworks governing practice and professional conduct. This unit will build capacity in students to meet their professional responsibilities as practitioners in nursing or midwifery. Students will also have the opportunity to discuss career planning and ongoing professional development.

101449.2 Bilingualism and Biculturalism

Credit Points 10 **Level** 3

Equivalent Units

A2014 - Bilingualism and Biculturalism

....

This unit is a Core Unit in the Bachelor of Arts Linguistics Major and Sub-major, an optional pool unit in the Bachelor of Arts (Interpreting and Translation) and Bachelor of Arts (Interpreting and Translation) Dean's Scholars, a Core Unit

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in the Bachelor of Social Science (Pathway to Early Childhood Teaching) Languages and Linguistics Sub-major, and can also be taken as an elective. Bilingualism and biculturalism are an important aspect of life in Australia: many Australian residents are, were, or could be, bilingual and/or bicultural. This unit aims to give students an understanding and appreciation of the most important facets and manifestations of bilingualism and biculturalism, in the linguistic, cognitive, personal, societal and educational spheres, particularly with regard to the Australian context. It also aims to show students how this unit relates to broader studies in education, humanities, linguistics, and social sciences.

300890.1   Biodevices

Credit Points 10 **Level** 3

Equivalent Units

300414 - Biodevices

Special Requirements

Successful completion of 60 credit points at Level 1 or 2.

....

This unit replaces 300414 - Biodevices from Autumn 2014. The unit will investigate nature's nanomachines; lipids, DNA and proteins. The students will learn how only a few basic building blocks can self-assemble into more complex structures, which in turn self-assemble into more complex hierarchical structures from which one can build biodevices. These fascinating self-organising supramolecular structures generally involve some kind of non-covalent binding. Particular emphasis is placed on the underlying principles that govern the functioning of such machines and some coverage of the modelling of such processes using techniques such as statistical thermodynamics is given. Biological computing is also covered.

300802.1   Biodiversity

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of biology and chemistry

Incompatible Units

300539 - Biodiversity, 300792 - Biology A - The Diversity of Life, 300222 - Biology 2, 14436 - Biodiversity, BI102A - Biological Sciences 1.2 (V1), J1761 - General Biology

Special Requirements

Students are required to have safety glasses, lab coat, enclosed shoes.

....

How many species walk, fly, swim or slither, crawl, hop, wriggle or just float, hitchhike or move so slowly that they appear not to move at all? No one knows and new species appear almost every day. This unit focuses on this spectacular diversity of living things and the process of evolution. Students explore and classify biodiversity and how organisms function, acquire and assimilate resources and co-ordinate growth and reproduction. Organisms interact with one another and their environment forming a complex set of interactions in ecosystems. It is these interactions that have driven evolution. Ultimately human survival depends on the sustainable use of this biodiversity and ecosystems.

700095.1   Biodiversity (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of biology and chemistry

Equivalent Units

300539 Biodiversity, 700032 Biodiversity (UWSC), 300802 Biodiversity

Special Requirements

Students must be enrolled at UWSCollege.

....

How many species walk, fly, swim or slither, crawl, hop, wriggle or just float, hitchhike or move so slowly that they appear not to move at all? No one knows and new species appear almost every day. This unit focuses on this spectacular diversity of living things and the process of evolution. Students explore and classify biodiversity and how organisms function, acquire and assimilate resources and co-ordinate growth and reproduction. Organisms interact with one another and their environment forming a complex set of interactions in ecosystems. It is these interactions that have driven evolution. Ultimately human survival depends on the sustainable use of this biodiversity and ecosystems.

300909.1   Biological Adaptation to Climate Change

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 40 credit points at Level 2.

....

This unit investigates how individuals, populations and ecosystems respond to climate change. Climate change will provide the umbrella by which anthropogenic impacts are examined in the context of adaptation and evolution of animals and plants. This unit explores how ecological resilience provides a theoretical foundation for understanding how complex systems adapt to and recover from localised disturbances like fires, pest outbreaks, and floods, as well as large-scale perturbations such as climate change. Resilience theory is especially important to environmental scientists for its role in underpinning adaptive management approaches to ecosystem and resource management.

200263.1   Biometry

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics

Equivalent Units

200032 - Statistics for Business, 200192 - Statistics for Science

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Incompatible Units

200190 - Finite Mathematics, 200194 - Engineering Mathematics 3

....

This unit introduces students to various statistical techniques necessary in scientific endeavours. Presentation of the content will emphasize the correct principles and procedures for collecting and analysing scientific data, using a hands-on approach. Topics include effective methods of gathering data, statistical principles of designing experiments, error analysis, describing different sets of data, probability distributions, statistical inference, non-parametric methods, and simple linear regression and correlation.

200263.3   Biometry

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics or equivalent

Equivalent Units

200192 - Statistics for Science, 300700 - Statistical Decision Making, 200032 - Statistics for Business, 200052 - Introduction to Economic Methods

Incompatible Units

200182 - Quantitative Techniques

....

Biometry introduces students to various statistical techniques necessary in scientific endeavours. Presentation of the content will emphasize the correct principles and procedures for collecting and analysing scientific data, using a 'hands-on' approach. Topics include effective methods of gathering data, statistical principles of designing experiments, error analysis, describing different sets of data, probability distributions, statistical inference, non-parametric methods, simple linear regression and analysis of categorical data.

200263.4   Biometry

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics or equivalent

Equivalent Units

200192 - Statistics for Science, 300700 - Statistical Decision Making, 200032 - Statistics for Business, 200052 - Introduction to Economic Methods

Incompatible Units

200182 - Quantitative Techniques

....

Biometry introduces students to various statistical techniques necessary in scientific endeavours. Presentation of the content will emphasize the correct principles and procedures for collecting and analysing scientific data, using a hands-on approach. Topics include effective methods of gathering data, statistical principles of designing experiments, error analysis, describing different sets of data, probability distributions, statistical inference,

non-parametric methods, simple linear regression and analysis of categorical data.

401002.1   Bioscience 1

Credit Points 10 **Level** 1

Equivalent Units

400746 - Understanding Good Health

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4684 Bachelor of Midwifery. Unitrack students may study this unit as a miscellaneous unit.

....

This unit introduces student nurses and midwives to the terminology and major introductory concepts related to normal structure and function of the human body and its relationship to performances of activities of living and healthy lifestyle practices.

401006.1   Bioscience 2

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of the human body systems, growth and development, homeostasis and the relationship to health, activities of living and the National Health Priorities.

Equivalent Units

400750 - Introduction to Health Breakdown

Special Requirements

Must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced). Unitrack students may study this unit as a miscellaneous unit.

....

This unit extends knowledge gained in Bioscience 1 and introduces nursing students to concepts associated with alterations in health and wellness as a consequence of life transition. It includes an introduction to pathophysiology, pharmacology, immunology and microbiology. The unit also focuses on the impact of microorganisms on the health of people and the body's natural defences in dealing with infections and injuries and its significance for nursing.

401031.1   Bioscience for Midwifery

Credit Points 10 **Level** 1

Prerequisite

401002.1 Bioscience 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit extends knowledge gained in Bioscience I and introduces midwifery students to concepts associated with early human development, labour, birth and postpartum changes. Physiological changes in the newborn at birth are identified together with growth and development to six weeks of age. The unit includes an introduction to principles of pharmacology and pharmacological agents

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that may be used as a supportive resource during pregnancy and birth.

400927.1 Block Clinical Practicum (PG)

Credit Points 10 **Level** 7

Assumed Knowledge

Traditional Chinese Medicine Practice 4 (PG)

Incompatible Units

400363 - Block Clinical Practicum

....

This unit provides the student with intensive, supervised clinical practice experience. Arrangements will be made for students to complete this stage in China. This will involve students paying their own travel fares, as well as, training and accommodation fees to the Chinese institution. This unit represents the final clinical practicum stage and development of clinical skills. Students will be expected to demonstrate competence in handling patients in a clinical context, and manage their integrated care using TCM.

300836.1 Botany

Credit Points 10 **Level** 2

Assumed Knowledge

Basic knowledge of biology, chemistry and ecology.

Prerequisite

300802.1 Biodiversity

Equivalent Units

BI103A - Botany; 300328 - Botany

....

From microscopic algae to giant flowering angiosperms, this unit develops students knowledge and understanding of plants on earth. The unit covers the topics of plant anatomy and morphology, classification and systematics, and evolution. Students will examine the major groups of plants: green algae, bryophytes, lycophytes, monilophytes, gymnosperms and angiosperms. Laboratory and field work involves the study of common Australian plants and economically significant plants.

101684.3 Brain and Behaviour

Credit Points 10 **Level** 2

Equivalent Units

100931 - Neuroscience

....

This unit provides an introduction to the biological and neuroscientific bases of human behaviour. Topics covered include the chemistry of life, the molecular basis of life, the cell and some of the major organ systems of the human body with particular reference to the nervous, endocrine and sensory systems. The course has a significant laboratory component which reinforces lecture and text material. Students will be introduced to the biological and neuroscientific concepts necessary for a thorough understanding of areas of psychology such as abnormal psychology, cognitive processes, developmental psychology, human learning, and physiological psychology.

200088.2 Brand and Product Management

Credit Points 10 **Level** 3

Assumed Knowledge

A sound knowledge of marketing principles and of the key elements of consumer behaviour, marketing research and marketing communications.

Prerequisite

200083.2 Marketing Principles

Equivalent Units

MK205A - Brand Management

....

This unit focuses on the role of brand and product management in the context of planning and implementing marketing strategies and is intended to develop a critical appreciation of the inherent challenges contemporary firms encounter in creating and maintaining brand equity.

101756.1 Bridging the Gap: Re-engaging Indigenous Learners

Credit Points 10 **Level** 3

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

Equivalent Units

101116 - Issues in Aboriginal Education

....

This unit is available to all Undergraduate students who have open electives. Bridging the Gap: Re-engaging Indigenous Australian Learners will provide students with knowledge and skills to develop teaching strategies that will bridge the education gaps existing for many Indigenous Australian (Indigenous) learners. Students will gain knowledge of quality teaching frameworks to engage all learners and in particular Indigenous learners. The unit will also increase students' awareness of the complexities of the cultural inter-relationships between many Indigenous and non-Indigenous learners. The unit focuses on empowering students to effectively teach: Indigenous Australians; Indigenous studies in consultation with Indigenous communities; and assess as well as evaluate resources for use in teaching Indigenous studies.

300088.1 Broadband Networking

Credit Points 10 **Level** 3

Prerequisite

300112.1 Digital Communication Technology

....

This unit covers networking technologies, and standards of broadband networks that dominate both the WAN and LAN markets. These include frame relay, ATM, broadband ISDN and high-speed LANs. Quality of Service (QoS) issues, and the need to support multimedia and real-time traffic, the need to control congestion and the need to provide different levels of QoS to different applications are the focus.

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100850.2 Buddhism in the Contemporary World

Credit Points 10 **Level** 2

Equivalent Units

63120 - Communication and Culture in Asia 2: Performing Asian Cultures and Identities.

Special Requirements

Successful completion of 60 credit points at Level 1.

....

In 2012 this unit replaced by 101882 - A History of Modern Global Buddhism. A history of Buddhism and its spread through Asian and more recently to the West, introducing its principal beliefs and practices, the diversity of its manifestations, its political, cultural, and social impact. Focus is on contemporary Buddhism.

400621.2 Bugs and Drugs

Credit Points 10 **Level** 2

Assumed Knowledge

Basic understanding of structure and function of systems within the human body.

....

Throughout history humans have sought to control their well-being whether it be in response to disease-producing microbes or situations inherent in modern day life. This unit examines an eclectic range of treatments and technologies. Some have been triggered by ancient and enduring infectious foes such as smallpox and the plague or emerging menaces including Ebola and SARS. Others are nested within contemporary living and may be constructed as communicable in the social sense. Selected issues will be explored including agents utilised in the alteration of sensory perception including hallucinogens as well as reaction to and manipulation of body image.

300706.2 Building 1

Credit Points 10 **Level** 1

Equivalent Units

BG101A - Building 1, 700070 - Building 1 (UWSC)

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major.

....

This unit provides students with an overview of regulations and construction techniques with an emphasis on low-rise residential buildings in the Australian context. It covers general process; building regulations; environmental issues; surveying techniques; structural elements (footings, framing and bracing); envelope; services; fit-out and finishes.

700070.1 Building 1 (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300706 - Building 1

Special Requirements

Students must be enrolled at UWSCollege.

....

This unit provides students with an overview of regulations and construction techniques with an emphasis on low-rise residential buildings in the Australian context. It covers general process; building regulations; environmental issues; surveying techniques; structural elements (footings, framing and bracing); envelope; services; fit-out and finishes.

300707.2 Building 2

Credit Points 10 **Level** 1

Equivalent Units

BG103A - Building 2; 700071 - Building 2 (UWSC)

....

The aim of this unit is to provide students with an overview of the design, classification, applicable Australian Standards, structural systems, construction techniques, materials handling systems, building services, fit-out and finishes for larger scale buildings.

700071.1 Building 2 (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300707 - Building 2

Special Requirements

Students must be enrolled at UWSCollege.

....

The aim of this unit is to provide students with an overview of the design, classification, applicable Australian Standards, structural systems, construction techniques, materials handling systems, building services, fit-out and finishes for larger scale buildings.

200292.2 Building Law

Credit Points 10 **Level** 3

Equivalent Units

LW305A - Building Law 2

....

This unit is designed to provide students with a good understanding of the law and dispute resolution mechanisms that regulate the conduct of the building industry and building practices e.g. Occupational health and safety, contract law, workers compensation, awareness of industrial relations and dispute resolution.

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BG302A.1 Building Regulation Studies

Credit Points 10 **Level** 3

Equivalent Units

300722 - Building Regulation Studies

....

In 2010 this unit replaced by 300722 - Building Regulation Studies. To develop an awareness of the regulatory construction and equipment techniques in the detection, prevention, behaviour and control of fire; an understanding of and an appreciation for buildings; to extend knowledge of the modern built environment for appraisal at Council level in planning and development procedures related to the inspection role, and the legal responsibilities in fire engineering and hazard assessment. Building regulations and fire safety; performance and prescription; fire literature and development; materials in fire, fire resisting construction; detection/alarm systems; egress and human behaviour; spread of fire; work cover; smoke movement and control; fire fighting equipment; essential services and heritage buildings.

300885.1 Building Regulations Studies

Credit Points 10 **Level** 2

Equivalent Units

BG302A - Building Regulation Studies, 300772 - Building Regulation Studies

....

In 2013 this unit wil be replacing 300722 Building Regulations Studies. This unit develops an awareness of the regulations used to control risk in buildings. Major sources of risk, such as fire and public health, are identified and controlled. Building regulations of high risk regions, such as cyclonic, seismic and bushfire-prone areas, are also discussed. The unit emphasises the safety of vulnerable occupants, such as young children, disabled people and the elderly. The unit also explores recent developments in the National Construction Code (NCC: formerly BCA) concerning energy efficiency.

300722.2 Building Regulations Studies

Credit Points 10 **Level** 3

Equivalent Units

BG302A - Building Regulation Studies

....

In 2013 this unit replaced by 300885 Building Regulations Studies. This unit develops an awareness of the regulations used to control risk in buildings. Major sources of risk, such as fire and public health, are identified and controlled. Building regulations of high risk regions, such as cyclonic, seismic and bushfire-prone areas, are also discussed. The unit emphasises the safety of vulnerable occupants, such as young children, disabled people and the elderly. The unit also explores recent developments in the BCA concerning energy efficiency.

200336.3 Business Academic Skills

Credit Points 10 **Level** 1

Assumed Knowledge

HSC English or equivalent

Equivalent Units

200155 - Business Skills and Communication, 100483 - Principles of Professional Communication 1, 700002 - Business Academic Skills (UWSC), 700077 - Creative Industries Business Academic Skills

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major.

....

This is a foundation unit that addresses academic essay writing skills relevant to business and economic issues. The unit is designed to develop basic student proficiencies such as information collection, analysis and evaluation, and logical reasoning skills. Through the analysis of ethical issues, this unit teaches students to research; reference using the College of Business and Law's Harvard style; analyse data; develop an argument; and write an academic essay.

200091.3 Business to Business Marketing

Credit Points 10 **Level** 3

Assumed Knowledge

Basic knowledge of marketing concepts, theories and frameworks

Prerequisite

200083.2 Marketing Principles

Equivalent Units

MK318A - Business-to- Business Marketing, 61723 - Business-to-Business Marketing

....

This unit encompasses introduction to B2B Marketing, differences between B2B and consumer marketing, organizational buying behaviour, B2B market segmentation, business marketing strategy, management of the 4P's in B2B Marketing, relationship and network marketing, Supply Chain Management and CRM strategies, and evaluating the marketing efforts and making the marketing strategy work.

200158.3 Business, Society and Policy

Credit Points 10 **Level** 2

Corequisite

200571.2 Management Dynamics OR **61611.1** Management Studies OR **H1727.1** Business Management OR **MG102A.3** Management Foundations

....

The purpose of this unit is to explore through reflection and social inquiry the complex relationships between businesses and their stakeholders, critically evaluating

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social and political impacts of business decisions and practices and the challenges and ethical dilemmas emerging in the context of global capitalism. Students will examine these relationships within the framework of the development of capitalism, considering the importance of government roles to regulate the impacts of business actions on society and vice versa. It emphasises the social responsibility of the firm and the role of ideology used to justify the actions of business, society and government.

400984.1   Cardiorespiratory Physiotherapy

Credit Points 10 **Level** 3

Prerequisite

400982.1 Core Competencies in Physiotherapy Practice AND **400981.1** Clinical Pharmacology AND **400870.1** Population Health and Society AND **400864.2** Research Methods (Quantitative and Qualitative)

Corequisite

400984.1 Cardiorespiratory Physiotherapy AND **400986.1** Neurological Physiotherapy AND **400985.1** Clinical Education A

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy or Graduate Entry Master of Physiotherapy programs. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff. Students cannot enrol in Year 3 Physiotherapy units until they have completed 160 credit points in the Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs.

....

This unit builds on the knowledge and skills developed in the first two years of physiotherapy study. It focuses on client assessment and evidence-based management in acute cardiorespiratory physiotherapy contexts. This will require strong communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include introductory skills in cardiorespiratory physiotherapy assessment, interpretation and prioritisation of findings along with the implementation and evaluation of appropriate treatment strategies.

300816.1   Cell Biology

Credit Points 10 **Level** 1

Assumed Knowledge

Basic understanding of biology and chemistry

Equivalent Units

300543 - Cell Biology, 300793 - Biology B - Cellular Processes, 300221 - Biology 1

Special Requirements

Students require safety glasses, labratory coat and labratory book.

....

Cells are the most basic form of all life, and underlying normal cell function are the molecules used to build complex cellular structures, generate energy, and propagate dynamic life. The unit will study the fundamental processes through which key biomolecules, including lipids, carbohydrates, amino acids and nucleic acids are manipulated to generate and store energy, and build a broad array of important biological macromolecules including DNA, membranes and proteins. To sustain life, cells respire for energy and replicate for growth and sexual reproduction. Accordingly the unit will examine cellular respiration, transcription, translation, mitosis, meiosis, transmission and how genes are inherited and modified providing student's insights into the phenomena of life. The role of DNA technology in the fields of medicine, biomolecular plant and animal science, food, forensic and environmental science will provide students with real world applications.

700125.1   Cell Biology (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic understanding of biology and chemistry

Equivalent Units

300543 Cell Biology, 300793 Biology B – Cellular Processes, 700034 Cell Biology (UWSC), 300816 Cell Biology

Special Requirements

Students must be enrolled at UWSCollege in either 7003 Diploma in Science or 7009 Diploma in Science Fast Track.

....

Cells are the most basic form of all life, and underlying normal cell function are the molecules used to build complex cellular structures, generate energy, and propagate dynamic life. The unit will study the fundamental processes through which key biomolecules, including lipids, carbohydrates, amino acids and nucleic acids, are manipulated to generate and store energy, and build a broad array of important biological macromolecules including DNA, membranes and proteins. To sustain life, cells respire for energy and replicate for growth and sexual reproduction. Accordingly the unit will examine cellular respiration, transcription, translation, mitosis, meiosis, transmission and how the genetic code is inherited and modified providing students insights into the phenomena of life. The role of DNA technology in the fields of medicine, biomolecular plant and animal science, food, forensic and environmental science will provide students with real world applications.

400874.2   Channels and Points 1

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed knowledge equivalent to Theories of Traditional Chinese Medicine 1.

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Equivalent Units

400347 - Acupuncture 1

....

Acupuncture is one of the principal therapeutic interventions in Traditional Chinese Medicine (TCM). This unit introduces students to acupuncture theory and practice, and provides opportunity to develop practical skills. It covers the theory of channels and points, channel pathway, point location and indication of the three yin/yang channels of hand and points, and the three yin channels of foot and points. This unit also expands upon the student's understanding of TCM theory and practice principles.

400875.2 Channels and Points 2

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed knowledge equivalent to Channels and Points 1.

Equivalent Units

400347 - Acupuncture 1

....

Acupuncture is one of the principal therapeutic interventions in Traditional Chinese Medicine (TCM). This unit completes the study of system of channels and points, which forms the basis of clinical application of acupuncture. It covers the channel pathway, point location and indication of the three yang channels of foot and points, and Du and Ren channels and points. It also introduces the points of ear and scalp acupuncture. This unit expands upon the student's understanding of TCM theory and practice principles.

700043.2 Chemistry (UWSCFS)

Credit Points 10 **Level** Z

Equivalent Units

900024 - Chemistry (UWSC)

Special Requirements

Students must be enrolled at UWS College.

....

This unit introduces students to the basic concepts required to satisfy the needs of most first year university science courses in both skill and content areas. It is intended that students will gain a greater understanding of the theoretical concepts covered in the course by completing the practical component of the course.

400162.2 Child and Adolescent Occupations

Credit Points 10 **Level** 3

Assumed Knowledge

First and second Year specialty occupational therapy units or Occupational Therapy Theory and Practice.

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy and 4664 - Master of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) successfully completed an approved Child Protection Workshop 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) if students are visiting a NSW Health facility they will need to comply with the occupational screening and immunisation policy of NSW Health.

....

Students learn about paediatric and adolescent occupational therapy practice in different practice settings. This unit examines child development and explores the occupations of childhood and adolescence. Occupational therapy models, frames of reference, assessments and interventions are applied to practice scenarios. Family-centred practice is a key focus of this unit. There will be a self directed and reflective learning approach in this unit.

101265.2 Children's Culture

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit explores the concept of children's culture and the diversity of cultures to which children belong. The unit focuses on current debates about childhood and children's culture, including the rise of children's consumer culture. Students will gain insights into children's lives and culture by critically engaging with a variety of objects and institutions that are part of children's lives, for example, toys, videogames, children's television programs, films and books. The unit will also examine the role of adults in children's culture, including in marketing and advertising to children.

101242.3 Children's Literature

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit explores a wide range of literary texts created for children, from folktales, fairytales and myths to contemporary examples. It focuses on the relationship between children's texts, society and culture. The unit will examine a variety of genres and themes, for example, the experience of childhood as constructed by adult authors of children's texts; post-colonial children's literature; the emergence and development of distinctly Australian children's texts; the development of "young adult" literature; the impact of new technologies on children's literature; and role of art in children's literature.

101626.4 Children's Literature: Image and Text

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points.

....

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This unit focuses on the interrelationships between image and text in children's literature. The unit examines both picture books and other image-based children's texts, including electronic texts and graphic novels. The unit will examine children's texts as cultural artefacts, theories of visual literacy and how image and text combine to create meaning. Students will have the opportunity to create their own picture book for their final project.

100056.2   Chinese 101

Credit Points 10 **Level** 1

....

The unit is offered in Autumn at Penrith for students enrolled in Course 1671 - Bachelor of Social Science (Pathway to Early Childhood Teaching). This unit is an introduction to the (Mandarin) Chinese language as well as aspects of Chinese culture which are necessary for language competency, using Pinyin and simplified characters. It is intended for students who are not from a Chinese-speaking background and who are at beginner level in all four skills -listening, speaking, reading and writing in Modern Standard Chinese. Components of this unit may be presented in English.

100057.2   Chinese 102

Credit Points 10 **Level** 1

....

This is a post-beginner level unit in (Mandarin) Chinese intended for those with knowledge of Chinese 101 or equivalent. This unit builds on the knowledge and skills developed in (Mandarin) Chinese 101 and aims to further develop listening, speaking, reading and writing skills in elementary Modern Standard Chinese. The unit includes a socio-cultural component which will examine some aspects of China and Chinese culture as well as the Chinese community in Australia.

100063.2   Chinese 302

Credit Points 10 **Level** 3

....

This unit further develops students' proficiency in both spoken and written Chinese acquired in 100062 - Chinese 301, with an emphasis on oral expression, reading and writing skills. It enhances students' ability to interact with native speakers in both spoken and written Chinese in various situations, and expands their understanding of Chinese culture. Some authentic materials are used in order to enhance students' understanding of the language in its cultural context and their ability to interact in similar settings.

100064.2   Chinese 303: Twentieth-Century Chinese Literature

Credit Points 10 **Level** 3

....

This unit introduces students to modern and contemporary Chinese literature in the Chinese language. It includes a brief overview of Twentieth-century Chinese literature, and exposes students to a variety of literary genres. Students

are expected to work individually and in groups in order to analyse, evaluate and critique these works, whose social and cultural context is integral to understanding them. This process will not only increase students' understanding and appreciation of Twentieth-century Chinese literature, but it will also develop their critical thinking skills.

100065.2   Chinese 304: Chinese Classical Literature

Credit Points 10 **Level** 3

....

This unit introduces students to Chinese classical literature in the Chinese language. It includes a brief overview of Chinese classical literature and exposes students to the prose, poetry, drama and fiction genres of Chinese classical works from the Han dynasty to the Qing dynasty. Through selected readings, students will gain some knowledge of the stylistic and linguistic features of classical prose and develop skills in reading classical Chinese. Students will also develop an understanding of the Chinese literary tradition and an appreciation of the continuing relevance of classical Chinese in contemporary China.

100066.2   Chinese 305: Chinese Cinema

Credit Points 10 **Level** 3

....

This unit offers a brief review of Chinese film and introduces some of the best Chinese-language productions of the last two decades from mainland China and Taiwan. Students will be required to work individually and in groups to critique the social and moral issues raised in these films. They will also consider the historical context from which these films emerged. This process will develop a deeper understanding of Chinese society and the lives of Chinese people of different eras. It will also enhance students' appreciation of Chinese cultural identity and moral values.

100067.2   Chinese 307: The Cultural Context of China

Credit Points 10 **Level** 3

....

This unit provides a brief overview of Chinese culture and examines the cultural interchanges of which it has been a part throughout history. Students will analyse the effects of these cultural contacts, both positive and negative. They will also evaluate and critique relevant cultural issues, from a comparative perspective. This process will increase students' understanding of the cultural identity of China, and it will also enable them to appreciate the importance of outside cultural influences, thereby reinforcing an open and mature attitude towards multiculturalism. The unit will be conducted in Chinese.

400918.1   Chinese Internal Medicine 1 (PG)

Credit Points 10 **Level** 7

Assumed Knowledge

Traditional Chinese Medicine 3, Acupuncture Techniques, Chinese Medicinal Formulas

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University of Western Sydney

Incompatible Units

400357 - Chinese Internal Medicine

....

The study of internal medicine forms the basis of clinical practice in traditional Chinese medicine. This unit begins to bridge the gap between theory and practice. It enables the health professional to analyse, diagnose and treat common internal diseases with both acupuncture and herbal medicine and using a TCM approach. The focus of this unit is on the analysis of major presenting symptoms.

400922.1   Chinese Internal Medicine 2 (PG)

Credit Points 10 **Level** 7

Assumed Knowledge

Traditional Chinese Medicine 3, Acupuncture Techniques, Chinese Medicinal Formulas

Incompatible Units

400360 - Chinese Internal Medicine 2

....

This unit builds on Chinese Medicine 1 and extends the students ability to analyse, diagnose and treat common and difficult diseases in internal medicine with both acupuncture and herbal medicine and using a Traditional Chinese Medicine approach. Students will develop an understanding of the causes and pathophysiological mechanisms of a wide range of diseases.

400876.2   Chinese Materia Medica 1

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed knowledge equivalent to Traditional Chinese Medicine 1.

Equivalent Units

400349 - Chinese Herbal Medicine 1

....

Herbal medicine is one of the principal therapeutic interventions in Traditional Chinese Medicine. This unit introduces students to the therapeutic and reference organisation of Chinese medicinal herbs, and enables students to commence using the materia medica. It covers the commonly used herbs in each of the six categories of the Chinese materia medica, including the herbal properties, actions, indications, contraindications, combined usage as well as herbal dispensing. This unit also expands upon the student's understanding of TCM theory and practice principles.

400877.2   Chinese Materia Medica 2

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed knowledge equivalent to Chinese Materia Medica 1.

Equivalent Units

400351 - Chinese Herbal Medicine 2

....

This unit completes the study of Chinese medicinal herbs, which forms the basis for Chinese herbal medicine. It covers the commonly used herbs in each of the twelve categories of the Chinese materia medica, including the herbal properties, actions, indications, contraindications and combined usage. It also introduces the basic knowledge of Traditional Chinese Medicine (TCM) dietary therapy and herbal pharmacognosy. This unit also expands upon the student's understanding of TCM theory and practice principles.

400878.1   Chinese Medicinal Formulas

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge equivalent to Chinese Materia Medica 1 and 2.

Equivalent Units

400351 - Chinese Herbal Medicine 3

....

Herbal medicine is the principal therapeutic intervention in Traditional Chinese Medicine (TCM). This unit follows from Chinese Materia Medica 1and 2, and begins the study of major Chinese herbal formulas, which form the basis for clinical prescribing in Chinese herbal medicine. The focus of this unit is to compare and contrast the main formulas in specified categories, and to analyse the specific actions of the herbs that make up the formula. Students will be required to formulate, assemble and prepare complex prescriptions. This unit expands upon the student's knowledge of the Chinese Materia Medica, as well as the understanding of TCM theory and practice principles.

100989.2   Cinema and Realism

Credit Points 10 **Level** 3

Equivalent Units

100272 - Montage, Theory, Cinema

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit explores the idea of realism in both fiction and non-fiction film as it has been articulated in film theory and explored in various film movements. The unit will start from early actuality film, will examine the principles which animate documentary cinema, and will explore the idea of realism as it has developed in fiction film. The unit will discuss a range of approaches to documentary realism, and explore contemporary challenges to the documentary idea in arguments that fictive elements exist in all documentary film. The unit will also examine various historical schools of realist filmmaking in the fiction film, such as Italian neo-realism. By the juxtaposition of ideas of realism in documentary and fiction, the subject will explore the blurred boundaries of non-fiction and fiction in contemporary cinema.

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100990.2   Cinema, Culture, Memory

Credit Points 10 **Level** 3

Equivalent Units

100249 - Cinema, Culture and Memory.

Special Requirements

Successful completion of 60 credit points.

....

In 2013, this unit replaced by 101987 - Post Colonial Australian Cinema. This unit will examine the role of cinema in forming images of national and cultural identity. The unit will study approaches in film theory to national cinemas, and will explore the development of indigenous and postcolonial cinemas. The unit will discuss political debates and issues in national cinemas, and will raise questions about the nature of memory as it is mediated by cinematic experience, the representation of history, and the history of representation of indigenous cultures and peoples. The unit will introduce these questions and examine them within the framework of a case study of one national or postcolonial cinema.

300005.2   Circuit Theory

Credit Points 10 **Level** 2

Assumed Knowledge

Content contained in 200238 - Mathematics for Engineers 2. Ordinary Differential Equations, inlcuding first and second order. Laplace transforms: definition, inverse transform, s-shift, unit step function and Dirac delta function, transform of a derivative, solving differential equations.

Prerequisite

300021.2 Electrical Fundamentals

....

This unit aims to equip students with the tools needed for the design and analysis of electrical and electronic circuits. The unit also introduces various techniques of circuit analysis, convolution, mutual coupling, frequency response and two ports loop.

101589.2   Cities: Introduction to Urban Studies

Credit Points 10 **Level** 1

Equivalent Units

101342 - The Urban Context

....

This unit is a keystone in the Geography and Urban Studies major. It aims to introduce students to the major urban challenges that will shape our society in the future and to the major substantive concerns in the field of urban management and planning It will develop students' understanding of how their own urban experiences are shaped by broader historical, cultural, economic, and social forces, and will enable students to compare the Australian urban context and issues with those in other world regions.

100991.2   Citizenship Ancient and Modern

Credit Points 10 **Level** 3

Equivalent Units

100851 - Citizenship Ancient and Modern

Special Requirements

Successful completion of 60 credit points at Level 1.

....

There are repeated calls for greater involvement by citizens in public life or the community. Generally such appeals draw upon an image of ancient Western citizenship derived from the Greek city-state or ancient Rome. Yet the history of citizenship and civic identity in the West is long and varied. This unit surveys the historical literature from a number of different periods of Western history, from the ancient city-states to the Roman Empire, from Medieval merchants to Renaissance scholars, through to early modern debates around sovereignty and religious toleration. It also examines modern debates around the greater complexity of modern societies as against ancient, and the perceived greater focuses upon privacy and personal autonomy in the modern world - all of which are claimed to have diminished the civic impulse. The unit should be of interest to history, politics and education students.

300930.1   Classical Physics and Advanced Technologies

Credit Points 10 **Level** 2

Assumed Knowledge

Introductory mechanics: Newton's laws, work, conservation of energy and momentum. Introductory Electrostatics: Electric forces and Coulomb's law; DC electricity, voltage, current, resistance, Ohm's law, electric power, circuit laws. Introduction to Magnetic fields: production by magnets & currents, magnetic forces on currents & charges; Induced EMF, Faraday's law and electrical generators; AC current & voltage, peak & rms values, capacitance and inductance.

Prerequisite

300829.1 Physics 2

Equivalent Units

300413 - Applied Instrumentation in Nanotechnology

....

This unit explains in depth aspects of classical mechanics related to forced and damped oscillations. Physical waves are introduced and formalized by describing applications of the wave equation to mechanical systems and electromagnetic radiation. Interference and diffraction are detailed using electromagnetic fields (physical optics). Main technological applications of mechanical oscillations and electromagnetic waves are also explained, such as the atomic force microscope, laser, optical tweezers and the zeta-sizer.

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400969.1 Classical Texts in Chinese Medicine (PG)

Credit Points 10 **Level** 7

Assumed Knowledge

Traditional Chinese Medicine 3, Chinese Medicinal Formulas

Incompatible Units

400355 - Classical Texts in Chinese Medicine

....

This unit provides further learning experiences that enable the students to explore the original theories on physiology, pathology, diagnosis, differentiation and treatment of diseases through select periods of Chinese history. Many theoretical concepts, diagnostic systems and therapeutic methods of Traditional Chinese Medicine (TCM) are still in current usage, and will be covered through the study of important classical texts and academic schools of TCM thought. This unit expands upon the students understanding of TCM theories and practice principles through studies of the classical literature.

100852.2 Classics of Modern Philosophy

Credit Points 10 **Level** 2

Equivalent Units

63049 - Critical and Modern Philosophy

Special Requirements

Successful completion of 60 credit points at Level 1.

....

Classics of Modern Philosophy introduces students to a selected number of 'great' (highly influential) philosophical texts of the late nineteenth and twentieth centuries. Addressing fundamental issues such as human freedom, the nature of truth and knowledge, technological progress, problems of modern life, this unit guides students through key statements with supporting explanation of the philosophers, their projects and careers, and relevant social contexts.

101870.1 Climate Change and Culture

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

This unit introduces climate change as a complex social, cultural and political phenomenon, one that is re-shaping the way we live in the world and future lifestyles. Because climate change is highly contested, the course critically examines the issue from different theoretical, disciplinary, social and cultural perspectives. Topics range from cultural theory and forms of social action to the history and construction of climate change as concepts and debates around nature, culture, science, economics and consumption; to social justice, Indigenous knowledge systems, popular culture, the media and Australian politics, global governance, cities and urban planning.

300837.1 Climate Change Science

Credit Points 10 **Level** 2

Prerequisite

300808.1 Introductory Chemistry OR **300800.1** Essential Chemistry 1 AND **300802.1** Biodiversity

Equivalent Units

300781 - Atmospheric Science

....

A factual understanding of the energy balance of the globe, how this impacts on climate and how climate has varied in the past, is essential for any person working in the climate change area. This unit will introduce students to the concept of energy balance and climate, our understanding of how climate works, and how it has changed through time. Topics in basic atmospheric science will give students a critical understanding of current environmental concerns and debates about radiative forcing (the greenhouse effect), climate change, ozone depletion, photochemical pollution and acid precipitation.

400879.1 Clinical Assessment Methods

Credit Points 10 **Level** 3

Assumed Knowledge

Understanding of human anatomy & physiology and pathophysiology of common impairments of health.

Prerequisite

400138.1 Pathophysiology 1 AND **400868.1** Human Anatomy and Physiology 1 AND **400869.1** Human Anatomy and Physiology 2

Equivalent Units

400262 - Clinical Diagnosis

....

This unit is designed to introduce students to basic principles and essential skills of physical examination and diagnostic/laboratory investigation procedures, required for successful approach to diagnosis of health impairment states. Primary contact health practitioners are expected to have sound understanding of disease presentation, techniques of patient interviewing and examination for collection of relevant clinical information as well as the ability to select appropriate laboratory tests and interpret their findings. This unit will also help students to develop fundamental clinical reasoning skills required in the medical decision making process.

400985.1 Clinical Education A

Credit Points 10 **Level** 3

Prerequisite

400982.1 Core Competencies in Physiotherapy Practice AND **300754.1** Neuroanatomy AND **400981.1** Clinical Pharmacology AND **400864.2** Research Methods (Quantitative and Qualitative)

Corequisite

400983.1 Orthopaedic Physiotherapy AND **400986.1** Neurological Physiotherapy AND **400984.1**

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Cardiorespiratory Physiotherapy AND **400987.1** Neurological Physiotherapy Practice

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4668 Bachelor of Health Science (Honours) / Master of Physiotherapy or 4667 Master of Physiotherapy. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. Students are required to wear the UWS physiotherapy uniform which complies with NSW Health uniform requirements. Students cannot enrol in Year 3 Physiotherapy units until they have completed 160 credit points in the Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs.

....

This unit focuses on the core competencies of physiotherapy professional practice in acute care settings. These competencies will be developed through a supervised, community-based clinical education placement. Professional competencies addressed in this unit include communication, documentation, reflection, professional and ethical behaviour. In addition, students will develop skills in physiotherapy assessment and treatment in acute care settings which may span the musculoskeletal, neurological and cardiorespiratory domains.

401051.1   Clinical Education B (Rehabilitation)

Credit Points 10 **Level** 7

Prerequisite

400997.1 Exercise Rehabilitation AND **400998.1** Neurological Rehabilitation

Special Requirements

Students must be enrolled in course 4662 - Bachelor of Health Science/Master of Physiotherapy, 4667 - Master of Physiotherapy or 4668 - Bachelor of Health Science (Honours)/Master of Physiotherapy. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 OR a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. Students are required to wear the UWS physiotherapy uniform which complies with NSW Health uniform requirements.

....

This clinical education placement will operationalise the theoretical and research knowledge and skills learnt in 400997 Exercise Rehabilitation and 400998 Neurological Rehabilitation. Students will be required to assess and treat clients in rehabilitation settings. Treatments will be focused on improving client mobility and function that is altered by illness, injury, chronic disease or a disability. This will assist in preparation for client discharge home or to an appropriate residential facility, as well as enhance functioning at home or in the community. Assessment and treatments will tend to have a neurological physiotherapy focus, but clients may also present with cardiorespiratory and musculoskeletal conditions which require intervention. Students will, therefore, be expected to integrate knowledge and skills learnt across all physiotherapy-specific units in their provision of client-centred care as well as draw on their more general knowledge from earlier stages of the course.

401052.1   Clinical Education C (Ambulatory Care)

Credit Points 10 **Level** 7

Prerequisite

400983.1 Orthopaedic Physiotherapy AND **400997.1** Exercise Rehabilitation AND **400999.1** Musculoskeletal Physiotherapy

Special Requirements

Students must be enrolled in course 4662 - Bachelor of Health Science/Master of Physiotherapy, 4667 - Master of Physiotherapy or 4668 - Bachelor of Health Science (Honours)/Master of Physiotherapy. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 OR a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. Students are required to wear the UWS physiotherapy uniform which complies with NSW Health uniform requirements.

....

This clinical education placement will operationalise the theoretical and research knowledge and skills learnt in 400983 Orthopaedic Physiotherapy, 400999 Musculoskeletal Physiotherapy and 400997 Exercise Rehabilitation. Students will be required to assess and treat clients who present in hospital outpatient departments, community settings and private practices. This involves the assessment of the client's impairments, function and disability within their home and community environment. Interventions may include manual and exercise therapy; use of electrophysical agents, taping and bracing; and education regarding both prevention and management of conditions. Assessment and treatment will tend to have a musculoskeletal physiotherapy focus, however, clients may also present with neurological and cardiorespiratory conditions that require intervention. Students will therefore integrate knowledge and skills learnt across all

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physiotherapy-specific units in their provision of client-centred care as well as draw on their more general knowledge from earlier stages of the course.

401053.1   Clinical Education D (Paediatrics)

Credit Points 10 **Level** 7

Prerequisite

400985.1 Clinical Education A OR **401051.1** Clinical Education B (Rehabilitation) OR **401052.1** Clinical Education C (Ambulatory Care)

Corequisite

401047.1 Paediatric Physiotherapy

Special Requirements

This unit is only available to students who are enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4667 Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 OR a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. Students are required to wear the UWS physiotherapy uniform which complies with NSW Health uniform requirements.

....

This clinical education placement will operationalise the knowledge (theory and research) and skills learnt in Paediatric Physiotherapy. Students will also apply the knowledge and skills learnt in musculoskeletal, cardiorespiratory and neurological physiotherapy units to provide appropriate and holistic care to paediatric clients. Students will be required to assess and treat paediatric clients in acute hospital, rehabilitation or community settings. This involves the consideration of a child's age, development, and diagnosis during assessment and treatment. Advanced communication skills are required to educate parents and children on the prevention and management of the conditions. Students will therefore be expected to integrate knowledge and skills learnt all physiotherapy-specific units in their provision of client-centred care as well as draw on their more general knowledge from earlier stages of the course.

401054.1   Clinical Education E (Advanced Care)

Credit Points 10 **Level** 7

Prerequisite

400997.1 Exercise Rehabilitation AND **400985.1** Clinical Education A

Corequisite

401048.1 Physiotherapy for Chronic Illness and Disease AND **401051.1** Clinical Education B (Rehabilitation) AND **401052.1** Clinical Education C (Ambulatory Care)

Special Requirements

This unit is only available to students who are enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4667 Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 OR a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. Students are required to wear the UWS physiotherapy uniform which complies with NSW Health uniform requirements.

....

This clinical unit involves the integration of musculoskeletal, neurological and cardiorespiratory physiotherapy assessment and treatment skills in an advanced physiotherapy care environment. Advanced problem-solving skills will be required to manage complicated client presentations in various clinical environments. Advanced care environments may include speciality areas such as burns, spinal, emergency, intensive care and aged care units within a hospital, or private practice and community-based services where the physiotherapist is the primary care practitioner. Student preferences and prior clinical placement experience will be considered in the clinical placement allocation process. This will help to ensure all students are given the opportunity to explore the breadth of practice of physiotherapy in different environments.

400887.1   Clinical Exercise Physiology 1

Credit Points 10 **Level** 3

Prerequisite

400326.1 Exercise Prescription for General Populations AND **400885.1** Sport and Exercise Physiology

Equivalent Units

400328 - Exercise Prescription For Special Populations

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

Clinical Exercise Physiology 1 is primarily concerned with teaching students how to design and implement exercise assessments and exercise prescriptions for clinical populations (high-risk). Emphasis is placed on cardiovascular, metabolic, pulmonary and immunological diseases. Unit content relates to how exercise can be applied to prevent, manage and/or treat chronic diseases, informed by an understanding of the pathophysiology and its impact on health status. Students will be involved in designing exercise programs using an evidence-based approach, which will enable a client to achieve optimum results whilst maintaining a high regard for safety, adherence and motivation. Students will be involved in practical sessions aimed at developing the skills necessary

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for exercise screening, testing and prescription in clinical populations.

400981.2 Clinical Pharmacology

Credit Points 10 **Level** 2

Prerequisite

400138.3 Pathophysiology 1

Equivalent Units

400135 - Clinical Pharmacology and Microbiology

Incompatible Units

300505 - Pharmacology

....

This unit explores in depth clinical pharmacology fundamental to the practice of allied health (physiotherapy and podiatric medicine) and complementary medicine (traditional Chinese Medicine). General principles of pharmacology, pharmacokinetics and pharmacodynamics will be discussed. Key drug categories affecting the main body systems will be introduced in terms of their mechanisms of action, adverse reactions and clinical applications. In the context of antimicrobial pharmacology, general concepts of microbiology will be introduced offering students an understanding of the causative microorganisms, the complex relationship between host and pathogen, the pharmacological actions of antimicrobial drugs and the principles of infection control.

101677.3 Cognitive Processes

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of core concepts of cognition, perception and biological psychology

Prerequisite

101183.2 Psychology: Behavioural Science

Equivalent Units

100016 - Human Learning and Cognition

Special Requirements

Prerequisites will not apply to students enrolled in 1630 Graduate Diploma of Psychological Studies.

....

Cognitive psychology studies the mental processes that underpin attention, perception, learning and memory. Conceptual and research questions include: How do we recognize speech, faces, or music? What are the structures and mechanisms of human memory? What processes underpin acquisition of language, and are the processes similar when we learn a second language? What processes are involved in reading? What factors affect attention and performance? Is creativity anything more than problem solving? Contemporary theories will be discussed and evaluated. Investigative research methods include experiments, computer modelling, clinical case studies, and brain imaging.

401040.1 Collaborative Care

Credit Points 10 **Level** 3

Prerequisite

401036.1 Complex Care 1 AND **401038.1** Midwifery Practice Experience 3

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

The Australian College of Midwives and the National Health and Medical Research Council (NHMRC) provide guidelines to assist midwives to recognise when to refer or consult with other midwives or health care practitioners, as well as collaborative care arrangements. This unit provides students with the knowledge to collaborate with all health professionals. This includes assessing procedures for managing obstetric emergencies; transferring women or newborns; assessing referral pathways; and caring for bereaved families.

100900.3 Comedy and Tragedy

Credit Points 10 **Level** 2

Equivalent Units

B2857 - Comedy and Tragedy

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit will examine the theory, writing and performance of Western Tragedy and comedy. The generic terms "tragedy" and "comedy" will provide signposts for both historical and theoretically modern approaches to a range of plays. Texts selected from the period since 1950 may represent comedy and/or tragedy in popular culture, and may have been written for media other than the stage, such as television and film.

300089.5 Commercial Applications Development

Credit Points 10 **Level** 2

Assumed Knowledge

It is assumed that students have an introductory programming ability and are familiar with using the information technology facilities at UWS.

Prerequisite

300580.2 Programming Fundamentals OR **300585.2** Systems Analysis and Design OR **300104.4** Database Design and Development

Incompatible Units

300940 - Commercial Applications Development (Advanced)

....

This unit builds on programming principles to develop software applications based on commonly used off the shelf packages such as Microsoft Word, Excel and Access. It covers the development of programs for these packages

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using macro programming techniques and programming language such as Visual Basic for Applications. It provides a solid understanding along with practical applications of macro and scripting language usage, development, debugging and possible application interactions. It is a preparation and foundation for the scripting and macros as found in IS systems/packages from operating system shell scripts, web applications to database stored procedures.

300940.1 Commercial Applications Development (Advanced)

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals AND **300585.2** Systems Analysis and Design AND **300104.4** Database Design and Development OR **300941.1** Database Design and Development (Advanced)

Incompatible Units

300089 - Commercial Applications Development

Special Requirements

Students must be enrolled in 3685 - Bachelor of Computing (Information Systems) Advanced

....

This unit enables students to develop software applications situated within the Microsoft Office environment. It provides a preparation and foundation for the construction of related, but more complex, applications using the Microsoft API or VB.NET. The unit also provides a foundation for the use of scripting and macro languages both for the web and for operating systems. The advanced component of the unit will be offered via a series of seminars including other Office applications such as Outlook and PowerPoint so that students taking this unit can develop more powerful interactive applications which enable use of email and calendar facilities. Advanced techniques such as user-defined classes and objects will be included in this series.

300068.3 Communication Electronics

Credit Points 10 **Level** 5

Prerequisite

200238.2 Mathematics for Engineers 2 AND **300025.3** Electronics

Equivalent Units

84488 - Advanced Electronics

....

The unit presents the theory and many of the devices used in radio frequency (RF) communication electronics. S-parameters are presented and advanced to cover areas such as- multiport networks and lossless networks. S-parameter measurement techniques are presented and tested in the lab. The analysis/design of common RF components including power splitters, directional couplers, circulators and phase shifters are developed. Microstrip transmission lines are presented as a practical means of interconnecting devices at RF frequencies. RF transistor amplifier and oscillator design is presented in detail. RF mixers, RF filters and RF receiver architectures are also discussed in detail.

400732.2 Communication in Health

Credit Points 10 **Level** 1

Equivalent Units

400131 - Communication for the Helping Professions.

....

Communication is integral to professional relationships, whether working individually with a client, educating community members on health matters, or working with other professionals as part of a multidisciplinary team. This unit aims to develop communication skills in preparation for work within the health professions across these areas. Communication skills will include those needed to form therapeutic relationships with individual clients and groups, as well as those required to communicate health information to clients, groups and the wider community. Students will develop skills to establish appropriate working relationships with professional colleagues.

700062.2 Communication in Health (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

400732 - Communication in Health, 400131 - Communication for the Helping Professions

Special Requirements

Students must be enrolled at UWS College.

....

Communication is integral to professional relationships, whether working individually with a client, educating community members on health matters, or working with other professionals as part of a multidisciplinary team. This unit aims to develop communication skills in preparation for work within the health professions across these areas. Communication skills will include those needed to form therapeutic relationships with individual clients and groups, as well as those required to communicate health information to clients, groups and the wider community. Students will develop skills to establish appropriate working relationships with professional colleagues.

300007.2 Communication Systems

Credit Points 10 **Level** 3

Prerequisite

300057.3 Signals and Systems

....

This unit will provide a basic introduction to communication systems and techniques. Specific topics covered include energy and power spectral density, amplitude modulation, frequency modulation, pulse modulation, an overview of digital modulation techniques, noise in communication systems and an overview of current telecommunication systems; spread spectrum systems, optical communication systems, radio broadcasting and mobile communication systems.

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100992.3 Communication: Power and Practice

Credit Points 10 **Level** 3

Equivalent Units

63195 - Communication Theory

Special Requirements

Successful completion of 60 credit points

....

Human communication takes many forms, and has many corresponding capacities: to bond, to represent, to express, to reveal, to record, to encode, to network - and more. Through communicative connections and associated actions human societies aim to accomplish ethical, political and personal tasks. This unit aims to examine communications as actions and forces as much as making meanings: verbal confession reveals personal truths and cultural belief; the printed word enables dissemination of new ideas about society and its structures; electronic messages connect in novel ways. Through looking at crucial forms and evolving communication techniques, this unit examines the powers of communication.

300838.1 Comparative Physiology

Credit Points 10 **Level** 2

Assumed Knowledge

Basic biology, chemistry and maths

Prerequisite

300818.1 Introduction to Physiology OR **300936.1** Functional Proteins and Genes OR **300801.1** Animal Science OR **300816.1** Cell Biology OR **300802.1** Biodiversity

Equivalent Units

300608 - Animal Physiology

Special Requirements

Successful completion 60 credit points at Level 1 and 20 credit points at Level 2.

....

Building on the underlying physical and chemical principals/laws that define physiology, this unit from both a systems (e.g. Respiratory) and environmental (e.g. Marine) perspective, seeks to compare the functional physiology of organisms at all levels of organisation. Particular attention will be paid to respiration, temperature tolerance & regulation, living in water, sensory and neurophysiology. Students will have the opportunity to carry out a defined research project.

401036.1 Complex Care 1

Credit Points 10 **Level** 2

Prerequisite

401034.1 Midwifery Knowledge 3

Special Requirements

Must be enrolled in the 4684 Bachelor of Midwifery.

....

This unit introduces students to complexities in health that emerge during pregnancy, labour, birth and the postnatal period which require additional care when the health of the mother and/or newborn may be compromised. This module also focuses on the midwifery care required for newborns with health changes from birth to six weeks and for those neonates with special needs.

401039.1 Complex Care 2

Credit Points 10 **Level** 3

Prerequisite

401036.1 Complex Care 1 AND **401038.1** Midwifery Practice Experience 3

Special Requirements

Students must be enrolled in the 4684 Bachelor of Midwifery.

....

This unit continues to explore the complex issues surrounding childbirth with a particular emphasis on those women who have pre-existing conditions. Dilemmas and challenges that surround infertility, maternal mental health, medical conditions and previous surgical conditions that may impact on pregnancy and or birth, are examined. The unit also explores environmental issues and women's social and psychological health. In addition, the unit includes management and the care of the sick newborn.

401049.1 Complex Cases and Professional Issues

Credit Points 10 **Level** 7

Prerequisite

400984.1 Cardiorespiratory Physiotherapy AND **400999.1** Musculoskeletal Physiotherapy AND **401048.1** Physiotherapy for Chronic Illness and Disease AND **400985.1** Clinical Education A

Corequisite

401051.1 Clinical Education B (Rehabilitation) OR **401052.1** Clinical Education C (Ambulatory Care) OR **401053.1** Clinical Education D (Paediatrics) OR **401054.1** Clinical Education E (Advanced Care)

Special Requirements

Students must be enrolled in course 4662 - Bachelor of Health Science/Master of Physiotherapy, 4667 - Master of Physiotherapy or 4668 - Bachelor of Health Science (Honours)/Master of Physiotherapy.

....

In this unit, students will further develop their clinical reasoning with respect to clients with complex presentations. A framework will be presented, which synthesises complex information such as the theory, research and skills in musculoskeletal, cardiorespiratory and neurological physiotherapy across the lifespan, and theories related to professionalism, ethics, safety and communication. This framework will be applied to the area of Intensive Care, where students will develop further knowledge and skills in specific cardiorespiratory techniques such as manual hyperinflation and suctioning. This unit also contains the discussion of a range of recent

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Units

professional developments in physiotherapy, which are relevant to entry level practitioners. These include registration as a physiotherapist, continuing education, workload control strategies, duty of care responsibilities and quality improvement processes (including critical reflection), employment strategies and career pathways.

300911.1   Complex Forensic Studies

Credit Points   10 **Level**   3

Prerequisite

300864.1 Imaging Science & Photographic Evidence AND **300873.1** Crime Scene Investigation AND **300843.1** Forensic and Environmental Analysis AND **300806.1** Forensic Science AND **300845.1** Genetics

Equivalent Units

300373 - Complex Forensic Case Studies

Special Requirements

Students must be enrolled in course 3589 - Bachelor of Science (Forensic Science) or 3562 - Bachelor of Science (Advanced Science).

....

This is an advanced and integrating capstone unit for students studying forensic science. It incorporates previous science, forensic science and social science units to form a comprehensive examination of the functionality of forensic evidence within the contemporary Australian judicial system. This capstone highlights the needs for an interdisciplinary approach to define and critique forensic science evidence from various perspectives including science, law, criminology, policing and social science. Students are required to use their skills and knowledge with additional independent research and inquiry using a range of set literature. The unit will study a range of contemporary issues including how the judicial system evaluates the reliability of evidence from an admissibility threshold, identification evidence from CCTV, contextual bias with forensic examination, contamination issues with forensic evidence and methods of expressing forensic findings and/ or significance.

300092.1   Computer Architecture

Credit Points   10 **Level**   3

Prerequisite

300096.1 Computer Organisation

Equivalent Units

14949 - Computer Architecture

....

This unit is designed for computer science students, particularly those interested in systems programming, hardware/software interfaces, and computer system performance evaluation. The topics cover memory system organisation and architecture, CPU functional organisation, pipelined and superscalar microarchitectures, multiprocessor systems, and I/O systems. After completing this unit students will understand the major issues in the state-of-the-art computer architecture, especially modern microprocessors, and will be able to use this knowledge as a basis for product choice and systems configuration.

300447.2   Computer Forensics Workshop

Credit Points   10 **Level**   3

Assumed Knowledge

This is the capstone practical unit for Computer Forensics major of the Bachelor of Computer Science, as such it is assumed that the students of this unit will have completed all other units in the major.

Prerequisite

300143.3 Network Security AND **300149.2** Operating Systems AND **300165.3** Systems Administration Programming

Special Requirements

This unit requires specialised technical laboratory facilities, and specialist academic staff that are very limited in number. As such the School believes it can support the running of this unit for no more than 20-24 students per year which is the expected number completing the Computer Forensics major. In addition the specified pre-requisites are unlikely to be met by students not enrolled in the Bachelor of Computer Science.

....

This unit is composed of a series of investigative workshops that put into practice, in a Computer Forensics context, many of the technical skills developed in earlier pre-requisite units. The unit is intended to not only further develop these skills but to instil best technical practice, sound understanding of technical investigative techniques and documentation of the results of investigation. Workshop topic areas include: clean media copying techniques, search and identification of hidden data, building profiles of computer activities through probing and analysis of log files and how to prepare a system and network to best support subsequent intrusion and activity detection.

300093.3   Computer Graphics

Credit Points   10 **Level**   3

Prerequisite

300027.2 Engineering Computing OR **300581.2** Programming Techniques

Equivalent Units

14956 - Computer Graphics

....

Computer Graphics will examine elementary graphics concepts, algorithms and programming skills for producing graphical applications, in both two-dimension (2D) and three-dimension (3D) using Open GL. Techniques and algorithms will be programmed in Processing, which is a very easy-to-learn programming language yet powerful and comprehensive.

300565.2   Computer Networking

Credit Points   10 **Level**   2

Assumed Knowledge

Fundamentals of computer architecture, binary and hexadecimal numbering systems, and programming

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principles. They should also have a working knowledge of the World Wide Web.

Equivalent Units

300094 - Computer Networking Fundamentals, 300086 - Applied Data Communications and Networking

....

Computer Networking is an introductory unit in computer systems networking. It covers basic networking technologies, Ethernet fundamentals, ISO OSI model, routing, switching and subnetting, the Internet architecture, networking protocols including TCP/IP, important networking devices such as repeaters, hubs, bridges, switches, routers and gateways, basic management and security issues. This unit is also the first of three units, which will prepare students for industry based networking certification (CCNA).

300946.1   Computer Networking (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

Fundamentals of computer architecture, binary and hexadecimal numbering systems, and programming principles. A working knowledge of the World Wide Web.

Incompatible Units

300094 - Computer Networking Fundamentals, 300086 - Applied Data Communications and Networking, 300565 - Computer Networking

Special Requirements

Only students enrolled in the B Computing (IS) Advanced & BICT (Advanced) may take this unit

....

This unit introduces students to computer systems networking. It covers basic networking technologies, Ethernet fundamentals, ISO OSI model, routing, switching and subnetting, the Internet architecture, networking protocols including TCP/IP, important OSI layer 2 and 3 networking device fundamentals, basic network management and security issues. This unit is also the first of three units, which will prepare students for industry based networking certification (CCNA). Students in this advanced unit will be required to undertake individual assessment activities demonstrating a high level of technical and applied theoretical competency.

700012.1   Computer Networking (UWSC)

Credit Points 10 **Level** 2

Assumed Knowledge

Fundamentals of computer architecture, binary and hexadecimal numbering systems, and programming principles. Students should also have a working knowledge of the World Wide Web.

Equivalent Units

300094 - Computer Networking Fundamentals, 300086 - Applied Data Communications and Networking, 300565 - Computer Networking

Special Requirements

Students must be enrolled at UWS College.

....

This introductory unit in computer systems networking covers basic networking topologies, Ethernet fundamentals, ISO OSI layers, routing, switching and sub-nets, the Internet architecture, networking protocols including TCP/IP, important networking devices such as repeaters, hubs, bridges, routers and gateways, basic management and security issues. This unit is also the first of three units which will prepare students for industry based networking certification.

300095.4   Computer Networks and Internets

Credit Points 10 **Level** 3

Assumed Knowledge

Fundamentals of data communications and computer networking, such as that covered in the prerequisite unit.

Prerequisite

300565.2 Computer Networking OR **300095.4** Computer Networks and Internets OR **300086.2** Applied Data Communications and Networking OR **300946.1** Computer Networking (Advanced)

Special Requirements

This unit is offered at an advanced level and students need to have a good knowledge in fundamentals of data communications, computer networking and basic knowledge of programming in C++ language to successfully complete the unit.

....

This unit extends on the work undertaken in the prerequisite unit and provides students with an in-depth understanding of the role of TCP/IP, ICMP and routing protocols used in IP networks and internetworks. Students will learn about the critical role of routing protocols and how to design, construct and implement small internets. Students will also learn how to perform basic management and security tasks in a practical, hands-on fashion using Cisco routers and other networking equipment. This is the second of three units that prepares the student for industry based networking certification (CCNA).

300096.5   Computer Organisation

Credit Points 10 **Level** 2

Prerequisite

300027.2 Engineering Computing OR **300580.2** Programming Fundamentals

Corequisite

200025.2 Discrete Mathematics OR **200237.3** Mathematics for Engineers 1

....

This unit is designed for computer science students, particularly those interested in systems programming and hardware development. The students will learn about the interface between the hardware and software of a computer system. This will involve study of some aspects of computer architecture and low level interfacing to gain an insight into CPU organisation at the assembly language level. After completing this unit students will be able to write

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procedures in an assembly language, and use their understanding of the relationship between the instruction set architecture and the implementation of high level languages to write efficient programs.

300569.2 Computer Security

Credit Points 10 **Level** 3

Assumed Knowledge

The students are expected to have general understanding on computer systems; computer fundamentals, databases, and web technologies.

....

This unit identifies and analyses various principles and technologies related to security and privacy and discusses practical application of those principles and technologies in securing computer systems. It is designed to provide basic computer security skills required by any discipline that uses computer systems and also lays a solid foundation for individuals who are keen to pursue a career in computer security. In particular, but not limited to, this unit aims at the implementation and management of security and privacy policies of organisations within the standards and legal framework that is also applicable to the Australian standards.

300364.3 Computing Honours Seminar Program

Credit Points 10 **Level** 5

Special Requirements

Students must be enrolled in an Honours degree.

....

The seminar program in an integral part of the Bachelor of Computing (Honours) program. It is structured in such a way that there are extensive links with the other components in the program (Research Process and Practice and Computing Honours Thesis). In undertaking and completing tasks associated with this component the student will be working towards the ultimate goal of completion of the thesis document. Successful completion of the seminar program will allow development of skills, knowledge and a way of thinking which, with the research process and practice component, will assist in the production of the thesis. In this program, students will be given the opportunity to present work in progress reports to peers and academic staff, attend and report research seminars and develop practical experience in articulation of ideas.

300363.3 Computing Honours Thesis

Credit Points 60 **Level** 5

Corequisite

300364.3 Computing Honours Seminar Program

Special Requirements

Students must be enrolled in an Honours degree.

....

The aim of this unit is to further develop the student's research and problem solving skills. The student is required to implement the research plan, complete a substantive

piece of research in the field of Computing and IT and to communicate the results of that work to an interested and technically literate audience. All projects will therefore contain at least two broad areas of assessment: the substantive work itself and the oral and written communication of the work to others. All assessment components submitted in both of these areas are expected to be of a high professional standard. Students will present their research in the thesis. The thesis topic and structure will vary according to the area of interest of the student and the expertise of the supervisor. The project may comprise theoretical investigation, software or hardware development or some combination of these. The project is meant to be a significant undertaking and to incorporate some element of innovation. Throughout this unit regular planned consultations between the student and supervisor will occur. Students are expected to work to a schedule devised in consultation with their supervisor. The schedule will include set dates for the presentation of draft chapters for review by the supervisor.

300736.2 Concrete Structures (UG)

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of engineering mechanics and statics.

Prerequisite

300733.2 Introduction to Structural Engineering

Corequisite

300732.2 Structural Analysis

Equivalent Units

85251 - Concrete Structures (UG)

....

This unit covers the basic elements of structural behaviour and design with reinforced and pre-stressed concrete. Students will learn to analyse the section capacity of reinforced concrete beams, slabs, and columns, and design simple suspended structures. The unit places a strong emphasis on the process of structural design.

300855.1 Conservation Biology

Credit Points 10 **Level** 3

Prerequisite

300802.1 Biodiversity AND **300836.1** Botany OR **300838.1** Comparative Physiology OR **300865.1** Plant Physiology OR **300845.1** Genetics OR **300839.1** Ecology

Equivalent Units

300466 - Environmental Biology, 300617 - Conservation Biology

Special Requirements

Successful completion of 40 credit points at level 2 and 20 credit points at level 3. Students are required to wear a lab coat and enclosed footwear in this unit.

....

Most species disappearances have occurred in major extinction events spread over geological time. Are we in the midst of and the cause of another mass extinction event? This unit will explore this idea by examining the processes

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that have led to, and are leading to species extinction and the current biodiversity crisis. Many of the methods and issues used in and associated with conservation will be covered in a variety of case studies, field and laboratory activities.

200504.2   Construction Economics

Credit Points 10 **Level** 4

Assumed Knowledge

Building construction including residential, light industrial and small commercial as well as building measurement and estimating.

....

This subject is designed to provide students with: an understanding of economic principles, national and international economic issues; general investment issues; how the national and international economy functions; how the building industry and the building firm relates to the national and international economy; and how economic reasoning may be applied to various problems in the building industry.

200482.2   Construction in Practice 1

Credit Points 10 **Level** 2

Assumed Knowledge

Local Government planning requirements, residential construction details, quantity surveying, contract documentation, site planning.

Prerequisite

BG101A.1 Building 1 AND **BG103A.1** Building 2 AND **BG105A.1** Graphic Communication and Design (V1)

....

In 2013 this unit replaced by 300886 - Construction in Practice 1. This unit is designed to allow the student to gain experience with the complexity of the construction industry by integrating knowledge from earlier units. The unit involves group work on construction planning and management, regulatory control and client liaison required for initiating and completing a residential construction project.

300886.1   Construction in Practice 1

Credit Points 10 **Level** 3

Assumed Knowledge

Local Government planning requirements, residential construction details, quantity surveying, contract documentation, site planning

Prerequisite

300706.2 Building 1 AND **300729.1** Graphic Communication and Design AND **300707.2** Building 2

Equivalent Units

200482 - Construction in Practice 1

....

This unit is designed to allow the student to gain experience with the complexity of the construction industry by integrating knowledge from earlier units. The unit involves

group work on construction planning and management, regulatory control and client liaison required for initiating and completing a residential construction project.

200484.3   Construction in Practice 3

Credit Points 10 **Level** 4

Prerequisite

200482.2 Construction in Practice 1 AND **MG313A.1** Project Management AND **PL302A.1** Construction Planning (V1)

Equivalent Units

BG408A - Building in Practice 3

....

This unit enables students to integrate and develop knowledge gained earlier in the course allowing them to simulate industry practice. Students are given a brief to undertake large and complex construction projects (eg. high rise buildings, airport construction, or sports stadium construction). They then take account of regulatory control, financial limitations, and stakeholder impacts whilst managing a team and being flexible and responsive to changing demands.

200503.2   Construction Information Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Students must be familiar with spreadsheet and database software. Students should also have a basic understanding of contract administration.

....

This unit is designed to provide skills and knowledge for information management technology and practice as it relates to the building industry. The unit gives and overview of information management, data collection and storage, information classification systems, communications, specialist computer applications and artificial intelligence.

300728.2   Construction Planning

Credit Points 10 **Level** 3

Assumed Knowledge

Understand estimating preliminaries for multi storey construction.

Prerequisite

200468.2 Estimating 1

Equivalent Units

PL302A - Construction Planning

....

This unit is intended to provide students with the ability to organise the resources required for a major construction project; to plan the sequence and timing of construction operations; and to assess the risk inherent in achieving a construction schedule.

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300720.2   Construction Technology 1 (Civil)

Credit Points 10 **Level** 2

Prerequisite

300706.2 Building 1 OR **300707.2** Building 2

Equivalent Units

BG204A - Construction Technology 1 (Civil)

....

This unit develops students' knowledge and skills in appraising site requirements for construction purposes, both at the pre tendering and construction phase of a project. Content: Soil classification, site investigation, site safety, plant and equipment, trenches, detention/retention pits and basins, temporary structures, demolition, site dewatering, building surveying, and site environmental control.

300721.3   Construction Technology 2 (Substructure)

Credit Points 10 **Level** 2

Assumed Knowledge

Basic knowledge of building technology from TAFE, university or practical experience.

Equivalent Units

BG207A - Construction Technology 2 (Substructure)

....

This unit will further develop your knowledge of substructures. We will investigate how applied loads and the foundation reaction determine the construction of different retaining walls and footings. We will specifically examine how surface and ground water affect a sub-structure. You will be expected to solve difficult foundation problems using innovative techniques, including underpinning, grouting and temporary substructures. The types of sub-structures include strip footings, waffle-pod slabs, end-bearing & friction piles, gravity & cantilever retaining walls and tied-earth structures.

200502.3   Construction Technology 3 (Concrete Construction)

Credit Points 10 **Level** 3

Assumed Knowledge

It is expected that students will have first studied the Building 1 and 2 units as well as Construction Technology 2.

Prerequisite

BG207A.1 Construction Technology 2 (Substructure)

....

The aim of this unit is to introduce students to the concept of structures, loads and the effect of loads on structures in relation to concrete construction. Students will have an in-depth understanding of concrete as a construction material. It covers the construction technology aspects of concrete structural components and systems, including beams, columns, slabs and frames. Emphasis will be given to formwork design and construction. Students will be introduced to the relevant Australian Standards for concrete

construction. The unit also aims at developing students' ability to deal professionally with other building professionals, including architects and structural engineers.

200470.4   Construction Technology 4 (Steel Construction)

Credit Points 10 **Level** 3

Assumed Knowledge

300706 - Building 1, 300707 - Building 2, 300720 - Construction Technology 1, 200502 - Construction Technology 2

....

This unit deals with the construction of structural steelwork. Students will gain better understanding of mechanical properties of steel. It covers various components in structural steelwork, and their behaviour under loads. Students will also be introduced to various frame systems in multi-story and high-rise construction and relevant Australian Standards for steel construction. Emphasis will be given to safe erection and assembly of structural steelwork. Due consideration will be given to the requirements of Workcover in relation to site safety and material handling. An introduction will also be given for Steel-concrete composite construction.

200471.3   Construction Technology 5 (Envelope)

Credit Points 10 **Level** 4

....

After undertaking this unit, you should understand the way internal spaces are designed and constructed to optimise thermal, visual and nacoustic comfort and for energy efficiency.

300725.2   Construction Technology 6 (Services)

Credit Points 10 **Level** 4

Equivalent Units

BG406A - Construction Technology 6 (Services)

Special Requirements

Students must be enrolled in courses 2607 - Bachelor of Construction Management, 3621 - Bachelor of Engineering - Construction Key Program, 3636 - Bachelor of Engineering (Advanced) - Construction Key Program

....

To provide students with a vehicle to develop knowledge and skills needed to comprehend the design of services in major buildings, and in so doing engender a life-long interpretation of the intricacies of physical installation and their critical sequence in the construction process.

200084.2   Consumer Behaviour

Credit Points 10 **Level** 1

Equivalent Units

61721 - Consumer Behaviour, MK105A - Buyer Behaviour

....

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A focus on the consumer is critical in marketing philosophy. Effective marketing strategies are necessarily formulated as a result of the understanding of basic consumer behaviour. This unit covers assumptions and concepts related to understanding the consumer, including but not limited to cultural and ethnic values, social class and status, personal influence, family and household influences, situational influences, consumer resources, involvement, motivation and knowledge, attitudes, individual differences in behaviour, personality, values and lifestyle, information processing, learning, influencing attitudes, diagnosis of decision process and behaviour, consumer decision-making process and need recognition, information search, alternative evaluation, purchase and its outcomes, retailing and consumer trends, market segmentation, diffusion of innovations, global consumer markets, consumerism and social responsibility.

100994.2 Consumer Culture

Credit Points 10 **Level** 3

Equivalent Units

100901 - Consumer Culture, SS243A - Consumer Culture

Special Requirements

Successful completion of 60 credit points at Level 1.

....

Consumption and consumerism are words that frequently have negative connotations in popular usage. The consumer society has been widely criticised, from a diverse range of political perspectives. This unit introduces students to some of these critiques, including those relating to issues of gender. It also aims to introduce students to other ways of thinking about commodities and consumption - ways that focus on the active processes involved in making meaning out of commodities and on the popular pleasures involved in such processes. This unit focuses on the rise of consumer society and of the cultural paradigm of consumerism. Students analyse a range of cultural products and practices, such as shopping, as well as considering the role of commodities in meaning making and identity formation.

300928.1 Consumer Issues in Nutrition

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of human nutrition and health. Computer literacy.

Equivalent Units

300360 - Consumer Issues in Nutrition

....

This unit explores current food and nutrition issues. It introduces students to the factors that influence public health nutrition and explores (a) the contribution food systems and food security makes to consumer wellbeing; (b) the changing global marketplace and the impact of globalisation on food security and ecological sustainability; and (c) the complex inter-connections between government policy, globalisation, consumerism and human health. Students will assess nutritional status from available data and explore the role of community food systems. Students

will also be introduced to social research methods and plan a social research study to address a nutrition related issue.

100800.2 Consumer Psychology

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge of 100020 - Social and Developmental Psychology. Consumer Psychology is an applied field. Assumed knowledge of core psychological issues will facilitate learning.

....

Consumer Psychology is the study of how people relate to and involve with products and services that they purchase or use. It attempts to describe, predict, explain, and/or influence consumer responses to products and service-related information and experiences. It contains a broad range of theoretical, conceptual, and methodological perspectives. It is indeed the psychology of how consumers think, feel, reason, and select between different alternatives (e.g., brands, products); how the consumer is influenced by his or her environment (e.g., culture, family, signs, media) and what leads to buying behaviour. By understanding the consumer, we will be able to make informed decisions and apply appropriate marketing and advertising strategies.

400335.3 Contemporary Issues in Sport Management

Credit Points 10 **Level** 3

Assumed Knowledge

Students should have an understanding of the objectives in Sport Marketing 1

Equivalent Units

B3087 - Contemporary Issues in Sport Management

....

Sport management operates in an environment where political, economic and legal influences impact on the running of sporting organisations. This unit critically examines contemporary issues influencing the management of sport in Australia.

100855.2 Contemporary Japan: Culture and Society

Credit Points 10 **Level** 2

Equivalent Units

63021 - Communication and Culture in Asia 1: Contemporary Japan

Special Requirements

Successful completion of 60 credit points at Level 1.

....

An introduction to aspects of contemporary Japanese society and culture chosen to introduce key aspects of Japanese society and culture, to position Japan in a global perspective, to investigate questions of how we form knowledge of societies other than our own.

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200108.2 Contemporary Management Accounting

Credit Points 10 **Level** 2

Prerequisite

200116.4 Management Accounting Fundamentals

Equivalent Units

61122 - Advanced Management Accounting, AC303A - Advanced Management Accounting (V1), H2762 - Management Accounting

....

This unit views contemporary areas of management accounting from a strategic perspective, and critically examines some of the traditional concepts and techniques discussed in Management Accounting Fundamentals.

200568.3 Contemporary Management Issues

Credit Points 10 **Level** 3

Prerequisite

200571.2 Management Dynamics OR **MG102A.3** Management Foundations

Equivalent Units

H3740 - Contemporary Management Issues

....

This is an engaged unit that requires students to undertake real-world projects to support selected industry or community partners. The unit also blends in-class and online activities as well as individual and group work, with self-directed problem-based learning. The focus of students' learning is on social and environmental issues in management, and the in-class workshops support students to conduct the required engagement activities with industry or community partners. As a third-year unit, attention is given to students' application of the knowledge and skills already acquired in their degree programs, and on the practice of business management skills.

100854.3 Contemporary Popular Cultures

Credit Points 10 **Level** 2

Incompatible Units

VP204A - Reading Popular Culture, 63123 - Contemporary Popular Cultures

Special Requirements

Successful completion of 40 credit points at Level 1

....

This unit looks at popular culture in contemporary society and the ways it functions to give shape and meaning to social life. It considers issues around the politics of popular culture, questions of value, taste, subjectivity, resistance and pleasure. It invites students to reflect upon their own experiences of and relations to popular culture as well as those of others to develop skills of analysis and interpretation. It covers topics as diverse as shopping, TV Talk Shows, tattooing, celebrity and fandom.

400894.2 Contemporary Youth Health Issues

Credit Points 10 **Level** 3

Incompatible Units

400280 - Sexuality, 400791 - Introduction to Drug Use in Society

....

The unit explores contemporary health issues related to young people. Students will examine a range of topics from a multidisciplinary approach, which include the social, cultural, political and biological factors that influence and construct young people's lives and health. Students will explore pathogenic and salutogenic approaches to understanding and promoting young people's health. When considering and analysing the influences and contexts, students will be able to gather resources and develop diverse meaningful strategies that will assist young people to promote health practices.

101751.2 Contextualising Indigenous Australia (Day Mode)

Credit Points 10 **Level** 1

Equivalent Units

300455 - Indigenous Australia: Back to the Future

....

This unit will provide a comprehensive overview of Indigenous Australian cultures, histories and identities. The scope of the unit spans pre-colonisation to the twenty-first century across Australia and all relevant fields of study. A cross-section of institutional, community and popular culture contexts will be explored. This body of knowledge will provide a context for various professions and discussions. Students will have the exciting opportunity to hear from a diverse range of Indigenous educators from academics to artists through to performers and community elders. A broad understanding of Indigenous Australia will position students to be advocates for change in contemporary Australia.

300009.3 Control Systems

Credit Points 10 **Level** 3

Assumed Knowledge

200238 - Mathematics for Engineers 2 • Ordinary Differential Equations • First order, Second order, and Higher order. • Laplace transforms • Multivariable Calculus • Functions of two or more variables • Double integrals • Triple integrals. Similar to that contained in 200238 - Mathematics for Engineers 2. Students should also have the appropriate background and competence in the safe use of computers, test equipment, components and data sheets.

Prerequisite

300057.3 Signals and Systems OR **300480.2** Dynamics of Mechanical Systems

....

This unit introduces the fundamental concepts of automatic control engineering. It covers traditional and contemporary design and analysis techniques; the concepts required to

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design continuous time and discrete time controllers. Matlab is utllized considerably.

101799.2 Convicts and Settlers - Australian History 1788 - 1840

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

In little more than half a century Australia was transformed from a convict prison to a parliamentary democracy. The people who made this transformation were the ex-convicts, free settlers and first generation of colonial born children. The survival of data about ordinary people between 1788-1840 makes it possible to investigate families, communities, employment, law and order and the daily experiences of urban and frontier life in these formative years. Using family history resources on the internet and sophisticated digital archives of historical records in Australia and overseas, this unit will challenge assumptions about "who do you think we were?"

400982.2 Core Competencies in Physiotherapy Practice

Credit Points 10 **Level** 2

Prerequisite

400138.3 Pathophysiology 1 AND **400732.2** Communication in Health AND **400881.3** Functional Anatomy AND **400882.2** Introduction to Biomechanics AND **400906.2** Introduction to Physiotherapy Practice

Corequisite

400981.2 Clinical Pharmacology

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy or 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy. This is a specialty unit offered as a compulsory core unit of the physiotherapy program. It is profession specific, preparing students to practice as physiotherapist and not relevant as an elective for non-physiotherapy students. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff. Students are required to wear the physiotherapy student uniform to all tutorials and during the 2-week clinical placement.

....

This unit builds on the knowledge and skills developed in first one and a half years of physiotherapy study. It focuses on the core competencies of physiotherapy professional practice, which will be developed through a variety experential and community engagement learning activities. Professional competencies addressed in this unit include communication, documentation, reflection, professional and ethical behaviour. In addition, students will develop skills in client assessment, interpretation of findings and education. A professional practice placement is incorporated into this unit.

200109.4 Corporate Accounting Systems

Credit Points 10 **Level** 3

Prerequisite

200536.2 Intermediate Financial Accounting

....

This unit builds on the fundamental knowledge of accounting procedures gained in Intermediate Financial Accounting. It involves the comprehensive study of aspects of corporate accounting and reporting which are regulated by legislation, accounting standards, Australian Securities and Investment Commission and Stock Exchange requirements. This unit is designed to provide students with grounding in the regulation and practice of corporate reporting in Australia. The major orientation is towards the theoretical and practical aspects or corporate reporting, whilst at the same time exploring the reasons for regulatory disclosures.

200488.3 Corporate Financial Management

Credit Points 10 **Level** 2

Assumed Knowledge

HSC Mathematics, introductory economics or microeconomics

Prerequisite

200101.3 Accounting Information for Managers OR **200103.1** Accounting Reports and Decisions

Equivalent Units

200050 - Financial Management, 200110 - Corporate Financial Decision Making

....

This unit introduces the fundamental concepts of finance theory and the tools of financial decision making in the context of the Australian institutional environment. These concepts relate primarily to the time value of money, risk and return, capital budgeting and capital structure. The unit's purpose is to develop an understanding of the basic practices of financial management from the perspective of a firm (both large and small). Students examine the investment, financing and dividend decisions of corporations.

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100856.4   Creative Non-Fiction

Credit Points 10 **Level** 3

Assumed Knowledge

A good standard of written expression

Equivalent Units

CT209A - Texts and Techniques

Special Requirements

Successful completion of 60 credit points

....

This unit provides students with an advanced understanding of the issues, processes and practical questions involved in the writing of creative non-fiction. It is intended that students will gain both enhanced theoretical knowledge of writing practices and, through workshop participation and practical exercises, develop both their own writing skills and the ability to critique the writing of others on the basis of sound understanding of the characteristics of the genre.

100859.3   Creative Writing Project

Credit Points 10 **Level** 3

Assumed Knowledge

It is highly desirable that students should have successfully completed one of the following Level 2 units: 100896 - Writing Fiction, 100856 - Creative Non-Fiction or 101011 - Writing Poetry

Special Requirements

Successful completion of 60 credit points.

....

This unit extends students beyond the writing of individual stories and poems into larger areas of creative writing, such as the discontinuous narrative, the novella, and the cycle of related poems and/or stories. It involves students in the process of developing a major project from an initial set of ideas, through the stages of drafting to a "finished" product, using workshop techniques, individual interviews and peer critiquing. It aims to give each student some experience of a relationship with readers (fellow students) and an editor (the tutor).

300873.1   Crime Scene Investigation

Credit Points 10 **Level** 2

Prerequisite

300874.1 Digital Forensic Photography

Equivalent Units

300374 - Crime Scene Investigation

Incompatible Units

300746 - Evidence & Crime Scene Management

Special Requirements

Students must be enrolled in 3589 Bachelor of Science (Forensic Science) or 3562 Bachelor of Science (Advanced Science)(Forensic Science). Students must have a crime scene suit for the simulated crime scene assessment. Students must supply their own grip kit including; forensic linear scales, a magnifying glass, markers, writing material, clip board, small measuring tape.

....

A substantial amount of forensic evidence used in the prosecution of criminal cases is initially established at the crime scene. Recognising, detecting, recovering, preserving and recording this evidence forms a critical function within forensic science and criminal investigation. This unit introduces the student to a range of crime scene practices that provides the knowledge and skill to unpack a complex scene with voluminous detail, into a more specifically targeted range of forensic evidence items. This unit will explore aspects of crime scene investigation including; crime scene processes, recognition of evidence, documentation of crime scenes, evidence detection and enhancement, maintaining evidence integrity, footwear impression evidence, fingerprinting and bloodstain pattern analysis. It also introduces professional practices associated with maintaining evidence integrity and continuity.

101408.2   Critical Discourse Analysis

Credit Points 10 **Level** 2

Equivalent Units

100888 - Studies in Language and Discourse

Special Requirements

Successful completion of 40 credit points at Level 1.

....

The principal means of communication in our culture is language, it shapes and patterns our world, socialises us, and is fundamental to almost all forms of interaction. Critical Discourse Analysis takes language and text as its objects of study, seeing these as technologies for social interaction, representation and communication. By exploring both the grammatical structure of the English language and its use and development in and for social contexts and purposes within a post-structuralist framework, Critical Discourse Analysis develops analytical, interpretive and critical skills for students. Critical Discourse Analysis has the potential for application in many areas of study and professional work.

300815.1   Crop Production

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of plants.

Equivalent Units

300451 - Horticultural Production 2, 300300 - Fruit Production, 300329 - Floriculture, 300616 - Crop Production

....

This unit aims to provide students with an understanding of the scientific basis of sustainable crop and food production and security. These include broad-acre cropping, fruits/orchards and vegetables. In this unit students will gain an understanding of the physiological controls on crop yield in the variable Australian environment in which crops are grown. Students will become familiar with the science and practice of sustainable crop production and develop crop

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management skills through the production of nursery crops, vegetables and fruits. Students will also gain an understanding of processing these crops after harvest, to develop an appreciation of factors impacting upon produce quality and safety.

200586.2 Cross Cultural Management

Credit Points 10 **Level** 2

Equivalent Units

MG206A - Cross Cultural Management

....

21st Century businesses are looking more and more similar in the way they are designed and operated. Yet to be successful and to gain comparative advantage it is imperative that these businesses manage their workforces differently. Critical to this different way of managing is culture. Culture is the cornerstone that makes people similar, yet different. Taking a multidisciplinary and 'hands on' approach, this unit examines the impacts of culture on business practices and management styles.

300871.1 Culinary Science

Credit Points 10 **Level** 3

Prerequisite

300879.1 Experimental Foods

Equivalent Units

300715 - Culinary Science, 300640 - Culinary Studies

Special Requirements

Students require personal protection equipment e.g. apron and closed in shoes.

....

This unit applies scientific principles to the development, preparation and presentation of food products. Students are encouraged to become autonomous learners through problem-solving activities and experiential techniques. Students integrate and apply knowledge and skills from areas such as chemistry, biology, food science and nutrition to nutritionally focussed food products. Students are encouraged to keep abreast of food trends in the dynamic food industry as well as current nutritional issues within domestic, multicultural and indigenous communities. Students will utilise prior knowledge and skills to address specific nutritional issues and the development of new food products to fit within these boundaries.

101590.2 Cultural and Social Geographies

Credit Points 10 **Level** 2

....

Examines the nexus between culture and place. Contemporary cultural planning issues include; local community relations, social planning, place management, place redefinitions, selling place, ethnic concentration, cultural precincts, and the spatial politics of gender and sexuality. The roles of cultural products in carrying spatial information and reinforcing identity are examined. Introduction to cultural and social geography, and developments in cognate fields of cultural studies and anthropology. Key theories of identity. Case studies range

across religion, gender, sexuality, class and nationalism. The analysis and assessment advances a politics of difference, anti-racist, social justice perspective.

100858.3 Culture and Globalisation

Credit Points 10 **Level** 3

Equivalent Units

63157 - Culture and Globalisation

Special Requirements

Successful completion of 60 credit points

....

The unit introduces students to both the broad and specific concepts of globalisation. It covers such topic areas as the expansion and development of global capital and the ascendancy of the transnational over national forms of economy, society, communication, politics and culture. It also covers the contrasting increasing interest in and development of national and/or local forms of economy, society, politics and culture as they accommodate and reshape the global.

101249.2 Culture and Thought in Twentieth-Century China

Credit Points 10 **Level** 3

Equivalent Units

100967 - Nationalism and State Building in Asia

Special Requirements

Successful completion of 60 credit points.

....

This unit is concerned with cultural and intellectual change in twentieth-century China, which saw the end of the imperial system, the establishment of the Chinese Republic, the rise to power of the Chinese Communists, and the launching of the Four-Modernisation Program in the post-Mao era. It will offer insights into the Chinese search for modernity over the last one hundred years, especially the role of the intellectuals and their relations with society and state.

400866.3 Culture, Diversity and Health

Credit Points 10 **Level** 2

Equivalent Units

700072 - Culture, Diversity and Health (UWSC)

....

This unit introduces skills for understanding and engaging effectively with the culturally and socially diverse world in which we live and work. Indigenous Australia is a major theme and students will gain an appreciation of the achievements and needs of Indigenous Australians. The unit examines cultural awareness more broadly and puts these issues in the context of health professionals working in multi-cultural settings and handling culturally different health philosophies and practices. Cultural diversity is increasingly recognised as a major issue in the delivery of health care and a major determinant of Indigenous health.

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200036.3 Data Mining and Visualisation

Credit Points 10 **Level** 3

Assumed Knowledge

200192 - Statistics for Science or 200032 - Statistics for Business or 200263 - Biometry

Prerequisite

300104.3 Database Design and Development

....

This unit presents data mining as a well structured standard process, namely, the Cross Industry Standard Process for Data Mining (CISP-DM). Further, this unit emphasizes (1) the presentation of data mining as a process, (2) the "White box" approach, emphasizing an understanding of the underlying algorithmic structures, (3) the graphical approach, emphasizing exploratory data analysis, and (4) the logical presentation, flowing naturally from the CRISP-DM standard process and the set of data mining tasks. This unit gives the insight of the data mining algorithms, by using small data sets and then provides examples of the application of the various algorithms on actual large data sets. Finally it provides the hands-on analysis problems, representing an opportunity to apply acquired data mining expertise to solving real problems using large data sets.

300010.3 Data Networks

Credit Points 10 **Level** 4

Assumed Knowledge

Students are expected to have done an introductory Electrical Engineering course in Signals and Systems that includes continuous-time and discrete time forms of signals, Fourier Transforms (in different forms) and an introduction to probability and random processes. An elementary knowledge of communication systems will also be assumed. Prior completion of Engineering Maths 3 and Communication Systems is recommended.

Prerequisite

300057.3 Signals and Systems

Equivalent Units

84355 - Data Communication & Computer Networks, 89038 - Data Communications & Network Technology

....

This unit is concerned with the principles and topics of fundamental importance to data communication, computer communication networks and telecommunications. The lower layers of the OSI reference model are emphasized (hardware, physical layer, data link layer and network layer). Also, it will cover all major network technologies-SONET, ATM, Internet, and Telephony. Essential network engineering topics such as protocol layering, multiple access, switching, scheduling, routing, congestion control, error control, flow control, and network security shall also be included. An engineering approach will be taken to provide an insight into network design.

300103.3 Data Structures and Algorithms

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals OR **300027.2** Engineering Computing

Corequisite

200025.2 Discrete Mathematics OR **200237.3** Mathematics for Engineers 1 OR **300699.2** Discrete Structures and Complexity

....

This unit introduces students to fundamental data structures and algorithms used in computing. The material covered forms the basis for further studies in programming and software engineering in later units and for further training in programming skills. The unit focuses on the ideas of data abstraction and algorithm efficiency. The issues of computational complexity of algorithms are addressed throughout the semester. The topics covered include the fundamental abstract data types (lists, stacks, queues, trees, hash tables, graphs), recursion, complexity of algorithms, sorting and searching algorithms, binary search trees and graphs.

300104.4 Database Design and Development

Credit Points 10 **Level** 2

Assumed Knowledge

Basic programming skills, including variable declaration, variable assignment, selection statement and loop structure.

Incompatible Units

200129 - Database Management System for Business Information Systems.

....

The main purpose of this unit is to provide students with an opportunity to gain a basic knowledge of database design and development including data modeling methods, techniques for database design using a set of business rules that are derived from a case study and finally implementation of the database using a commercial relational database management system. The unit also examines a number of important database concepts such as database administration, concurrency, backup and recovery and security. At the same time student learning and intercommunication skills are enhanced by running tutorial presentations and group assignments.

300941.1 Database Design and Development (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

Basic programming skills, including variable declaration, variable assignment, selection statement and loop structure.

Incompatible Units

200129 - Database Management System for Business Information Systems, 300104 - Database Design and Development

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Special Requirements

Students must be enrolled in course 3685 - Bachelor of Computing (Information Systems) Advanced or 3684 - Bachelor of Information and Communication Technology (Advanced)

....

This unit covers the principles, methodologies and technologies for the database design and development, exploring in particular the data modelling methods and the use of the language SQL for the database applications. The unit also examines a number of important database concepts such as database administration, concurrency, backup and recovery, and security. Students in this advanced unit are furthermore required to investigate new technological and theory advances in the database industry and apply them to the solution of concrete database problems.

700011.2 Database Design and Development (UWSC)

Credit Points 10 **Level** 2

Assumed Knowledge

Basic programming skills, including variable declaration, variable assignment, selection statement and loop structure.

Equivalent Units

300104 - Database Design and Development

Special Requirements

Only UWSCollege students can enrol in this unit unless specific approval is given by UWS.

....

The main purpose of this unit is to provide students with an opportunity to gain a basic knowledge of database design and development including data modeling methods, techniques for database design using a set of business rules that are derived from a case study and finally implementation of the database using a commercial relational database management system. The unit also examines a number of important database concepts such as database administration, concurrency, backup and recovery and security. At the same time student learning and intercommunication skills are enhanced by running tutorial presentations and group assignments.

100996.3 Death and Culture

Credit Points 10 **Level** 3

Equivalent Units

SS240A - Death and Culture, 100902 - Death and Culture

Special Requirements

Successful completion of 60 credit points.

....

This unit is a critical introduction to the social practices surrounding death in modernity. Although primarily addressing social arrangements in the West, the unit examines the bio-politics of death in a wider cultural framework, with attention to geographies of power and economic influence. The unit traces the historical development of concepts of the individual; the impact on

Western ideas around death of genocide and modern warfare; and assesses contemporary ethical, social and medical controversies (like euthanasia and the trade in body parts). The unit attempts to demonstrate the relationship of death to: social institutions; ideas of community and the construction of self in modernity.

200485.2 Decision Making for Construction Professionals

Credit Points 10 **Level** 2

Prerequisite

300674.2 Engineering, Design and Construction Practice

....

This unit will provide you with an understanding of decision-making and support the development of critical thinking skills. The skills that are learnt in this unit will be applied in the Construction in Practice strand, Major Project in Construction and Honours Thesis.

100903.2 Democracy in Asia

Credit Points 10 **Level** 3

Equivalent Units

63033 - Democracy in Asia.

Special Requirements

Successful completion of 60 credit points

....

This unit is concerned with the theory and practice of democracy in modern and contemporary history of Asia. It explores a range of issues relating to liberalism, human rights, political reform and democratization. It seeks to explain the differences in the ways in which democracy has been conceived, understood and practiced in different cultures and societies. It also examines the East-West debate on "Asian values" and the suitability of Western-style democracy to Asia. Finally, it discusses the prospects for democracy in Asia.

200079.2 Derivatives

Credit Points 10 **Level** 3

Assumed Knowledge

200052.1 - Introduction to Economic Methods OR 200031.1 - Mathematics for Business 200488.1 - Corporate Financial Management

Equivalent Units

61344 - Risk Management, H3686 - Options, Futures and Derivitive Products

....

This unit provides an introduction to trading and the theory of pricing of options, futures and other derivative products currently used in the domestic and international financial markets.

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University of Western Sydney

300012.3 Design Management 1: Product Design Audit

Credit Points 10 **Level** 2

Equivalent Units

10884 - Design Management 1: Corporate Image

....

Design Management 1 focuses on the development of the product / service audit process and study of a firm's corporate image, identity, brand, and products as perceived by the target groups it aims to reach. Students will study the approach taken to develop a strategic design management plan that guides the way a firm presents itself to its target audience and differentiates itself against its competition in the targeted markets. Foundation design principles involving the evaluation of two-dimensional and three-dimensional design are explored through a series of firm-level case studies of firms with prominent and commercially successful design management strategies.

300013.3 Design Management 2: Corporate Image and Identity

Credit Points 10 **Level** 2

Prerequisite

300012.3 Design Management 1: Product Design Audit

Equivalent Units

10885 - Design Management 2: Corporate Identity

Special Requirements

The Company chosen by a student as a case study in 300012 - Design Management 1, on which the assignments are based, should be followed through to 300013 - Design Management 2.

....

In Design Management 2 students will develop, based on the Corporate Image Brief and Research established in Semester 1, a methodology and program to study a corporation's approach(es) to communicate with its market audience. The evaluation of the study leads to the formulation of the corporate identity design strategy and brief. The information summarised in the design brief is then used to establish the corporate identity design program, which informs the development of the components of a client company's corporate identity. The company chosen by the students as a case study in Design Management 1, on which the assignments are based, should be followed through to Design Management 2.

300014.3 Design Management 3: Organisational Skills for Designers

Credit Points 10 **Level** 3

Assumed Knowledge

Ability to use: e-mail, internet web browser, WebCT or equivalent, word processing program. Knowledge and/or experience in: referencing, essay writing, group work and the successful completion of Level 2 units would be of advantage and will be assumed.

Equivalent Units

10886 - Design Management 3B: Professional Practice

....

Key learning outcomes include that students: understand manufacturing paradigms and their impact on the product development process and the design process; understand the impact of organisational structures, strategies and processes on the design process; develop and gain experience of using key skills that will enable them to work successfully with various organisational members in the product development process. These skills include teamwork, decision-making and communication, analysis and problem solving. Develop and gain experience of using distance communication and virtual teamwork skills, skills that are becoming increasingly important in new product development.

300015.3 Design Management 4: Design Process

Credit Points 10 **Level** 3

Assumed Knowledge

The successful completion of Level 2 units and 300014 Design Management 3 or equivalent would be of advantage and will be assumed.

Equivalent Units

10887 - Design Management 4: Corporate Design

....

Design Management 4 focuses on fundamental issues of the design process and design management. It exposes students to the various theories and models underlying trade-offs and choices made during the design process and issues of intellectual property. Experiential exercises and contemporary case studies are used throughout the unit. Students will consider how models of design processes impact on existing products and their own design work. This unit is part of a sequence of four units that constitute the sub-major in Design Management and eight units that constitute the major in International Design Management and Innovation Design Management.

300016.2 Design Science

Credit Points 10 **Level** 1

Equivalent Units

J1807 - Engineering Science, 700126 - Design Science (UWSC)

....

An explanation and description of how the built environment (buildings and products) works is essential to designers and construction professionals. This unit provides an introduction to physical units of measurement, tolerance, statics, dynamics, acoustics and thermal properties. It also allows students to interpret and apply the concepts of electricity, energy, work and power to the built environment. Students engage with these concepts through a hands-on learning experience including practical projects and live demonstrations.

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University of Western Sydney

700126.1 Design Science (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

The content of any NSW HSC Mathematics subject

Equivalent Units

300016 - Design Science

Special Requirements

Students must be enrolled at UWSCollege in 7015 Diploma in Construction Management or 7016 Diploma in Construction Management Fast Track. UWS students may only enrol in this unit with the permission of their Director of Academic Program and UWSCollege.

....

An understanding of how the built environment works is essential to designers and construction professionals. This unit provides an introduction to physical units of measure, tolerance, statics, dynamics and optics. It also introduces students to electricity and magnetism as well as the concepts of momentum, energy, work, power and the operation of motors and machine. Students engage with these concepts through a hands-on learning experience including practical projects and live demonstrations.

300305.3 Design Studio 1: Themes and Variations

Credit Points 10 **Level** 2

Assumed Knowledge

It is assumed that students have completed Applied Ergonomics and Industrial Graphics 1.

Prerequisite

300462.2 Engineering and Design Concepts

Equivalent Units

10953 - Design Process 1: The Design Concept, J2815 - Design Principles 2D/3D, J2869 - Design Principles

....

In this unit students are given the opportunity to apply their design and communication skills to generate a wide range of concepts in response to a number of design briefs. Students explore concepts according to aesthetic and functional criteria through hand sketching, rendering and model-making.

300308.3 Design Studio 2: The Design Proposal

Credit Points 10 **Level** 2

Assumed Knowledge

300305 - Design Studio 1: Themes & Variations, 300309 - Sustainable Design: Life Cycle Analysis, 300302 - Industrial Graphics 1: Presentation, 300282 - Industrial Graphics 2: Transition

Equivalent Units

10954 - Design Process 2: The Design Proposal, J2870 - Design Application, J3804 - Design Project 1

....

Design Studio 2 will develop the ability of students to advance a design concept up to the point of pre-production. The unit explores the often complex influences on a design proposal - from the methods used to identify the needs of people, future purchase patterns, production limitations to price point analysis. It focuses on the integrative nature of the process of designing.

300311.3 Design Studio 3: Product Realisation

Credit Points 10 **Level** 3

Assumed Knowledge

300308 - Design Studio 2:The Design Proposal, 300309 - Sustainable Design: Life Cycle Analysis, 300306 - Sustainable Design:Sustainable Futures, 300282 - Industrial Graphics 2:Transition, 300310 - Industrial Graphics 3:3D Solids.

Equivalent Units

10955 - Design Process 3: Product, J3765 - Advanced Design Application, J3805 - Design Project 2, J3825 - Design Project (Integrated)

....

In this unit, students respond to a set design brief so that they can develop a more comprehensive understanding of the design process, from initial briefing to product realisation. Students first investigate the task from multiple perspectives then generate a wide range of possible solutions. The most promising concept, the most feasible, innovative and appropriate to the specific user and context, is then refined, developed and professionally communicated using a wide range of design techniques and media.

300313.3 Design Studio 4: Simulate to Innovate

Credit Points 10 **Level** 3

Assumed Knowledge

It is assumed students have completed Industrial Graphics 2 and Industrial Graphics 3 and are proficient in computer solid modelling. Knowledge of plastic manufacturing is also essential.

Prerequisite

300311.3 Design Studio 3: Product Realisation

Equivalent Units

10956 - Design Process 4: The Design Context

....

Design Studio explores the strategies for Industrial Design within the complex and contradictory context of operating as designers in late-industrial cultures. The complexity of designing in Australia for a global economy with local peculiarities will be studied with a particular emphasis on designing for users who are increasingly difficult to know. These same users are also demanding more protection from goods and services they consume and demonstrate increasing doubts about the claims that advertisers make. These factors are bringing new issues into the Industrial Design context. Product innovation with an emphasis on

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rapid prototyping will form the basis of assessment in this unit.

300314.2 Designed Inquiry

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge related to the successful completion of Year 1 and 2 is assumed.

....

This unit instructs students in the practical techniques required for designing, conducting and presenting research, in an action-learning environment. Actual research projects based on design-related issues will be explored. A range of research methods will be presented and students will be assisted in the strategic selection of appropriate methods in designing their research. This unit provides a forum for students to bring together and present both the design and results of research. Students will have the opportunity to select and explore their own research topics developed in consultation with the lecturer or tutor, design data collection instruments, analyse data and engage in peer discussions about the significance of their findings.

300111.2 Developing Web Applications with XML

Credit Points 10 **Level** 3

Assumed Knowledge

300582-Technologies for Web Applications, 300580-Programming Fundamentals

....

This third year unit provides a comprehensive coverage of XML, related emerging technologies and their use in web applications. Students will be given opportunities to develop web based information systems which rely upon these technologies. This unit is heavily oriented to practical based work.

300723.2 Development Control

Credit Points 10 **Level** 2

Assumed Knowledge

Basic understanding of residential construction.

Equivalent Units

BG303A - Development Control

Incompatible Units

200435 - Property Development Controls

....

In this unit current issues related to development control will be critiqued. These include: planning law as it relates to the development application process; the assessment of applications for approval for development as an integrated process; the evaluation of the impact assessment process; appropriate consideration of urban design, streetscape, heritage and conservation issues; and the evaluation of the impact of parking, traffic, landscape and services in development proposals.

101682.4 Developmental Psychology

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of core concepts of personality, social and developmental psychology

Special Requirements

Prior to enrolling in this unit students must have submitted a Working with Children Check Student Declaration.

....

Note: The unit offerings for the 1H and 2H Teaching Periods at Bankstown and Penrith campuses listed above are available only for students enrolled in courses 1670 - Bachelor of Education (Birth - 5 years) and 1615 - Bachelor of Early Childhood Studies (Child and Family). Please note that enrolments will be monitored and students who are not enrolled in courses 1670 or 1615 will be required to withdraw from 1H/2H and enrol in one of the alternative Teaching Periods listed above. Structured around an overview of lifespan development including diversity, this unit explores the holistic nature of growth and development through developmental theory and research. This unit highlights the interactive nature of three main areas of development: biological, cognitive, and psychosocial changes that affect the individual from conception to end of life. The unit encourages observation as a means for understanding development and promoting individuals well being. An understanding of indigenous development will be integrated into the unit alongside an appreciation of richness in diversity within various cultural contexts.

200030.2 Differential Equations

Credit Points 10 **Level** 2

Assumed Knowledge

Algebra - competency in manipulation of algebraic terms including powers, sigma notation Elementary functions - polynomial, power, exponential, logarithmic, circular and hyperbolic, inverse functions Differentiation - derivatives of standard functions, product/quotient/composite function rules Integration - integrals of standard functions, change of variable, integration by parts

Incompatible Units

200238 - Mathematics for Engineers 2

....

Differential equations arise naturally, both in abstract mathematics and in the study of many phenomena. This unit provides the theory of ordinary differential equations and an introduction to partial differential equations, together with methods of solution. Examples are drawn from a wide range of biological, chemical, physical and economic applications.

200030.3 Differential Equations

Credit Points 10 **Level** 2

Assumed Knowledge

Algebra - competency in manipulation of algebraic terms including powers, sigma notation Elementary functions - polynomial, power, exponential, logarithmic, circular and

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hyperbolic, inverse functions Differentiation - derivatives of standard functions, product/quotient/composite function rules Integration - integrals of standard functions, change of variable, integration by parts

Incompatible Units

200238 - Mathematics for Engineers 2

....

Differential equations arise naturally, both in abstract mathematics and in the study of many phenomena. This unit provides the theory of ordinary differential equations and an introduction to partial differential equations, together with methods of solution. Examples are drawn from a wide range of biological, chemical, physical and economic applications.

200030.4   Differential Equations

Credit Points 10 **Level** 2

Assumed Knowledge

Algebra - competency in manipulation of algebraic terms including powers, sigma notation Elementary functions - polynomial, power, exponential, logarithmic, circular and hyperbolic, inverse functions Differentiation - derivatives of standard functions, product/quotient/composite function rules Integration - integrals of standard functions, change of variable, integration by parts

Incompatible Units

200238 - Mathematics for Engineers 2

Special Requirements

Students enrolled in 3621 Bachelor of Engineering or 3664 Bachelor of Engineering Science may not enrol in this unit.

....

Differential equations arise naturally both in abstract mathematics and in the study of many phenomena. This unit provides the theory of ordinary differential equations and an introduction to partial differential equations together with methods of solution. Examples are drawn from a wide range of biological, chemical, physical and economic applications.

300887.1   Digital Communication and Coding

Credit Points 10 **Level** 3

Prerequisite

300057.3 Signals and Systems

....

The unit covers the analysis, design and operation of modern digital communication and coding systems. Specific topics include baseband pulse transmission, digital passband transmission, signal space analysis, fundamental limits in information theory and error control coding. The statistical underpinnings of telecommunication theory with applications will be emphasized.

300112.1   Digital Communication Technology

Credit Points 10 **Level** 2

Prerequisite

300086.1 Applied Data Communications and Networking OR **300094.1** Computer Networking Fundamentals

Equivalent Units

J3750 - Advanced Data Communications, 14961 - Data Communications 2

....

This unit is designed for students majoring in data communications. The unit introduces students to the principles, theories, techniques, and systems used in the vast area of digital communications. Students learn about coding and compression, and their corresponding industry standards. The characteristics and performance of various data communication systems such as analog and digital are also examined.

300370.1   Digital Control Systems

Credit Points 10 **Level** 4

Assumed Knowledge

Prior knowledge assumed: Continuous time control systems, the use of the Laplace transform, ADC and DAC, Z-transform, vector matrix difference equations, state variable representation helpful and familiarity with Matlab or similar software.

Equivalent Units

84465 - Real Time Control

....

This unit is a first course in discrete, single rate sampled linear control systems and introduces the use of a computer as the main control element in a feedback system and as a data acquisition tool in real time. Methods of analysis and design are examined, using s-domain and state space methods, with an emphasis on the practical aspects of designing and implementing digital control systems. Less emphasis on theoretical issues. Direct design and emulation methods are included. Practical laboratory work is included along with the use of Matlab software tools

300874.1   Digital Forensic Photography

Credit Points 10 **Level** 2

Prerequisite

300806.1 Forensic Science

Equivalent Units

300375 - Digital Forensic Photography 1

Special Requirements

Students must be enrolled in 3589 Bachelor of Science (Forensic Science) degree.

....

Forensic photographing forms and important function within forensic science for the purpose of detection, documentation and enhancement of perishable and non-perishable forensic evidence. This unit introduces the

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student to the fundamental principles and practices of forensic photography. Topics include; conceptual and applied aspects of maintaining image integrity for forensic evidence, principles of light science, digital imaging, camera and lighting operations, concepts associated with visual communication in forensic science, and concepts associated with technical photography composition.

101250.3   Digital Futures

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1

....

This unit examines the role of digital technologies in contemporary cultural production, exploring the impact digital technologies have had on the design and construction of images, spaces and bodies in the late 20th and early 21st centuries. The unit traces the development of technologies from analogue, to electronic, to digital, and analyses key topics in media studies including the cyborg, virtual reality, artificial life and simulation. The unit contextualizes conceptual issues with reference to design, film, art and new media works.

300069.3   Digital Signal Processing

Credit Points 10 **Level** 3

Assumed Knowledge

Students should be able to apply knowledge from 300005 - Circuit Theory: employ the basic principles of analysing an AC electric circuit; apply Kirchhoff's Voltage and Current laws and their use in electric circuits; apply Nodal analysis, mesh analysis and superpositiion analysis to AC electric circuits; utilise Laplace Transform and its applications to Electric Circuits; demonstrate the concept of Bode plot and frequency response; examine passive and active filters.

Prerequisite

300057.3 Signals and Systems

....

This unit is aimed to provide an introduction to fundamental concepts and principles in digital signal processing. It focuses on signal analysis, digital filter design, hardware implementation and applications.

300018.2   Digital Systems 1

Credit Points 10 **Level** 1

Assumed Knowledge

Topics from 300021 - Electrical Fundamentals: Understand the basic principles of analysing an electric circuit; understand Kirchhoff's Voltage and Current laws and their use in electric circuits; understand the concept of operational amplifier and its circuit.

....

This unit provides students with a solid background in digital logic design. Students are introduced to the fundamentals of digital logic with number systems, basic logic devices and Boolean algebra. Analysis and design of combinational and sequential logic circuits is covered in

detail. Design with programmable logic devices is introduced.

300019.3   Digital Systems 2

Credit Points 10 **Level** 3

Prerequisite

300018.1 Digital Systems 1

....

This unit covers modern logic design techniques and the process of creating logic circuits and systems from design specifications to implementation. Topics include logic design techniques for combinational and sequential logic circuits; hardware description language (HDL); logic circuit implementation using an HDL; state-of-the-art logic circuit design tools; and programmable logic devices.

300880.1   Disaster and Emergency Management

Credit Points 10 **Level** 3

Equivalent Units

300449 - Environment, Health and Emergency Management, 300702 - Disaster and Emergency Management

Special Requirements

Successful completion of 60 credit points at Level 1 and 40 credit points at Level 2. Students are required to have access to a personal computer.

....

This unit explores the management of planning and preparation for and community responses to disasters and emergencies. Through case studies and presentations from current and cutting-edge professional practitioners in the field, students develop a 'hands on' understanding of risk assessment and prevention strategies for community safety during times of critical incidents. This includes emergency management strategies for community recovery and public education and preparation for potentially critical incidents. Workshop activities facilitate collaborative student learning through the use of developing scenarios including infectious disease pandemics, natural disasters and manmade emergencies such as terrorism.

200025.2   Discrete Mathematics

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics or equivalent

Equivalent Units

ST107A - Discrete Mathematics, 14349 - Discrete Mathematics

Incompatible Units

14950 - Algebra 1A and 1B, 14503 - Maths 3, 14323 - Maths for Computing, 300699 - Discrete Structures and Complexity

....

This Level 1 unit introduces set theory, symbolic logic, graph theory and some counting problems. It provides a

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solid foundation for further study in mathematics or computing.

300699.2 Discrete Structures and Complexity

Credit Points 10 **Level** 2

Assumed Knowledge

Basic programming such as that in 300580 - Programming Fundamentals.

Prerequisite

300700.5 Statistical Decision Making

Incompatible Units

200025 - Discrete Mathematics

Special Requirements

To enrol in this unit students must be in 3639 Bachelor of Information and Communications Technology or the following double degrees 3654, 3655, 3656, 3657, 3661

....

The fact that computers work at all in the way they do is due to the formal mathematical structure that is used in their design. The same holds for establishing important matters such as the reliability of our computer networks. This unit presents, in their computing context, a range of mathematical concepts that are essential for understanding a number of topics concerning computers: the ways they work, they ways they interact, and the ways we interact with them.

300867.1 Disease Prevention and Control

Credit Points 10 **Level** 3

Assumed Knowledge

A background knowledge of microbiology, and epidemiology

Equivalent Units

300782 - Disease Prevention and Control

....

Changes in human lifestyles, rapid urbanisation, industrial expansion, environmental degradation, international migration and travel, shifting demography, sedentary behaviour and demands for mass-produced food have promoted diseases which challenge conventional healthcare practices. While obesity, diabetes, dementia, interpersonal violence, transport-related accidents, cardiovascular diseases and cancers predominate, the prevention and control of communicable conditions such as HIV/AIDS, hepatitis and influenza remain significant challenges. Epidemiological studies and technologies, such as Geographic Information Systems, help us to monitor the distributions of diseases and to identify their risk factors. Integrated population health management strategies which address these risk factors are necessary for effective disease prevention and control.

300115.2 Distributed Systems and Programming

Credit Points 10 **Level** 3

Prerequisite

300167.3 Systems Programming 1 AND **300094.2** Computer Networking Fundamentals OR **300565.2** Computer Networking

....

This unit covers concepts and design of, and programming for distributed systems. It builds on basic network communication protocols (specifically IP) to cover client-server programming using both the system level socket interface and remote procedure calls. It also examines large-scale distributed system architectures, particularly those based on distributed objects, and considers the complexities inherent in distributed transactions. Key concepts covered include data and algorithmic distribution, idempotent protocols, stateless and stateful servers, and distributed system transparency. Illustrative case studies are included.

101857.2 Doing Business in China

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points.

....

This unit is primarily aimed at acquainting undergraduate students with the academic theory and debates surrounding China's business etiquette and its globalizing economy. Drawing on a wide range of English-language studies, unit lectures will cover in broad strokes the historic background of the economic reforms carried out in China over the last three decades, as well as their societal implications. They will discuss, for example, the evolution of corporate law and property rights in the PRC since 1949, and the underlying differences and interdependence between the Chinese and Australian economies.

300479.1 Drainage Engineering

Credit Points 10 **Level** 3

Assumed Knowledge

300674 - Engineering Design & Construction Practice and 300027 - Engineering Computing.

Prerequisite

85009.2 Water Engineering OR **300740.1** Water Engineering

Equivalent Units

85017 - Foundation and Drainage, 85025 - Hydrometeorology

....

This unit will introduce the basic concepts of drainage analysis. Basic concepts of hydrology will be introduced. This will be integrated with the hydraulic principles learned in Water Engineering to perform hydrologic analysis of catchments.

Units

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400961.1 Drugs on Line

Credit Points 10 **Level** 1

Equivalent Units

E1250 - Drugs On Line

....

This unit deals with selected issues in drug use, misuse and abuse. An introductory section discusses mechanisms of drug action in the body and their likely effects. Some topical areas include recreational drugs, drugs in sport, vitamins and herbal supplements, oral contraceptives, antidepressants and weight management therapeutic agents.

300480.2 Dynamics of Mechanical Systems

Credit Points 10 **Level** 3

Prerequisite

300035.3 Kinematics and Kinetics of Machines AND **300040.2** Mechanics of Materials

Equivalent Units

300020 - Dynamics and Mechanical Systems

....

This unit looks at how non-rigid components deform and oscillate. It looks at undamped and damped systems undergoing free vibration, steady state forced vibration and transient forced vibration. The principles of virtual work are used to investigate the equilibrium and dynamics of mechanisms.

200120.1 E-Business Fundamentals and Systems

Credit Points 10 **Level** 2

....

Developments in information systems, particularly those associated with the Internet, have created new opportunities for businesses. Organisations can better manage their internal operations and obtain competitive advantages such as breaking into new markets or offering enhanced levels of service by exploiting these systems. As a consequence, the term 'e-business' (electronic business) has arisen. It refers to activities such as buying and selling, servicing customers and collaborating with business partners, as well as conducting business transactions within an organisation, where these are computer-based or use digital communications. This unit introduces students to the concept of e-business (and its subset, electronic commerce or e-commerce) and shows how this is impacting on the ways businesses are conducted. The unit examines major examples of the types of systems supporting e-business, employing, where appropriate, case studies drawn from business, government, industry and society. It considers the characteristics of these systems, how they are utilised, the opportunities they create, the practical limitations they face, current developments and future trends. The unit particularly looks at their business, legal, ethical and social impacts and implications, both at national and international level.

300839.1 Ecology

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of first-year university biology satisfactory completion of Biodiversity and Cell Biology or equivalent and the concepts of classification, evolution, taxonomy, cellular processes plant and animal structure and function.

Prerequisite

300802.1 Biodiversity OR **300816.1** Cell Biology OR **300813.1** Wildlife Studies OR **300824.1** Management of Aquatic Environments

Equivalent Units

EY210A - Ecology 2.1; 300634 - Ecology; EY201A - Ecology 2.1 (V1)

....

We live in a society where environmental problems dominate public debate. Ecology is one of the sciences required to find solutions to such problems; terms and ideas that came originally from ecology are used in public discussions, and in legislation. This unit will introduce students to ecology: what is studied, how it is studied, what are the strengths and limitations of ecology. Current ecological thinking will be covered, from the scale of individual organisms, through populations, and up to communities and ecosystems. Methods of study will be highlighted using evidence from molecular ecology through to field investigations.

200053.3 Economic Modelling

Credit Points 10 **Level** 3

Prerequisite

200032.5 Statistics for Business OR **200052.4** Introduction to Economic Methods

....

This unit builds on concepts explored in Introduction to Economic Methods. The unit broadens the application of the stochastic linear model in econometrics, exploring its use in the estimation of economic models and in the testing of economic hypotheses associated with these models. The emphasis is on learning by doing in small group workshops.

200537.3 Economics and Finance Engagement Project

Credit Points 10 **Level** 3

Assumed Knowledge

Students need to have completed at least four semesters of a course, key program or major in Economics or Finance.

Special Requirements

Successful completion of 150 credit points within the key programs or majors of Economics and Finance, Applied Finance, International Trade and Finance or Applied Economics of course 2739 or 2753 Bachelor of Business and Commerce or successful completion of 150 credit points within the key programs of Applied Finance or Applied Economics of courses 3659 Bachelor of Science/ Bachelor of Business and Commerce and 3655 Bachelor of

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Information and Communications Technology/Bachelor of Business and Commerce or successful completion of 150 credit points within the course 2504 Bachelor of Economics or the course 2526 Bachelor of Economics/Bachelor of Laws.

....

This unit will provide students with exposure to problems with which economists and finance professionals are confronted in their daily work. They will be confronted with the multi-dimensional nature of the issues addressed by economists and finance professionals in real-life. Students will need to consider the nature of the problems as well as how realistic the solutions they are proposing are, and will learn how to systematically reflect on their contribution to the industry or community setting with which they engage.

300856.1   Ecosystem Carbon Accounting

Credit Points 10 **Level** 3

Prerequisite
300837.1 Climate Change Science

....

A critical part of societies response to climate change is to measure the movement of greenhouse gases. Once this is done, steps taken to reduce these gases can be correctly targeted and the impact of such steps monitored. This unit will introduce students to the scientific measurement of greenhouse gas uptake and emissions, including assessment of uncertainties and verifiability of measurement. Ecosystem-level models will be used to estimate and quantify movement of greenhouse gases, allowing quantification of the net greenhouse gas emissions over the life cycle of a product. These approaches are vital steps in moving our society to a sustainable future.

101263.1   Education and Transformation

Credit Points 10 **Level** 2

....

The unit provides opportunities for students to examine theories and practices associated with Transformative Learning (TL), within oneself and society, and its potential role for the development of professional educators, change agents and leaders in society. TL is learning that is liberating, emancipatory, empowering, profound, deep, and life changing. It occurs through critical reflection on experience, subsequent testing through discourse, and also through intuitive and affective processes. This unit enables students to design and facilitate life-affirming and transformative learning experiences in others.

101663.1   Education for Sustainability

Credit Points 10 **Level** 2

....

Increasingly, the need to develop sustainable ways of living that can reduce our ecological footprint and conserve precious natural resources for future generations is recognised as a critical concern of education at all levels. Developing 'sustainability literacy' requires new ways of thinking and learning that enable us to recognise the connections between environmental concerns, social

patterns and individual actions. Education for Sustainability approaches key issues in sustainability education with a learner-centred approach that builds skills for inquiry, analysis and creative action. It promotes personal and social change, develops civic values and empowers learners to be leaders for a sustainable future.

101661.1   Education in a Cosmopolitan Society

Credit Points 10 **Level** 3

....

This unit responds to the question of what it might mean to educate "world teachers" for cosmopolitan classrooms and schools. For some time multicultural education as policy and practice has dominated schooling in Australia. In globalizing times there has been a shift to considering alternatives and one of these is cosmopolitanism. The unit examines the thesis that cosmopolitanism as a philosophy already underpins western education. The central component of this ideal is the facilitation of reason. In the light of this philosophy, the unit explores arguments about inclusion, examines NSW curricula and pedagogical frameworks.

300567.3   e-Health

Credit Points 10 **Level** 3

Prerequisite
300566.2 Introduction to Health Informatics

Special Requirements
Students in 3663 – Graduate Certificate in Health Informatics are not required to complete the pre-requisite unit 300566 – Introduction to Health Informatics before enrolling in 300567 – e-Health.

....

This unit extends the students knowledge of Health Informatics by introducing concepts relating to electronic communications within the Health Industry. It exposes students to a variety of environments used to create, store, transfer and deliver healthcare data. Areas include minimum data sets, data linkage, messaging concepts/ standards, terminologies, healthcare evaluation, electronic health records and related Standards, security, privacy and trust, epidemiology and population health together with TeleHealth/ TeleMedicine approaches, methodologies, tools and techniques.

300070.4   Electrical Drives

Credit Points 10 **Level** 3

Prerequisite
300071.2 Electrical Machines 1

....

The unit aims to introduce the study of electrical machines and drives. The subject covers various types of electrical motors and drive systems, their applications and control. The unit covers various types of the speed control, starting and braking systems and the dynamics of different electrical drives.

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300021.2 Electrical Fundamentals

Credit Points 10 **Level** 1

....

The objective of this unit is to introduce to the student a number of concepts within electrical engineering. These include: The basic definitions of charge, current, potential difference, power; Electric circuits and basic laws such as Ohm's and Kirchoff's Laws; Thevenin, Nortons and the maximum power theorems; Electromagnetism and the associated fundamental laws; Capacitor and resistor circuits and time constants and An introduction to the operational amplifier. Basic principles are explained and applied to a range of typical electrical circuits and devices. These foundations provide students with the basic requirements for a career in engineering where the concepts can be developed or applied to more complex engineering systems.

700104.1 Electrical Fundamentals (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Equivalent Units

300021 - Electrical Fundamentals, 700024 - Electrical Fundamentals (UWSC)

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

The objective of this unit is to introduce to the student a number of concepts within electrical engineering. These include basic definitions of charge, current, potential difference, power; electric circuits and basic laws such as Ohm's and Kirchoff's Laws; Thevenin, Norton's and the maximum power theorems; electromagnetism and the associated fundamental laws; capacitor and resistor circuits and time constants and an introduction to the operational amplifier. Basic principles are explained and applied to a range of typical electrical circuits and devices. These foundations provide students with the basic requirements for a career in engineering where the concepts can be developed or applied to more complex engineering systems.

700024.1 Electrical Fundamentals (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300021 - Electrical Fundamentals

Special Requirements

Students must be enrolled at UWS College.

....

The objective of this unit is to provide the student's first introduction to fundamental electromagnetism and electric circuit principles. Discussion is restricted to DC, although first-order systems are discussed and second order systems introduced as a pointer to on-going development. Basic definitions of charge, current, potential difference/ relative potential, power, and the electric circuit as a complete path are presented, together with the basic laws -

Ohm's Law and Kirchoff's nodal and loop laws. Examples from different engineering disciplines are related to circuit's laws. Basic nodal and mesh analysis are presented together with Thevenin and Norton circuit equivalents, real versus ideal current and voltage sources and the maximum power transfer principle. The operational amplifier as a circuit element is introduced. Energy storage elements (capacitors and inductors) are discussed leading into first-order systems and their natural responses and time-constants. Several basic electromagnetic concepts related to electric and magnetic flux and induced voltage are also discussed.

300071.2 Electrical Machines 1

Credit Points 10 **Level** 3

Prerequisite

300052.2 Power and Machines

Equivalent Units

89010 - Electrical Machines, Electrical Machines 1 (unit codes 84742, 81441, 84140, 84232, 84240, 84243), Electrical Machines 2 (unit codes 84272, 84872, 84280)

....

This unit introduces the fundamental principles of electrical machines: DC generators and motors, induction motors and synchronous machines. The unit also introduces various special purpose electrical machines, such as permanent magnet machines, step motors and reluctance machines.

300024.2 Electronic Systems Design

Credit Points 10 **Level** 3

Assumed Knowledge

300075 - Instrumentation and Measurement, and 300069 - Digital Signal Processing

Prerequisite

300025.2 Electronics AND **300076.1** Microprocessor Systems

....

This unit is concerned with the processes involved in the design and production of complete electronic systems. The product development cycle is considered from concept to market and commercialisation. The design of a large electronic system is undertaken as a group project. Production processes explored are printed circuit board (PCB) design and computer aided design (CAD) tools, and PCB manufacture and assembly. Management of the processes are studied including the application of total quality management (TQM) and just-in time management (JIT).

300025.3 Electronics

Credit Points 10 **Level** 2

Assumed Knowledge

Topics associated with the unit 300464 - Physics and Materials: Vibrations and wave phenomena; Photoelectric effect, atomic structure and periodic table; Electricity and magnetism.

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Prerequisite

300021.2 Electrical Fundamentals

Special Requirements

Students should have a sound understanding of: The basic principles of analysing an electric circuit; Kirchhoff's Voltage and Current laws and their use in electric circuits; Nodal analysis, mesh analysis and superposition analysis in DC electric circuits; Thevenin and Norton equivalent and their use in electric circuits; The storage elements capacitor and inductor and understand their performance in first and second order circuits.

....

This unit further develops skills in the analysis, design, practical implementation and testing of the main analogue electronic circuits. Topics covered are: semiconductor diodes and their applications, Bipolar Junction Transistors (BJT), Field Effect Transistors (FET), analysis of BJT and FET, design of discrete operational amplifiers, and operational amplifier characteristics and circuit configurations.

300584.3 Emerging Trends in Information Systems

Credit Points 10 **Level** 3

Prerequisite

300573.2 Information Systems in Context AND **300583.2** Web Systems Development

....

This unit provides a means for students to explore the changing nature of information systems in organisations. Specifically, the role that emerging technologies play in both the design and development of information systems is critically examined. Students will be able to research and assess new technologies, as well as develop and implement effective strategies for achieving change in information systems based on the feasibility of the introduction of the technologies.

300942.1 Emerging Trends in Information Systems (Advanced)

Credit Points 10 **Level** 3

Prerequisite

300573.2 Information Systems in Context AND **300583.2** Web Systems Development OR **300902.1** Web Systems Development (Advanced)

Incompatible Units

300584 - Emerging Trends in Information Systems

Special Requirements

Students must be enrolled in 3685 - Bachelor of Computing (Information Systems) Advanced

....

In this unit students explore the changing nature of information systems in organisations. Apart from being encouraged to research and assess new technologies and implement effective strategies for achieving change within organisational information systems, in this advanced unit

students will be required to undertake an individual, but closely supervised research project. The project will help stimulate inquiry, strengthen needs for academic research and encourage students to actively participate in new knowledge generation. Furthermore, students in this unit will be required to present their findings in a form of an academic paper with a possibility of publishing.

100860.3 Emotions, Culture and Community

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit examines forms of cultural expression and collective selfunderstanding articulated as emotional identifications. Topics covered may include shame, pride, responsibility, forgiveness, resentment, hope, disgust, generosity, happiness, hate and love. The unit explores how these have been taken up in contemporary cultural analysis as a focus for understanding affinities and conflicts between individuals and communities and for how Australians imagine their historical interconnectedness. It introduces some key theoretical perspectives that have been, and might be, applied to the study of emotions, culture and community.

100861.3 Empire: European Colonial Rule and its Subjects, 1750-1920

Credit Points 10 **Level** 2

Equivalent Units

63125 - The World Encircled 1100 - 1600

Special Requirements

Successful completion of 40 credit points at Level 1.

....

A historical investigation of the experience of the 19th century European empires from the perspectives of both the colonized and colonizers. It examines the combination of domination and cultural negotiation between colonizers and colonized. It examines both how peoples were managed as imperial subjects and how they responded to this management. It looks both at the effect of imperial rule on the colonized, and of empire upon the colonizers. It draws upon historical literature from a variety of sources and perspectives, and within European and Asian history. The focus is chiefly, though not exclusively, upon the British empire and its subject peoples.

200610.2 Employee Training and Development

Credit Points 10 **Level** 2

Prerequisite

200300.2 Managing People at Work

Equivalent Units

61422 - Employee Training and Development

....

Learning is essential in the 21st century workplace and a key concern of human resource development, human

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resource management and industrial relations practitioners. In 'Employee, Training and Development', we critically explore the implications of this fact from a range of perspectives. Firstly, what does this mean for workers and unions? Secondly, how does training and development form part of management's strategic approach? Finally, what role can government play in supporting these processes? In considering these broad questions, we look at assumptions underpinning current training and development practices, examples of training and development strategies as well as government planning for skilled workforce development.

300026.3   Energy Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Basic knowledge of power frequency devices and systems

Prerequisite

300025.3 Electronics AND **300052.2** Power and Machines

....

The unit introduces the global energy picture of electric energy systems, including a look ar alternative energy sources where time permits. It deals with mainly power systems on a macroscopic scale and with power electronics to a lesser extent and on a smaller scale. Basic processes of energy generation, distribution and conversion are presented, along with the use of semiconductor power switching devices.

300462.2   Engineering and Design Concepts

Credit Points 10 **Level** 1

Equivalent Units

300011 - Design Issues and Principles, J1803 - Impact of Design and Technology, J1757 - Design Issues, J1758 - Engineering Design

....

This unit equips students with the fundamental skills that will enable them to use creative design and engineering approaches to solve challenging problems and to understand the design process. Students will be exposed to 2D and 3D visualisation techniques, will learn how to interpret abstract information, and will work on practical projects in an interdisciplinary context. The aim is to provide a common first-year subject that is thematic, rather than discipline-centred and presents students with foundation concepts in engineering and industrial design.

700105.1   Engineering and Design Concepts (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Equivalent Units

300462 - Engineering and Design Concepts, 700021 - Engineering and Design Concepts (UWSC)

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit equips students with the fundamental skills that will enable them to use creative design and engineering approaches to solve challenging problems and to understand the design process. Students will be exposed to 2D and 3D visualisation techniques, will learn how to interpret abstract information, and will work on practical projects in an interdisciplinary context. The aim is to provide a common first-year subject that is thematic, rather than discipline-centred and presents students with foundation concepts in engineering and industrial design.

700021.1   Engineering and Design Concepts (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300462 - Engineering and Design Concepts

Special Requirements

Students must be enrolled at UWS College, except under specific circumstances approved by UWS.

....

This unit equips students with the fundamental skills that will enable them to use creative design and engineering approaches to solve challenging problems and to understand the design process. Students will be exposed to 2D and 3D visualisation techniques, will learn how to interpret abstract information, and will work on practical projects in an interdisciplinary context. The aim is to provide a common first-year subject that is thematic, rather than discipline-centres and presents students with foundation concepts in engineering and industrial design.

300027.2   Engineering Computing

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge in use of computers and Windows operating system

....

Engineering computing is an introduction to using computation to solve real problems. The unit also aims to instil sound principles of program design that can be utilised in many units throughout the students' course. The basic elements and structures of a high level language are taught. Students are exposed to numerous engineering problems and are encouraged to implement solutions using an algorithmic approach.

700106.1   Engineering Computing (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge in use of computers and Windows operating system

Equivalent Units

300027 - Engineering Computing, 700018 - Engineering Computing (UWSC)

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Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

Engineering computing is an introduction to using computation to solve real problems. The unit also aims to instil sound principles of program design that can be utilised in many units throughout the students' course. The basic elements and structures of a high level language are taught. Students are exposed to numerous engineering problems and are encouraged to implement solutions using an algorithmic approach.

700018.1 Engineering Computing (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge in use of computers and Windows operating system

Equivalent Units

300027 - Engineering Computing, 700106 Engineering Computing (UWSC Assoc Deg)

Special Requirements

Students must be enrolled at UWS College.

....

Engineering Computing is an introduction to using computation to solve real problems. The unit also aims to instil sound principles of program design that can be utilized in many units throughout the students' course. The basic elements and structures of a high level language are taught. Students are exposed to numerous engineering problems and are encouraged to implement solutions using an algorithmic approach.

700038.2 Engineering Design and Construction Practice (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300034 - Introduction to Professional Practice, 300461- Engineering and Industrial Design Practice, 300674 - Engineering, Design & Construction Practice

Special Requirements

Students must be enrolled at UWS College.

....

This unit encourages students to explore the professional responsibilities and challenges faced by Engineers, Designers and Building professionals. Students are introduced to emerging issues and approaches to sustainability and the complex nature of the design problems they will encounter in professional practice. Students engage in a semester-long research and problem solving task that addresses environmental and social sustainability imperatives and fosters fundamental research, design and communication skills. Special emphasis is placed on lifelong learning, academic literacy and professional skills including information literacy, project management, and teamwork which equip students for subsequent academic and professional contexts.

300481.2 Engineering Electromagnetics

Credit Points 10 **Level** 2

Assumed Knowledge

The students should have a good understanding of 300021 - Electrical Fundamentals

Prerequisite

300464.2 Physics and Materials AND **200238.2** Mathematics for Engineers 2

Equivalent Units

300022 - Electromagnetics, 300073 - Electromagnetic Compatibility

....

This unit introduces Maxwell's equations in integral and differential form and their application to basic theory and application of electromagnetic structures, wave propagation, guides waves, antennas and Electromagnetic compatibility.

300482.2 Engineering Geology and Concrete Materials

Credit Points 10 **Level** 1

Equivalent Units

85002 - Engineering Geophysics, 300039 - Mechanics and Materials

....

Students are introduced to the principles of Civil and Environmental Engineering Chemistry, Civil and Environmental Engineering Geology, and Concrete Materials. The students are exposed to real world engineering problems requiring knowledge of Civil and Environmental Engineering Chemistry, Civil and Environmental Engineering Geology and Concrete Materials. The knowledge gained from this unit will be directly applicable to other units of Civil and Environmental Engineering key programs.

700109.1 Engineering Management for Engineer Associates (UWSC Assoc Deg)

Credit Points 10 **Level** 2

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

The unit will provide the knowledge and skills to enable students to support the achievement of organisational goals through applying knowledge of environment and internal culture. The unit evaluates planning processes and goal setting to achieve superior performance and compares alternative approaches to motivation of work team members. Students will consider types of managerial communications and their associated communications channels in achieving best professional practice.

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300483.4 Engineering Project

Credit Points 20 **Level** 4

Prerequisite

300053.3 Professional Practice

Corequisite

300741.2 Industrial Experience (Engineering)

Equivalent Units

85018 - Civil and Environmental Engineering Project 2

Incompatible Units

300484 - Engineering Thesis, 300668 - Advanced Engineering Thesis

Special Requirements

Successful completion of 240 credit points.

....

This unit includes a capstone project which demonstrates student's professional level of idneifying, planning, designing, executing, testing and documenting an engineering project or activity.

700110.1 Engineering Project (UWSC Assoc Deg)

Credit Points 10 **Level** 2

Prerequisite

700118.1 Professional Practice for Engineer Associates (UWSC Assoc Deg)

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

In this unit, students will use project management tools, techniques and practices to plan and control a project that achieves stated requirements on time and within budget. Students will plan a project including the creation of a statement of work, a work breakdown structure and an appropriate set of supporting work packages.

300029.3 Engineering Visualization

Credit Points 10 **Level** 2

Assumed Knowledge

C++ Programming and 3-D Geometry

Prerequisite

300027.2 Engineering Computing

Equivalent Units

80151 - Computer Graphics

....

This unit is aimed to provide a comprehensive introduction to fundamental concepts and algorithms in engineering visualization. Topics covered include visualization hardware, scan conversion of geometric primitives, 2D and 3D transformations, 3D viewing and projection, hidden surface removal, solid modeling, illumination models and image manipulation.

300674.2 Engineering, Design and Construction Practice

Credit Points 10 **Level** 1

Equivalent Units

300461 Engineering and Industrial Design Practice; 300034 Introduction to Professional Practice; 700038 - Engineering Design and Construction Practice (UWSC)

....

This unit encourages students to explore the professional responsibilities and challenges faced by Engineers, Designers and Building professionals. Students are introduced to emerging issues and approaches to sustainability and the complex nature of the design problems they will encounter in professional practice. Students engage in a semester-long research and problem solving task that addresses environmental and social sustainability imperatives and fosters fundamental research, design and communication skills. Special emphasis is placed on lifelong learning, academic literacy and professional skills including information literacy, project management, and teamwork which equip students for subsequent academic and professional contexts.

700107.1 Engineering, Design and Construction Practice (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Equivalent Units

300674 - Engineering Design and Construction Practice, 700038 - Engineering Design and Construction Practice (UWSC)

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit encourages students to explore the professional responsibilities and challenges faced by Engineers, Designers and Construction professionals. Students are introduced to emerging issues and approaches to sustainability and the complex nature of the design problems they will encounter in professional practice. Students engage in a semester-long research and problem solving task that addresses environmental and social sustainability imperatives and fosters fundamental research, design and communication skills. Special emphasis is placed on lifelong learning, academic literacy and professional skills including information literacy, project management, and teamwork which equip students for subsequent academic and professional contexts.

101441.2 English Semantics and Pragmatics

Credit Points 10 **Level** 3

Assumed Knowledge

A2912 - The Structure of English or equivalent knowledge

Equivalent Units

A3038 - English Semantics and Pragmatics

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....

In 2013, this unit replaced by 101947 - Pragmatics. This unit is part of the English Linguistics Major. It introduces students to two important fields of linguistics, semantics and pragmatics, with special reference to English. It intersperses the theoretical elements with practical applications through examples, exercises and textual analysis, which enable students to understand the significance of these fields of linguistics to the languages professions, such as interpreting and translation and language teaching. The unit also aims to refine students' academic writing skills through the preparation of a short research paper.

100862.2 English, Text & Writing

Credit Points 10 **Level** 1

Equivalent Units

100344 - Introduction to English, Text and Writing

....

In 2013, this unit replaced by 101907 - Introduction to Literacy Studies. This unit covers a number of issues within literary and textual studies and creative writing, focusing on the areas of modernism and postmodernism. It considers the historical and cultural contexts of literary and textual production, examines a variety of literary genres and styles, and covers a range of contemporary critical and theoretical approaches.

300117.3 Enterprise Database

Credit Points 10 **Level** 3

Assumed Knowledge

General understanding of database design and development processes and techniques. Familiarity with at least one programming language.

....

The emphasis of this unit is to expose students to the process and techniques of the development of enterprise databases. This unit extends students' basic knowledge of database systems through analysis of suitable strategies for record storage, primary file organisation and database indexing techniques, transaction recovery and concurrency control strategies, general security and integrity considerations, understanding of emerging technologies in distributed databases, object-oriented databases and the world wide web.

200614.2 Enterprise Industrial Relations

Credit Points 10 **Level** 2

Prerequisite

200300.2 Managing People at Work

Equivalent Units

61432 - Enterprise Industrial Relations

....

This unit looks at workplace reform and restructuring -- the devolution approach to industrial relations management, workplace reform, organisation and behaviour, the role of workplace committees, trade unions at the enterprise level,

shop-floor and industry unionism; the enterprise bargaining process -- overall framework definitions, dimensions and scope; strengths and weaknesses; the processes -- negotiation, psychological, sociological and economic approaches, stages; impact of enterprise bargaining, workplace flexibility, efficiency, remuneration practices and employee satisfaction; grievance handling and grievance procedures; differences with other forms of negotiation, formal or informal; consultation and participation; issues involved, differences with negotiation; impact of changes in wage determination on workplace, particularly the work choices changes and current and future strategic and legislative directions in enterprise bargaining and workplace agreements.

200154.3 Entrepreneurial Management and Innovation

Credit Points 10 **Level** 2

Corequisite

200571.2 Management Dynamics

Equivalent Units

700085 - Entrepreneurial Management and Innovation (UWSC)

....

This unit examines the theory, practice and nature of entrepreneurship, as a virtual but often neglected and misunderstood mode of management. A basic premise underlying this unit is that all business entities require enterprising management to enhance their survival ability. This proposition is relevant to new and older, small and large organisations. Additionally, contemporary management practice requires the modern manager to be creative in a learning context and the ways in which these creative environments are reached through entrepreneurship are explored.

300821.1 Environment and Health

Credit Points 10 **Level** 1

....

This unit introduces students to the holistic and socio-ecological nature of human health and its linkages with the socio-cultural and physical environment, focussing specifically on environmental noise as a significant risk to both physical and mental health. Students are challenged to identify and reflect on the underlying causes of traditional and contemporary environmental health issues and to explore the changing nature of environmental health, its professional practice, associated policy and the changing roles and responsibilities in government, business and industry. The unit introduces a range of health promotion and community education models for the design and evaluation of environmental health interventions.

300737.3 Environmental Engineering

Credit Points 10 **Level** 2

Prerequisite

300482.2 Engineering Geology and Concrete Materials AND **300762.2** Fluid Mechanics

Units

Equivalent Units

85021 - Environmental Engineering

....

This unit outlines the essential issues of the environment that a civil and environmental engineer will address as a personal and professional contributor to the development of Australia. It has a bias towards water-related environmental issues.

300857.1 Environmental Geochemistry

Credit Points 10 **Level** 3

Prerequisite

300808.1 Introductory Chemistry OR **300800.1** Essential Chemistry 1 AND **300803.1** Essential Chemistry 2

Equivalent Units

300614 - Environmental Geochemistry

....

The unit deals with how how the lithosphere, hydrosphere, biosphere and atmosphere are interconnected through global biogeochemical processes. Topics include-the composition of ocean, ground and surface waters and their interactions with the atmosphere, rocks, soils, sediments and man-made pollutants; transfer of dissolved material between environments, and detection and control of toxic waste materials; environmental quality criteria, field sampling and modelling of selected environmental systems. These topics will be brought to life in a two-day field trip to Sunny Corner undertaken in the mid-session break.

300840.1 Environmental Planning and Climate Change

Credit Points 10 **Level** 2

Equivalent Units

300629 - Environmental Planning; 300783 - Environmental Planning & Climate Change

Incompatible Units

300704 - Healthy Built Environments

....

This unit is an introduction to environmental planning in local and state government and in particular the role of planning in protecting the natural environment, enhancing population health and/or encouraging sustainable development practices. Students focus on goal-setting for environmental protection and then explore how planning policy can assist with achieving these goals. Current metropolitan planning and strategy is examined using the Metropolitan Strategy for Sydney as the primary case study. The unit scopes environmental planning policies introduced by state, local and Commonwealth governments to adapt to climate induced impacts on the environment and on community health and well being.

300841.1 Environmental Regulation and Policy

Credit Points 10 **Level** 2

Equivalent Units

300784 - Environmental Regulations and Policy; 300630 - Environmental Regulations

....

This unit aims to provide students with a broad understanding of the current environmental regulations available to environment protection and planning authorities at the State and Local Government level to protect and manage the natural and built environments. This unit will also consider environmental policy introduced by the State and Commonwealth governments to manage land use activities so as to encourage sustainable development practices. It is a suitable unit for students entering government or industry in environmental management, health and planning roles. There is a particular focus on the use of legislation and preparation of policy to address environmental and health risks to the community.

300858.1 Environmental Risk Management

Credit Points 10 **Level** 3

Equivalent Units

300284 - Environment Risk Management; 300532 - Agriculture Risk

Special Requirements

Successful completion of 120 credit points

....

This unit examines the world of environmental risk management and will introduce students to environmental management systems including Environmental Impact Assessment and Environmental Auditing. The unit considers and examines the application of the precautionary principle in real world situations. Students will also be introduced to methods of quantitative risk assessment as applied to environmental and agricultural risks such as urban, peri-urban and rural growth; industrial and agricultural land use; contaminated land, and climate change.

300284.4 Environmental Risk Management

Credit Points 10 **Level** 3

Equivalent Units

EH309A - Environmental Management 1, 300532 - Agricultural Risk

....

This unit examines the world of environmental risk management and will introduce students to environmental management systems, methods of quantitative risk assessment together with processes of Environmental Impact Assessment and Environmental Auditing. With an emphasis on solving real world problems, this unit covers environmental and agricultural risks such as urban, peri-urban and rural growth; industrial and agricultural land use; contaminated land, and climate change.

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300872.1 Epidemiology

Credit Points 10 **Level** 2

Equivalent Units

300626 - Epidemiology

....

Epidemiology is an analytical science concerned with the distribution and determinants of health-related states in populations, aimed at the management of health problems. Epidemiology is not limited to controlling epidemics but assesses and manages physical, mental and social well-being in living, working and recreational environments. The unit introduces identification and understanding of risk factors for health and disease, and assists the student to develop an investigation protocol for assessing a specific health state within their own field of interest. This addresses career needs for a range of health studies while introducing the epidemiological analytical approach to risk assessment and research.

400926.1 Ergonomics and Work Occupations

Credit Points 10 **Level** 7

Assumed Knowledge

Human anatomy, functional anatomy.

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy and 4664 - Master of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) successfully completed an approved Child Protection Workshop 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) possess a current WorkCover Authority approved First Aid Certificate.

....

The productivity role is a key aspect of adult life for most people. Occupational therapists play a major role in assisting clients who have had their productivity role affected in some way. This unit explores the importance of productivity for adults, in particular those engaged in paid employment. The focus of this unit is the rehabilitation of the injured worker within the context of the OH&S legislation and the WorkCover case management system. In addition, this unit will explore vocational counselling and rehabilitation for clients with psychosocial, cognitive and physical disabilities.

300800.2 Essential Chemistry 1

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Chemistry (2 unit) or HSC Multi-strand Science (3 or 4 unit) or equivalent. General Mathematics bands 5 and 6 or Mathematics band 4 or equivalent.

Equivalent Units

300224 - Chemistry 1, 300554 - Principles of Chemistry, 700121 Essential Chemistry 1

....

This unit provides an introduction to some of the essential knowledge, concepts and skills of chemistry, to serve the needs of students majoring in chemistry and those requiring a working knowledge of chemistry. Observable chemical facts and phenomena including structure, dynamics, and energetics, are explained in terms of current mathematical and visual models and further developed in Essential Chemistry 2. Evidence for chemical understanding is provided using IR spectroscopy, mass spectrometry, and computer molecular modelling. Laboratory skills relate theory to practice through the development of practical skills required to determine the concentration of an analyte using volumetric and spectrophotometric analysis.

700121.2 Essential Chemistry 1 (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Chemistry (2 unit) or HSC Multi-strand Science (3 or 4 unit) or equivalent. General Mathematics bands 5 and 6 or Mathematics band 4 or equivalent. UWSCollege Foundation chemistry

Equivalent Units

300224 - Chemistry 1, 300800 - Essential Chemistry 1, 300554 - Principles of Chemistry, 700036 - Chemistry 1 (UWSC)

Special Requirements

Students must be enrolled at UWSCollege in either 7003 Diploma in Science or 7009 Diploma in Science Fast Track

....

This unit provides an introduction to some of the essential knowledge, concepts and skills of chemistry, to serve the needs of students majoring in chemistry and those requiring a working knowledge of chemistry. Observable chemical facts and phenomena including structure, dynamics, and energetics, are explained in terms of current mathematical and visual models and further developed in Essential Chemistry 2. Evidence for chemical understanding is provided using IR spectroscopy, mass spectrometry, and computer molecular modelling. Laboratory skills relate theory to practice through the development of practical skills required to determine the concentration of an analyte using volumetric and spectrophotometric analysis.

300803.1 Essential Chemistry 2

Credit Points 10 **Level** 1

Assumed Knowledge

An understanding and competence with basic chemical principles including SI units, chemical symbols, formulas and equations, nomenclature, stoichiometry, the mole concept, bonding, molecular shape and polarity, states and properties of matter, thermodynamics, equilibria, acids and bases, pH and electrochemistry. General Mathematics bands 5 and 6 or Mathematics band 4 or equivalent

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Equivalent Units

300225 - Chemistry 2, 300550 - Medicinal Chemistry, 14102 - Foundation Chemistry 2, CH104A - Chemistry 1.2, J1754 - Organic Chemistry 1

Incompatible Units

CH102A - Biological Chemistry 1.2D

Special Requirements

Students must have safety goggles, cloth laboratory coat and enclosed footwear.

....

This unit introduces an investigation of the reactivity of covalent molecules, in particular, of carbon-based compounds. Focussing on introductory chemical dynamics and thermodynamics, students will develop an in-depth understanding of the structure, nomenclature and reactivity of the principal organic functional groups, extending their basic principles of chemistry. They will also understand how molecules are synthesised and the ways they react being important in the function and role of chemistry in biological systems in our domestic and industrial worlds.

700122.1 Essential Chemistry 2 (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

An understanding and competence with basic chemical principles including SI units, chemical symbols, formulas and equations, nomenclature, stoichiometry, the mole concept, bonding, molecular shape and polarity, states and properties of matter, thermodynamics, equilibria, acids and bases, pH and electrochemistry. General Mathematics bands 5 and 6 or Mathematics band 4 or equivalent

Equivalent Units

300225 - Chemistry 2, 300550 - Medicinal Chemistry, 700037 - Chemistry 2 (UWSC), 300803 - Essentials of Chemistry 2

Special Requirements

Students must be enrolled at UWSCollege in either 7003 Diploma in Science or 7009 Diploma in Science Fast Track

....

This unit introduces an investigation of the reactivity of covalent molecules, in particular, of carbon-based compounds. Focussing on introductory chemical dynamics and thermodynamics, students will develop an in-depth understanding of the structure, nomenclature and reactivity of the principal organic functional groups, extending their basic principles of chemistry. They will also understand how molecules are synthesised and the ways they react being important in the function and role of chemistry in biological systems in our domestic and industrial worlds.

200468.2 Estimating 1

Credit Points 10 **Level** 2

....

To provide an understanding of factors that affect the cost of buildings; introduce costing techniques for new and existing buildings and provide students with the skills necessary to prepare builder's estimates.

300726.2 Estimating 2

Credit Points 10 **Level** 4

Assumed Knowledge

Building construction including residential, light industrial and small commercial as covered in the subjects Building 1 and Building 2 and building measurement as covered in Building Quantities and Estimating as covered in Estimating 1.

Equivalent Units

BG412A - Estimating 2

....

The aim of this unit is to give students a hands-on experience of the tendering process for construction professionals. Students undertake a team research project to determine the optimum parameters for a civil/building infrastructure estimation.

400249.2 Ethical and Legal Issues in Health Care

Credit Points 10 **Level** 3

....

This unit enables students to explore and develop an understanding of the ethical and legal issues important within contemporary health care. Through the use of case studies students will analyse profound ethical and legal challenges facing current health care that are equally important to health professionals, patients/clients and society generally. Critical thinking about these issues will be encouraged. Students will also be encouraged to consider differing theoretical perspectives in their examination of ethical issues. Additionally, students studying to work within health care, including complementary medicine, will develop a comprehensive understanding of the requirements for ensuring that their practice conforms to legal doctrines and ethical standards.

100863.3 Ethical Cultures

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

In 2014, this unit replaced by 102007 - Ethics in Historical Perspective. The unit provides an historical overview of the different types of ethical beliefs and practices that have been used is specific social settings from the classical world to the modern West. It looks at different types of spiritual and secular ethical behaviours, and the doctrines associated with each. It focuses upon the types of ethical argument and judgment-making specific to particular professions, occupations and social statuses over time. It concludes by surveying the different types of ethics taught to professionals today in the West, and on the differences between each, as well as the specific requirements of each. It will be of interest both to students with an interest in the history of ideas, and to students who want to learn more about ethics and moral decision-making.

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400893.2 Ethical Issues in Sports and Athletics

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in course 4659 - Bachelor of Health Science (PDHPE) or 4549 - Bachelor of Health Science (PDHPE).

....

This unit examines the growing importance of the study of ethics and sports. Such study not only includes the increasing incidence of the abuse of nutritional and pharmacological ergogenic aids, but also address local and global socio-economic and cultural issues such as the inequalities in opportunity for sport participation and excellence, professional athlete challenges to the Olympic movement, age appropriateness of youth talent identification and specialized training, etc.

101466.2 Ethical Traditions in Islam

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study, inclusive of either of the following two units: 101462 - Understanding Islam and Muslim Societies (Level 1) or 101464 - Great Texts of Islam: Quran and Hadith (Level 2) or equivalent unit.

....

This unit introduces students to the rich heritage of ethical traditions in Islamic thought. Students will study and critically evaluate the key features and contributions of Muslim theologians, philosophers and Sufis, who attempted to deal with revelation and rationalistic discourse in exploring the meaning of ethical life for Muslims and discussing whether philosophy and religious wisdoms were equals and allies in the pursuit of happiness. The origin and development of these traditions will be introduced with an emphasis on the relevance and application of some ethical issues, such as free will, predestination, human responsibility, and bioethics, to contemporary Muslim societies.

100864.2 Europe in the Twentieth Century

Credit Points 10 **Level** 3

Equivalent Units

B3681 - Twentieth Century Europe

Special Requirements

Successful completion of 60 credit points.

....

This unit examines the relationship between social change, ideology and politics in twentieth-century Europe. Three competing ideologies from 1900 are examined, authoritarianism, liberalism and socialism. With a special focus on the period 1914 to 1945, the unit examines the interaction between these ideologies and the polarization of politics through the major social upheavals of the period. Case studies will be drawn from the history of Britain, Germany, Russia, Italy, France and Spain in the twentieth century.

100897.2 Everyday Life

Credit Points 10 **Level** 1

Equivalent Units

63234 - Introduction to Cultural Studies

....

This unit introduces students to key themes and issues in the study of everyday life. It draws on different disciplinary areas - especially anthropology, sociology and cultural studies - and different theoretical and methodological perspectives to examine the ways cultural practices and meanings are used to shape human identities and societies in everyday life. It will focus on rituals and routines in the different spaces of everyday life, and the ways these contribute to the production of local worlds and the key cultural categories that give meaning to these worlds. It will include a focus on how we research everyday life.

300935.1 Evidence and Crime Scene Management

Credit Points 10 **Level** 2

Equivalent Units

300746 - Evidence and Crime Scene Management

Incompatible Units

300374 - Crime Scene Management

Special Requirements

Successful completion of 60 credit points. Students enrolled in the 3589 - Bachelor of Science (Forensic Science) are not eligible to take this unit as an elective.

....

The integrity of evidence and crime scene management is critical in preparing evidence for legal proceedings. The unit is particularly designed for students wishing to enter professional domains involving; policing, nursing, animal welfare, workplace investigators, health inspectors, OH&S officers, fire investigation, council and park rangers, social welfare, fraud and insurance investigation and others where the collection of evidence is a component of professional practice within the discipline. The unit covers topics such as; recognition of various evidence, the recording and documentation of evidence, crime scene or site photography, managing scenes, CCTV as evidence, maintaining evidence integrity, sexual assault evidence, the reporting and presentation of evidence in court and others.

101567.3 Evidence, Investigations and Police Intelligence

Credit Points 10 **Level** 2

Equivalent Units

400296 - Criminal Investigations

....

This unit aims to provide an overview to police investigations with a specific focus on the role that evidence, intelligence and forensic science play in the investigative process. The lectures will consider the

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objectives and history of investigation; the role of both the patrol investigator and the detective; the role of forensic science; and the sources and rules of evidence. Specific investigative challenges - such as responding to international criminal networks and media driven expectations - are also considered in this unit. The unit includes both theoretical and practical perspectives relating to evidence in order to situate criminal investigations in a larger historical, social and legal context. The tutorials will adopt a workshop approach to assist students to engage with and critically evaluate contemporary criminal investigations.

400755.2 Evidence-Based Nursing 1

Credit Points 10 **Level** 2

Equivalent Units
400057 Nursing Context 4

Special Requirements
Students must be enrolled in a Bachelor of Nursing program.

....

This unit explores concepts related to 400755 Evidence Based Nursing, which will further develop student understanding of the significance of scholarship, research and the research processes and how these may inform professional nursing knowledge and practice.

400765.2 Evidence-Based Nursing 2

Credit Points 10 **Level** 3

Assumed Knowledge
Knowledge and content related to 400755 - Evidence Based Nursing 1.

Prerequisite
400755.1 Evidence-Based Nursing 1

Equivalent Units
400060 - Nursing Context 5

....

This unit consolidates and assists student's synthesis of the major methodological approaches to support evidence-based practice, the process of research/inquiry and their application in the development of a defensible and justifiable nursing research project.

400865.2 Evidence-Based Practice

Credit Points 10 **Level** 3

Assumed Knowledge
Knowledge and skills of Foundations of Research & Evidence-based Practice and Research Methods (Qualitative and Quantitative).

Prerequisite
400864.3 Research Methods (Quantitative and Qualitative)

Equivalent Units
400154 - Integrating Evidence into Practice

....

In this unit, students incorporate previous research and biostatistics knowledge to develop new skills for using evidence to inform all aspects of their professional practice. Evidence-based practice uses an enquiry led approach to manage expanding and uncertain knowledge by formulating answerable questions, effectively searching literature, critically appraising evidence validity and results, and to assess its significance in clinical practice and healthcare decision-making.

400944.1 Evidence-Based Practice (Advanced)

Credit Points 10 **Level** 5

Assumed Knowledge
The unit is intended for prospective honours students and will usually require a GPA of 5 (credit average) for enrolment

Prerequisite
400864.1 Research Methods (Quantitative and Qualitative)

Incompatible Units
400865 - Evidence-Based Practice 400154 - Integrating Evidence into Practice 400180 - Occupational Therapy Honours Thesis 1

Special Requirements
Students must be enrolled in an honours course. The unit is only relevant to honours students in health science and is specifically tailored to accommodate the course and progression requirements of such students. It is not appropriate as a general elective.

....

In this unit, students incorporate previous research and biostatistics knowledge to develop new skills for using evidence to inform all aspects of their professional and research practice. Evidence-based practice uses an enquiry led approach to manage expanding and uncertain knowledge by formulating answerable questions, effectively searching literature and critically appraising the validity of evidence to assess its significance in clinical practice and healthcare decision-making. Students will embark on research training through studying the theory and application of research methods to honours research in their chosen field and practising the skills to analyse evidence in the health sciences.

100998.4 Evolutionary Thinking

Credit Points 10 **Level** 3

Equivalent Units
100865 - Evolutionary Thinking

Special Requirements
Successful completion of 60 credit points at Level 1.

....

Evolutionary thinking has been one of the strongest and most pervasive influences on human thinking and behaviour in the modern era, leading in its most dangerous forms to eugenics, social engineering and theories of racial hierarchy. This unit examines various evolutionary modes of thought - focusing especially on Darwins The Origin of

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Species (1859) - their social and cultural impact, and challenges to their legitimacy.

400883.2 Exercise Bioenergetics

Credit Points 10 **Level** 2

Prerequisite

400880.2 Fundamentals of Exercise Science AND
400885.2 Sport and Exercise Physiology

Equivalent Units

400325 - Bioenergetics of Exercise

Special Requirements

This unit is only available to students enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

This unit investigates exercise metabolism in an integrated fashion. Covering: energy pathways; metabolic control; metabolism, oxygen consumption and respiratory quotient relationships; metabolic responses to acute and chronic exercise; pathway contributions to exercise; metabolic limitations to exercise; metabolic contributions to fatigue; metabolic acidosis, cellular and systemic implications of metabolic thresholds, conditions that can alter cellular metabolism (eg. altitude, heat stress, anaemia, ischemia, ergogenic aids). Skeletal muscle metabolism is the primary focus, liver and adipose tissue metabolism are also considered as are anabolic pathways. Students will be exposed to basic biochemical assays of interest to the exercise physiologist.

400902.1 Exercise in Musculo-Skeletal Rehabilitation

Credit Points 10 **Level** 3

Prerequisite

400326.1 Exercise Prescription for General Populations

Equivalent Units

400327 - Exercise in Musculoskeletal Injury Rehabilitation

Special Requirements

Students must be enrolled in courses 4658 - Bachelor of Health Science (Sport and Exercise Science).To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) possess a current WorkCover Authority approved First Aid Certificate.

....

This unit focuses on the role of exercise in the functional rehabilitation of musculoskeletal injuries including work and sporting injuries. It covers injury and re-injury prevention strategies; mechanisms of injury; patho-physiology of injury and repair process; design and evaluation of rehabilitation exercise programs; how the exercise program functions in concert with other methods of injury treatment and management; important pharmacological, communication,

psychosocial and cultural considerations; the role of the exercise physiologist in the rehabilitation team; the effects of nervous system disorders and injury on skeletal muscle control, injury and rehabilitation are also considered.

400884.3 Exercise Nutrition, Body Composition and Weight Control

Credit Points 10 **Level** 2

Prerequisite

400868.2 Human Anatomy and Physiology 1 AND
400869.2 Human Anatomy and Physiology 2 AND
400881.3 Functional Anatomy

Special Requirements

Restricted to those enrolled in B.HSc (Sport and Exercise Science) and to have passed the prerequisites. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) provide evidence of compliance with the occupational screening and immunisation policy of NSW Health 4) possess a current WorkCover Authority approved First Aid Certificate.

....

This unit provides students with an understanding of the interdependent areas of nutrition, body composition and body weight control within the context of sport, physical activity, and exercise. Nutritional needs and recommendations for all levels and types of physical activity are covered along with the links between nutrition and health, body composition, control of body weight and composition. Students will develop skills in nutritional analysis, body composition assessment and the development of exercise programs for weight control. Students will use these skills and knowledge in the individualisation of advice on exercise nutrition and body composition control.

400326.4 Exercise Prescription for General Populations

Credit Points 10 **Level** 2

Prerequisite

400882.2 Introduction to Biomechanics AND **400884.2** Exercise Nutrition, Body Composition and Weight Control AND **400885.2** Sport and Exercise Physiology

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science). To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) possess a current WorkCover Authority approved First Aid Certificate.

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....

The exercise prescription area is designed to give students an understanding of and experience in exercise prescription and fitness program construction for the general population of all ages and both genders, including pre exercise screening and fitness testing. It will focus on the development of general health related fitness programs which improve aerobic and anaerobic fitness, flexibility, muscular strength and endurance, including resistance training. Students will design, implement and evaluate a self-prescribed exercise program.

400997.2 Exercise Rehabilitation

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of Human anatomy, human physiology, pathophysiology.

Prerequisite

400984.1 Cardiorespiratory Physiotherapy AND **400987.1** Neurological Physiotherapy Practice

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4667 Master of Physiotherapy, and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs. Students in courses 4662 Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy are to complete prerequisite unit 400982 - Core Competencies in Physiotherapy Practice. Students in course 4667 Master of Physiotherapy are required to complete prerequisite unit 400987 Neurological Physiotherapy Practice. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

....

Exercise Rehabilitation focuses on client management with exercise in a variety of settings across the lifespan. This will require effective communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include an understanding of the normal physiological responses to exercise, the implications of pathology and exercise and the integration of exercise based interventions with other physiotherapy modalities.

101874.2 Experiential Learning in Communities (ELC)

Credit Points 10 **Level** 2

Incompatible Units

101117 - Learning through Community Service

Special Requirements

Some students may be required to complete a Working With Children Check Declaration and undertake Child Protection training. These students will be identified by the

unit co-ordinator who will make arrangements for the relevant students to undertake the Working With Children Check Declaration and Child Protection training.

....

Experiential Learning in Communities (ELC) is a 10 credit point unit in which students learn the value of service in communities, agencies and non-profit organisations, through designing and carrying out projects of substantial benefit to our communities. The unit is organised around a number of focus areas or strands. It includes 10 hours of face to face learning, a 45 hour placement in a community agency, and participation in blended learning.

100013.3 Experimental Design and Analysis

Credit Points 10 **Level** 2

Prerequisite

101183.2 Psychology: Behavioural Science

Special Requirements

Pre-requisites will not apply to students enrolled in courses 1630 Graduate Diploma in Psychological Studies and 1501 Graduate Diploma in Psychology. Enrolment in these awards requires graduate status; hence the students have demonstrated proficiency in tertiary studies. Each applicant in these awards is assessed individually and provided with an individual study sequence by the Course Advisor.

....

This unit is driven by the scientific method with a focus on experimental design and related data analysis. Although some of the methods and techniques are dealt with in passing in earlier units, a more complete approach is adopted here. Research design and methodology issues, statistical concepts and techniques, computer analysis of data, and communicating research findings are all features of this unit.

300879.1 Experimental Foods

Credit Points 10 **Level** 3

Prerequisite

300805.1 Food Science 1 AND **300842.1** Food Science 2

Equivalent Units

300638 - Experimental Foods

Special Requirements

Students are required to have Personal Protection Equipment e.g. apron and closed-in shoes.

....

This unit aims to build on students' knowledge of food preparation gained in Food Science 1 and 2, the focus of this unit includes; food science and principles, the interaction of ingredients and the added effects of physical procedures on the end product. Students develop advanced scientific methodologies to give reproducibility. This is a recommended unit for those intending to advance in the areas of recipe development and new product development.

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100254.3 Exploring Local History

Credit Points 10 **Level** 3

Equivalent Units

63153 - Exploring the History of Western Sydney

Special Requirements

Successful completion of 60 credit points.

....

Understanding local history is an integral part of establishing personal and community identities. Local studies are used as the foundation for many socio-economic studies across various disciplines as well as in school curricula. The University of Western Sydney is part of a region rich in history, little of which has been researched or published. Local history techniques involve understanding a variety of physical and documentary sources. Students learn the history of the Sydney region by assembling data from original historical sources, based at the Archives in Kingswood and Villawood and from on-line data repositories. There are opportunities for site visits to historical and archaeological sites and local museums.

200589.2 Export Strategy and Applications

Credit Points 10 **Level** 3

Assumed Knowledge

Principles of international business including the dynamics of foreign business markets, international marketing and research methods, comparative global economics, international corporate finance and strategy. The basics of economics, accounting, law, statistics and business communications are also assumed.

Prerequisite

200591.2 Introduction to International Business

Equivalent Units

61126 - International Business Project 2

....

Internationalisation has become a strategic necessity for many firms wishing to survive and grow in today's increasingly competitive domestic economy. Globalisation in its many forms is a powerful driver of change. 'Export Strategy & Applications' will give students the practical skills needed to manage the day to day international trading activities of any company. This unit examines how and why exporting firms select and plan their entry into foreign markets, the management of intermediaries in the distribution channel, ways of promoting goods and services overseas, and the methods of trade finance, insurance and logistics that companies use on a daily basis as they pursue success internationally. This unit provides students with those essential skills sought by any employer company operating in international markets.

400760.2 Family Health Care: Child and Adolescent Nursing

Credit Points 10 **Level** 2

Incompatible Units

400408 - Child and Family Health, 400643 - Child and Family Health Practice

Special Requirements

Students must be enrolled in the Bachelor of Nursing or the Bachelor of Early Childhood Studies (Child and Family).

....

This unit explores physical, social, political and community issues which impact on the health of children, adolescents and families. The knowledge gained will be appropriate for working with children and families within a hospital or community setting. The promotion of health and prevention of illness underpins this unit.

400763.2 Family Health Care: Chronicity and Palliative Care Nursing

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of all Year 1 and Year 2 Nursing units

Prerequisite

400753.1 Medical-Surgical Nursing 1 AND **400757.1** Medical-Surgical Nursing 2

Equivalent Units

400065 - Nursing Therapeutics 10

....

This unit engages students in the assessment, planning, implementation and evaluation of professional nursing care for those individuals and their families living with a chronic illness and those dying from a life threatening illness.

400756.2 Family Health Care: Health Issues and Australian Indigenous People

Credit Points 10 **Level** 2

Special Requirements

Students must be enrolled in the Bachelor of Nursing or the Bachelor of Nursing (Graduate Entry).

....

This unit provides the student with opportunities to investigate and discuss health issues as they relate to Aboriginal and Torres Strait Islander Peoples.

400761.3 Family Health Care: High Acuity Nursing

Credit Points 10 **Level** 3

Prerequisite

400753.1 Medical-Surgical Nursing 1 AND **400757.1** Medical-Surgical Nursing 2 OR **400825.2** Medical Surgical Nursing 2 (Advanced)

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Equivalent Units

400062 - Nursing Therapeutics 9

Special Requirements

Restrictions on clinical practicum placements because of safety and professional issues when dealing with the public. Students must be enrolled in the Bachelor of Nursing, the Bachelor of Nursing (Graduate Entry) or the Bachelor of Nursing (Advanced) and must have met Special Requirements for these courses 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 3. Adult Health Immunisation Schedule 4. Code of Conduct Agreement 5. First Aid Certificate Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit will elaborate and consolidate mechanisms of health breakdown and complex nursing concepts and professional nursing practices that promote, maintain and support health and wellness. The focus is on providing professional nursing care of people who are experiencing acute, profound physiological, psychosocial and spiritual health breakdown.

400767.3   Family Health Care: Older Adult Nursing

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge and skill gained in Years 1 and 2 of a nursing degree.

Prerequisite

400753.3 Medical-Surgical Nursing 1 AND **400757.3** Medical-Surgical Nursing 2 AND **400825.2** Medical Surgical Nursing 2 (Advanced)

Equivalent Units

400644 - Gerontic Practice

Special Requirements

Special Requirements are those stipulated by NSW Health and UWS. At present these include: Prior to enrolling in this unit students must have: 1) Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) Adult Health Immunisation with serology results 3) Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 4) Code of Conduct 5) Form 2: TB Assessment form 6) Form 3: Student Undertaking/ Declaration form 7) Workcover accredited Senior First Aid Certificate

....

The health and wellbeing of older people reflect their genetic inheritance, the environment, lifestyle choices and a complex set of developmental experiences upon which individuals, groups and socio-political influences have impinged. Nevertheless, being or becoming old is only one part of a persons life experience. Thus, in order to understand being old, we need to have knowledge of such influences and experiences. By promoting the health and therefore the potential of people, nurses have the opportunity to be in the forefront of health care. This opportunity places nurses in a position to intervene therapeutically in the lives and upon the lifestyles of older people by working with individuals and groups to facilitate healthy ageing and by promoting positive attitudes towards ageing and older people.

300804.1   Feeding the Planet

Credit Points 10 **Level** 1

Equivalent Units

300502 - Primary Production

....

Global population is forecast to reach 9 billion by 2050. To meet future demand for food we will need to supply 70% more food than we currently produce. At the same time, the resources that underpin food production; land, water, energy and people; are either in decline or becoming more expensive. One of the greatest challenges facing humanity over the next few decades is how to feed 9 billion without causing unsustainable damage to our natural resource base? In 'Feeding the Planet' we will explore this challenge from a range of perspectives. This unit overviews global population, food requirements and food security issues of feeding the world's growing population. It involves the understanding, knowledge and practical hands-on experience of primary production industries and related enterprises. Ethical issues relating to primary production, food and diets and the many constraints for food production and sustainable intensification of production with limited resources will be investigated.

101844.2   Feminist Theories

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit examines a variety of theoretical perspectives that inform feminist thought and practice. We will discuss diverse feminist analyses of gender relations and formations of power, intersections of gender with race, class, and culture, and possibilities for feminist solidarity in a global context.

300913.1   Field Project 1

Credit Points 10 **Level** 3

Prerequisite

300662.1 Research Methods OR **300932.1** Natural Science Research Methods

Equivalent Units

300659 - Field Project 1

Special Requirements

Students enrolling externally must be externally enrolled in the 3672 - Bachelor of Natural Science (Environment and Health) course. All other students enrolling externally will

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need Unit Coordinator approval to do so. Students will need to complete a Risk Assessment form to approval of their supervisor before commencing field work for this unit. Animal and/or Human Ethics approvals may be needed before field data collection commences for some projects. Students requiring ACEC approval will need to submit these through their supervisor and the Unit Coordinator. Full ACEC approval applications need the signature of an appropriately qualified staff academic (agreeing to be the principal supervisor) before these can be submitted. Students involving research on Human participants will need Human Ethics approval from their supervisor and the Unit Coordinator before commencing field data collection. This may be given in two stages: for pilot studies and subsequently for main field studies revised in light of the pilot. Other approvals (e.g. NPWS) may be needed for specific projects. A report detailing the outcomes and any changes to approved protocols will be required in the Spring Unit 300914 Field Project 2 for all studies where Ethics approvals have been granted.

....

Unit 300913 (Field Project 1) and the associated Unit 300914 (Field Project 2) are designed as capstone units of study for the Bachelor of Natural Science Degree. They draw together the skills acquired in previous years of the degree course and apply them in the context of a year-long research project exploring a real world problem on behalf of a professional client. In this Unit the student will develop skills in scoping, planning and pilot testing the research project. They will then revise methods as appropriate, plan data collection and analysis.

300914.1 Field Project 2

Credit Points 10 **Level** 3

Prerequisite

300913.1 Field Project 1

Equivalent Units

300660 - Field Project 2

Special Requirements

Students enrolling externally must be externally enrolled in the Bachelor of Natural Science (Environment and Health) course, all other students enrolling externally will need Unit Coordinator approval. Students who completed Field Project 1 Unit in a previous year (i.e. Are not continuing directly into this Unit) will need to demonstrate that they have the data from this earlier Unit that can be used to produce an analysis and a report for their original client. Students need to advise the Unit Coordinator of any changes to the Risk Assessment submitted for unit 300913 Field Project 1. Animal and Human Ethics reports will be required as part of this Unit where approvals were obtained for these in Unit 300913 Field Project 1. Other reports (e.g. NPWS) may be needed for specific projects

....

This is the second of two Units (Field Project 1 & Field Project 2) that are designed as capstone units of study for the B Nat Sci Degree. Together they draw together the skills acquired in previous years of the degree course and apply them in the context of a year-long research project exploring a real world problem on behalf of a client in industry, government or community agency. In the first Unit

the student will have developed skills in scoping, planning, and piloting methods for a research project. In this second Field Project Unit the student will collect and organise a significant body of relevant field data, analyse this and present the conclusions and recommendations in the form of a report to the client that provides the students answers to the clients initial problems. The student then undertakes a critical review of the whole process to identify lessons for both personal and professional development and future career planning.

100256.4 Film and Affect

Credit Points 10 **Level** 3

Equivalent Units

63062 - Film, Genre and Affect

Special Requirements

Successful completion of 60 credit points

....

The concept of affect refers to intense feeling or emotion, and this unit examines different ways that affect has been understood in cinema. The unit explores the way that diverse cinematic genres have developed very different strategies to engage the spectator in this intense way, and discusses conventions, such as techniques of narrative, cinematography and performance. The unit examines models of affect derived from early film, the transformation of these models with the development of narrative, and the evolution of affective strategies in contemporary cinema. Examples may be drawn from early cinema, experimental cinema, political cinema, documentary or mainstream genres such as melodrama or horror. Through an analysis of the strategies used in various genres, we will raise broader questions about the nature of spectatorship in different historical and cultural contexts.

100866.3 Film and Drama

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

This unit offers a survey of one or more of the following: drama, drama on film and film drama. It will examine key concepts in cinema theory, dramatic form and film production. Comparison may be made between theatre texts and film adaptations related to the work of specific dramatists; or drama texts may be considered in themselves (often with the screening of filmed versions of these dramas). Alternatively, film itself will be considered as a disinct dramatic form whose contours will be traced in relation to the work of important directors. Viewing films will form an integral part of this unit and students will be expected to attend screenings of films as well as a lecture and tutorial.

101856.1 Film and Philosophy

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1.

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In 2013, this unit replaced by 101989 - Film, Philosophy, Theory. This unit considers the intimate relationship between film and philosophy through close examinations of key philosophical and theoretical writings on film (incorporating hermeneutic, phenomenological, ontological, psychoanalytic, cognitivist and aesthetic approaches). Treating cinema as a philosophical medium in its own right, the unit explores the ways in which philosophical concepts have been taken up and addressed by film, as well as considering the ways in which cinema has in turn influenced philosophy.

200111.2 Financial Accounting Applications

Credit Points 10 **Level** 1

Prerequisite

200101.3 Accounting Information for Managers OR **200103.1** Accounting Reports and Decisions

Equivalent Units

AC105A - Finance and Accounting, AC103A - Introductory Financial Accounting, H2818 - Financial and Management Accounting II, 61111 - Introductory Financial Accounting

....

This unit gives students the practical skills necessary to analyse the accounting transactions of an entity and then be able to measure and record these transactions in a systematic manner for the preparation of accounting reports to external users.

200059.2 Financial Economics

Credit Points 10 **Level** 3

Assumed Knowledge

200052 - Introduction to Economic Methods (or equivalent).

Prerequisite

200488.3 Corporate Financial Management AND **200046.1** Microeconomics OR **200525.2** Principles of Economics

....

This unit provides students with a unifying theoretical perspective on the most important concepts in the field of finance. The presentation is rigorous and students develop their ability to critically evaluate the principal theoretical results in the finance literature.

200048.2 Financial Institutions and Markets

Credit Points 10 **Level** 1

....

The investment, financing and risk management decisions that all firms make are implemented by creating and trading financial instruments in financial markets, often with the involvement of a variety of institutions. Using the Australian financial system as an illustration, this unit introduces students to the theory and functions of financial intermediaries and the operation of financial systems. Students also develop an understanding of the role and functions of markets in equities, debt, foreign exchange,

options and futures, and theories of interest rate determination and the term structure of interest rates.

300762.2 Fluid Mechanics

Credit Points 10 **Level** 2

Assumed Knowledge

200238 - Mathematics for Engineers 2

Prerequisite

200237.3 Mathematics for Engineers 1 AND **300464.2** Physics and Materials

Equivalent Units

300740 -Water Engineering

....

The unit provides a basic understanding of fluid mechanics principles. While the main focus will remain on incompressible fluids, effects of compressible fluids will also be discussed. The theories learned in classes will be reinforced in laboratory sessions.

700111.1 Fluid Mechanics (UWSC Assoc Deg)

Credit Points 10 **Level** 2

Assumed Knowledge

700102 Mathematics for Engineers 2

Prerequisite

700101.1 Mathematics for Engineers 1 (UWSC Assoc Deg) AND **700117.1** Physics and Materials (UWSC Assoc Deg)

Equivalent Units

300762 - Fluid Mechanics

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

The unit provides a basic understanding of fluid mechanics principles. While the main focus will remain on incompressible fluids, effects of compressible fluids will also be discussed. The theories learned in classes will be reinforced in laboratory sessions.

300915.1 Food Product Development

Credit Points 10 **Level** 3

Assumed Knowledge

Students enrolled in this unit must have previous knowledge of food science principles, food processing, human nutrition, food analysis, sensory evaluation and food quality control systems, plus experience in food formulation and ingredient manipulation coupled with an understanding of nutritional requirements.

Prerequisite

300922.1 Quality Assurance and Food Analysis AND **300879.1** Experimental Foods

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Equivalent Units

300637 - Food Product Development Practicum, FS304A - Food Product Development Practicum

Special Requirements

Successful completion of 160 credit points

....

This unit is a final year capstone unit where students work in a team environment to apply the knowledge previously gained through their studies in nutrition and food science to develop a novel food product. The entire process of product development will be covered, including: idea generation; collating market, technical and consumer information; consumer surveying to establish the need/desire for a new product; product innovation development; quality testing and packaging. Students will develop specialised knowledge of the total product development system, including the ability to design, develop formulations and evaluation of sensory properties. Final product assessment includes nutritional composition, microbiological analysis, sensory evaluation and labelling compliant with regulations. The project is run in the simulated industry environment; team work among the members plays a key part of the unit.

300859.1   Food Safety

Credit Points 10 **Level** 3

Prerequisite

300844.1 General Microbiology OR **300833.1** Microbiology 1

Equivalent Units

300639 - Food Safety

Special Requirements

Successful completion of 120 credit points

....

Food safety is rapidly evolving with the emergence of new foodborne diseases, changing disease patterns, evolving approaches to risk analysis and an emerging requirement that food producers, processors, handlers and consumers take shared responsibility for food safety. This unit aims to equip students with the necessary skills to identify, evaluate and control foodborne hazards in order to protect the safety and quality of the food supply and reduce associated risks to human health. Content includes the key elements of food safety and regulation, food contamination, food spoilage agents, foodborne hazards, principles of good hygienic practice and preservation in food production, preparation and distribution.

300805.1   Food Science 1

Credit Points 10 **Level** 1

Equivalent Units

300498 - Food Science 1, FS108A - Food Science & Technology Practicum 1.1

Special Requirements

Students are required to have enclosed footwear and lab coats to undertake this unit.

....

Food provides the sustenance of life with many roles, nutrition for good health, enjoyment and cultural identity. This unit introduces the basic principles for the understanding of food. Students will gain an awareness of the history and cultural significance of food and its traditions in Australia and around the world and the science behind food, its composition, physical and functional characteristics. Fruits and vegetables, cereal, meat and dairy products will be covered, how they are processed and impacts on food quality and nutrition. Current issues will be discussed, such as world food supply, food-borne disease, diet and healt, obesity and new trends in food.

300842.2   Food Science 2

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of first year chemistry and biology; understanding of food composition.

Prerequisite

300805.1 Food Science 1

Equivalent Units

FS109A - Food Science & Technology Practicum 1.2; 300499 - Food Science 2

....

This unit introduces students to the principles of food preservation including heat treatments, chilling, freezing, dehydration and fermentation. Factors affecting food quality are explored with respect to microbial, chemical and physical changes in food and their effects on food safety, nutritional value and sensory characteristics. The basic principles of good manufacturing practises, sanitation and Hazard Analysis Critical Control Point (HACCP) for control of food safety will be studied in relation to the design of safe food manufacturing processes. The processing of fruit, vegetables and meat products is covered through hands-on practicals in the food pilot plant.

300843.1   Forensic and Environmental Analysis

Credit Points 10 **Level** 2

Assumed Knowledge

An understanding and competence with basic chemical principles including SI units, chemical symbols, formulas and equations, stoichiometry, the mole concept, equilibria, acids and bases, pH and electrochemistry. Introductory statistics – mean, standard deviation, distributions, linear regression

Prerequisite

300800.1 Essential Chemistry 1 OR **300808.1** Introductory Chemistry

Equivalent Units

300493 - Forensic and Environmental Analysis

....

This unit extends the student's knowledge and experience of analytical techniques by applying them to forensic investigations and analysis in the environmental and food sciences. It will provide an understanding of the chemical

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and physical principles underlying the use of instrumentation in chemical analysis. Topics include principles of spectroscopic techniques, separation methods; sample collection and storage; presumptive testing; modern chemical instrumentation for gas and liquid chromatography; atomic spectroscopy; mass spectroscopy; x-ray methods and spectroscopic methods.

300882.1   Forensic Archaeology

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of general aspects of recording and crime scene documentation

Equivalent Units

300378 - Forensic Archaeology

Special Requirements

Successful completion of 60 credit points at level 1 and 40 credit points at level 2. Students must have safety glasses and laboratory coat, laboratory book.

....

This unit will provide an understanding of the forms of evidence that can be extracted from archaeological material remains and the procedures necessary to ensure that the evidence is not lost or contaminated during the processes of investigation. Students will investigate the changes that occur in archaeological and the physico-chemical markers that are used to fingerprint excavated materials used in forensic examination. Important topics include the chemical enhancement and methods of trace biological with an emphasises the importance of false positives and the chemical tests for such reactions. Taphonomy and the diagenetic changes occurring in buried environments are covered using physical investigative techniques and computational methods.

300881.1   Forensic Biology

Credit Points 10 **Level** 3

Equivalent Units

300377 - Forensic Analysis of Physical Evidence

Special Requirements

Students must have safety glasses, laboratory coat and laboratory book.

....

Forensic biology is a multi disciplinary science involving analysis of a variety of forensic samples such as; sexual assault, fingerprint, entomological and blood and serology evidence. Hair and fibre comparison, botanical identification, and DNA profiling. Students will investigate the scientific principles associated with determining the sources of biological evidence using a variety of microscopic and chemical techniques taking into account the changes that can occur in crime scene environment. This unit will expand on the detection methods of trace biological evidence already covered on other units and cover future directions in biometric identification from biological evidence. The use of the techniques in quarantine, customs and wildlife management will also be discussed.

300868.1   Forensic Chemistry

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of general and analytical chemistry equivalent to satisfactory completion of Chemistry 1, Chemistry 2, Essentials of Chemistry 1, Essentials of Chemistry 2 and a second year analytical chemistry unit.

Prerequisite

300297.2 Analytical Chemistry 2 OR **300843.1** Forensic and Environmental Analysis

Equivalent Units

300494 - Forensic Chemsitry

Special Requirements

Students must have safety glasses and laboratory coat.

....

This unit covers the underlying chemical and physical principles of advanced chemical topics relevant to forensic investigations. The investigation of these topics is informed by the correct principles and procedures for collecting and conserving evidence and the safe handling of chemical substances. Topics include the use of a range of modern chemical instrumentation to analyse forensic samples; the chemistry and analysis of various classes of drugs; the investigation of clandestine drug laboratories; chemical aspects of fire, arson and accelerants; and the nature of explosions and explosives.

300806.1   Forensic Science

Credit Points 10 **Level** 1

Assumed Knowledge

Basic academic skills, including the ability to write essays in English at a level appropriate to a first-year undergraduate student.

Equivalent Units

300654 - Forensic Science, SC103A - Forensic Science

....

This unit aims to give students a basic understanding of scientific methodology as it applies to the collection, analysis and interpretation of forensic evidence. Students are introduced to a range of analytical methods that are used with various types of forensic evidence, and these are discussed in relation to case studies. The role of human factors is discussed, together with the importance of critically evaluating forensic evidence and the means by which it was obtained.

300121.2   Formal Languages and Automata

Credit Points 10 **Level** 3

Prerequisite

200025.2 Discrete Mathematics

....

Three abstract models of computation are studied in this unit. The first is the finite automaton, together with regular languages and regular expressions. The second is the

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pushdown automaton, together with the associated languages and grammars. The third is the Turing machine. This allows study of the power of computers in general and their limitations, in particular situations: it is shown that there are problems for which there is no algorithmic solution. This unit explores the application of formal languages in the design of compilers and text processors.

300404.2   Formal Software Engineering

Credit Points 10 **Level** 3

Prerequisite

200025.2 Discrete Mathematics AND **300103.2** Data Structures and Algorithms

....

This unit is concerned with the design, development and post-delivery maintenance of software systems. The unit pays special attention to requirements engineering, formal specification techniques and design methodologies. The B-method is used to produce consistent, re-usable specifications and develop code that is both efficient and correct.

300485.3   Foundation Engineering

Credit Points 10 **Level** 3

Prerequisite

300732.2 Structural Analysis AND **300731.2** Soil Engineering OR **85012.2** Soil Engineering

Equivalent Units

85017 - Foundation and Drainage

....

This unit will present the application of principles of soil mechanics to the solution of foundation and geotechnical problems including the evaluation of allowable bearing capacity of shallow and pile foundations, the stability of earth retaining structures, the stability of slopes and soft soil engineering.

400861.1   Foundations of Medicine 1

Credit Points 80 **Level** 1

Assumed Knowledge

Year 12 Chemistry.

Special Requirements

Restricted to students enrolled in 4671 , 4641, 4647. Working with Children Check Student Declaration; Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; Adult Health Immunization Schedule; Code of Conduct Agreement; First aid certificate; Completed verification NSW ClinConnect. In addition, International students must have a police check (with English translation) from their home country or any other country where they have lived or a statutory declaration signed by a Justice of the Peace.

....

This unit presents an integrated understanding of the structure and function of the human body. The following systems are discussed: whole body organisation including

basic anatomy, nutrition and metabolism, function and pathology of the gastrointestinal system (including liver), cardiovascular system and respiratory system. In addition, students will focus on developmental psychology, patient experience, the medical system, identifying risk, errors in medical practice, managing error and basic procedures such as hand washing. Introduction to Clinical Medicine will cover generic history taking and communication skills in Session 1H and skills in history and examination of the gastrointestinal tract, cardiovascular system and respiratory systems during Session 2H.

400862.1   Foundations of Medicine 2

Credit Points 80 **Level** 2

Prerequisite

400861.1 Foundations of Medicine 1

Equivalent Units

400739 - Scientific Basis of Medicine 2, 400740 - Health Practice 2

Special Requirements

Restricted to students enrolled in 4671 , 4641, 4647. Working with Children Check Student Declaration; Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; Adult Health Immunization Schedule; Code of Conduct Agreement; First aid certificate; Completed verification NSW ClinConnect. In addition, International students must have a police check (with English translation) from their home country or any other country where they have lived or a statutory declaration signed by a Justice of the Peace.

....

This unit presents an integrated understanding of the structure and function of the human body. The following systems are discussed: renal, musculoskeletal, neuroscience, reproduction and development, endocrinology, infectious disease, immunology and cancer. In addition, Personal and Professional Development (PPD) will focus on developmental psychology, patient experience, the medical system, identifying risk, errors in medical practice, managing error and basic procedures such as hand washing. A particular focus will be the communities that make up Greater Western Sydney. In Clinical Medicine, students will continue to learn about the history and examination of body systems and will introduce students to clinical procedures.

100868.2   Foundations of Modern Australia

Credit Points 10 **Level** 1

Equivalent Units

100246 - Australian Colonial History

....

This unit introduces students to the history of the 18th and 19th century foundations of modern Australia, and to the social, economic, political and cultural events that shaped Australian social and political institutions. Students will be encouraged to consider the process of historical change within an historiographical framework and will use primary sources to explore some of these debates.

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100869.2   Foundations of Modern Europe 1500-1800

Credit Points 10 **Level** 2

Equivalent Units

63311 - Emergence of Modern Societies 1650-1850.

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit surveys the history of European society, politics and culture in the period between the Reformations and the transformation of revolutions of the late eighteenth century. It focuses upon the religious conflicts of the early modern period and their resolution, both at the level of individuals and states. It studies popular experiences of and responses to social, religious and political change over the period. And it surveys the political, scientific and cultural transformations of this tumultuous time.

400863.2   Foundations of Research and Evidence-Based Practice

Credit Points 10 **Level** 1

....

This unit will consider the reasons and roles of evidence-based practice and research, and introduce students to their language and core concepts. Skills will be developed for asking clinical or professional healthcare questions and to translate these into search strategies for finding evidence. To make sense of that evidence, students will be introduced to quantitative and qualitative research methods, types of data, how data is described and how biostatistics is used to provide meaning to research data.

700064.1   Foundations of Research and Evidence-Based Practice (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

400863 - Foundations of Research and Evidence-Based Practice

Special Requirements

Students must be enrolled at UWSCollege

....

This unit will consider the reasons and roles of evidence-based practice and research, and introduce students to their language and core concepts. Skills will be developed for asking clinical or professional healthcare questions and to translate these into search strategies for finding evidence. To make sense of that evidence, students will be introduced to quantitative and qualitative research methods, types of data, how data is described and how biostatistics is used to provide meaning to research data.

300606.2   Foundations of Statistical Modelling and Decision Making

Credit Points 10 **Level** 2

Assumed Knowledge

200192 - Statistics for Science, or 200032 - Statistics for Business or 200263 - Biometry

Equivalent Units

J2781 - Statistical Theory, 200034 - Statistical Theory

....

This Level 2 unit completes an introduction to the basic principles and concepts of statistics. There are two strands to the subject: distribution theory and statistical inference. The aim of the unit is to present a solid foundation in statistical theory and to provide an understanding of the relevance and importance of the theory in solving practical problems in the real world. The theoretical basis of the dual arms of classical statistical inference (estimation and hypothesis testing) is discussed relating the probabilistic half of the course to the final objective - inference.

400962.2   Foundations of Wellbeing

Credit Points 10 **Level** 1

Equivalent Units

100663 - Foundations of Wellbeing

....

Whereas health is commonly understood in terms of objective signs and symptoms (or their absence), wellbeing emphasizes subjective experience in the context of social and environmental factors that may support or impede a personal sense of wellbeing. This unit approaches wellbeing through a self-investigatory and reflective model that seeks to integrate systemic analysis of the individual, social, emotional, environmental and spiritual aspects of health and wellbeing in a personally meaningful way. Consideration of how issues of social justice and equity have differential impacts on both individuals and communities, and develop frameworks for taking personal and social action to enhance wellbeing.

101754.2   From Corroborees to Curtain Raisers (Day Mode)

Credit Points 10 **Level** 2

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit will provide students with an understanding of the historical framing and cultural re-framing of Indigenous Australians in the live arts. Students will be provided with a theoretical understanding of the politics of representation through examining and reflecting on the transitional shifts that Indigenous artists' have made from: cultural performance to theatre productions; 'traditional' storytelling to telling of stories through poetry and writing; ceremonial sounds to music and spoken word performance; documentary film to screen based drama to exploring new technologies and moving image performance. Students will

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be introduced to a variety of Indigenous artists and their creative works.

101755.1 From Ochre to Acrylics to New Technologies

Credit Points 10 **Level** 2

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit is available to all Undergraduate students who have open electives. This unit examines the emergence of the Indigenous Australian visual arts movement. It will provide students with a body of knowledge which explores the transition of art-making as it emerged from an historical cultural practice: from ochre to acrylics to new technologies. In examining the Indigenous visual arts movement beginning with the Papunya Tula artists, students will gain an insight into the significant contribution urban and regional Indigenous artists make to the Australian economy and culture. Students will have the exciting opportunity to participate in site visits and engage with a number of Indigenous visual artists.

400881.3 Functional Anatomy

Credit Points 10 **Level** 1

Prerequisite

400868.2 Human Anatomy and Physiology 1

Equivalent Units

400134 - Human Medical Sciences 3

Incompatible Units

300319 - Introduction to Human Anatomy and Histology, 300320 - Introduction to Human Physiology, 400256 - Human Medical Sciences 2, 300755 - The Appendicular Skeleton

Special Requirements

Students must be enrolled in Sport and Exercise Science, Physiotherapy, Occupational Therapy or Podiatry course due to limited Wet Anatomy laboratory space.

....

This unit covers in depth the functional anatomy of the musculoskeletal system. Special attention is given to the relationship between form and function, the terminology used to describe human movement and thorough knowledge of the bony landmarks, joints, muscle attachments, innervation, blood supply along with detailed actions of specific muscles and muscle groups. Emphasis is on a practical functional context with the relevance to clinical applications such as surface and imaging anatomy, and the anatomical basis of common injuries. Learning experience intends to stimulate proactive deep approach in learning anatomy motivated by the outcomes driven from specialist work within the Health professions.

300936.1 Functional Proteins and Genes

Credit Points 10 **Level** 2

Prerequisite

300816.1 Cell Biology AND **300803.1** Essential Chemistry 2

Equivalent Units

300219 - Biochemistry 1, 300555 - Proteins and Genes

Special Requirements

Student must have closed in shoes, lab coat, safety glasses and laboratory note book.

....

Biochemistry is the study of the chemistry of life. By understanding the structure and roles of biological macromolecules found in cells students will develop the concept of self assembly of these molecules to form life. Topics include the structure of carbohydrates, lipids, proteins, and nucleic acids and how they function in the lipid and aqueous environments of the cell. Basic metabolism is introduced with an overview of the major pathways in cells, mechanisms of regulation, and an introduction into important cofactors and intermediatory molecules. These concepts will be reinforced through practical classes that teach critical skills in experimental design, analysis and interpretation.

700112.1 Fundamentals for Engineering Studies (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit serves as an introduction to the key Mathematics and Physics concepts required to study Engineering at a tertiary level.

400880.2 Fundamentals of Exercise Science

Credit Points 10 **Level** 1

Equivalent Units

400802 - Professional Practice of Sport Exercise Science

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science) or 4659 - Bachelor of Health Science (Personal Development, Health and Physical Education.

....

This unit is designed to provide fundamental basic science and sport and exercise science content, with the intent to prepare the students for the more advanced scientific applications to the study and research of the sport and exercise sciences. Students will be exposed to computer software applications to aid data processing used in the sport and exercise sciences, with special applications to fields such as biomechanics, exercise physiology, motor learning, skill acquisition and sport psychology.

700073.1 Fundamentals of Exercise Science (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

400880 - Fundamentals of Exercise Science

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University of Western Sydney

Special Requirements

Students must be enrolled in the UWS College Diploma of Heath Science (PDHPE stream) unless specific permission has been granted by the School of Biomedical and Health Sciences.

....

This unit is designed to provide fundamental basic science and sport and exercise science content, with the intent to prepare the students for the more advanced scientific applications to the study and research of the sport and exercise sciences. Students will be exposed to computer software applications to aid data processing used in the sport and exercise sciences, with special applications to fields such as biomechanics, exercise physiology, motor learning, skill acquisition and sport psychology. In addition, students will be exposed at the introductory level to principles of cycle ergometry, treadmill exercise, and resistance training.

200191.5 Fundamentals of Mathematics

Credit Points 10 **Level** 1

Incompatible Units

200195 - Mathematical Methods A; 200196 - Mathematical Methods B; 14505 Engineering Mathematics 1; 200031 - Mathematics for Business; 200237 - Mathematics for Engineers 1; 200189 - Concepts of Mathematics; 300672 - Mathematics 1A; Mathematics 1B

Special Requirements

Permission required for students enrolled in course code 3562 Bachelor of Science (Advanced).

....

This unit is designed to assist in the transition from secondary school mathematics to university first year level mathematics, and gradually bring students to the required standard. It provides a sound foundation in basic mathematical tools in the areas of algebra, trigonometry, probability and calculus, which are particularly relevant to first year mathematics and statistics core subjects. The algebra section revises basic arithmetic manipulation before introducing functions, polynomial, logarithmic and exponential functions, solving equations, matrix manipulation and applications. The probability section covers basic concepts of probability. The trigonometry section introduces the concept of angles, trigonometric functions and their fundamental identities. The calculus section includes limits, differentiation, maximum and minimum values, graphing and integration. These mathematical methods and simple concepts are illustrated using practical examples derived from many different areas relevant to students.

300463.2 Fundamentals of Mechanics

Credit Points 10 **Level** 1

....

This unit deals with the action and interaction of forces, moments and couples in two and three dimensions. It examines the equilibrium of single bodies, and of trusses and mechanisms. It then looks at the friction between bodies. It covers the dynamics of a non-rotating body, and a body rotating about a fixed axis. Finally, internal loadings are investigated, particularly within a transversely loaded beam. The unit makes extensive use of vector algebra.

700113.1 Fundamentals of Mechanics (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Equivalent Units

700023 - Fundamentals of Mechanics (UWSC), 300463 - Fundamentals of Mechanics

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit deals with the action and interaction of forces, moments and couples in two and three dimensions. It examines the equilibrium of single bodies, and of trusses and mechanisms. It then looks at the friction between bodies. It covers the dynamics of a non-rotating body, and a body rotating about a fixed axis. Finally, internal loadings are investigated – particularly within a transversely loaded beam. The unit makes extensive use of vector algebra.

700023.1 Fundamentals of Mechanics (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300463 - Fundamentals of Mechanics.

Special Requirements

Students must be enrolled at UWS College.

....

This unit deals with the action and interaction of forces, moments and couples in two and three dimensions, on machine elements and simple structures. It examines the equilibrium of single bodies, of multi-body structures and of mechanisms. It then covers the dynamics of a particle. A systematic approach to solving practical engineering design problems is provided. The unit makes extensive use of vector algebra.

300491.2 Games Technology

Credit Points 10 **Level** 2

Assumed Knowledge

A basic understanding of the principles of programming equivalent to Programming Principles 1.

Incompatible Units

300162 - Client Server Applications

....

This unit provides an introduction to the game industry as well as introducing students to the techniques of game design and construction. Students will be exposed to the history of game development and the key aspects of different genres of computer games.

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300492.2   Games Theory and Design

Credit Points 10 **Level** 3

Assumed Knowledge

Understanding of programming concepts and details of programming in C++, knowledge of systems analysis methods including object orientated analysis and design.

....

This unit is replaced by 300862 - Video Game Development from Spring 2012. This unit provides students with an in-depth understanding of the development and structure of games engines. It provides students with a unifying overview of the many modules that are incorporated in a games engines well as a detailed examination of game-play and engine programming.

300844.1   General Microbiology

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of introductory biology, especially an understanding of the diversity of living organisms and basic concepts of cell structure and function is essential for students undertaking this unit.

Prerequisite

300816.1 Cell Biology OR **300802.1** Biodiversity

Equivalent Units

300331 - General Microbiology

Incompatible Units

MI104A - Microbiology 1.1; 300300 - Microbiology 1; 300833 - Microbiology 1

....

Microorganisms play a crucial role in soil and water ecosystems, in health and disease of plants and animals, including humans, as well as in industries such as the food and brewing industries. The unit builds on students existing knowledge of cell biology and biodiversity, and explores the characteristics of micro-organisms, the conditions required for their growth and survival, methods of control and their significance in the environment, health and industry. The theory and practice of microbiology are integrated in the laboratory component in which students learn techniques of handling, observing, growing and counting microorganisms.

300820.1   Genes, Genomics and Human Health

Credit Points 10 **Level** 3

Prerequisite

300845.1 Genetics OR **300817.1** Molecular Biology OR **300936.1** Functional Proteins and Genes OR **300848.1** Metabolism

....

Genomics is the application of our knowledge of the structure and expression of genomes to understanding gene function and the genetic basis of human disease. The Unit will begin with an introduction to the human genome and its relationship to the genomes of other organisms. It will also teach how genome-wide analysis of genetic variation in individuals and populations is improving our understanding of diseases such as asthma, heart disease, obesity, dementia and cancer. Practical application of genomics in the areas of pharmacogenomics, gene therapy/ genetic medicine, genetic discrimination and ethics will also be covered.

300845.1   Genetics

Credit Points 10 **Level** 2

Prerequisite

300816.1 Cell Biology OR **300802.1** Biodiversity OR **300813.1** Wildlife Studies

Equivalent Units

BI201A - Genetics 2.2; 300547 - Human Genetics; 300623 - Genetics

....

Genetics has a lot to do with sex and how genes are passed from one generation to the next. This unit introduces the student to the important conceptual issues in genetics from Mendel to DNA, from chromosomes to population genetics and from peas and fruit flies to genomics. While there is an emphasis on Mendelian and population genetics the unit also covers important concepts in molecular genetics demonstrating the link between genotype and phenotype. As the semester proceeds students are encouraged to makes links between concepts and problem solving through a series of exercises that enhance an analytical view of genetics.

300846.1   Geochemical Systems

Credit Points 10 **Level** 2

Prerequisite

300800.1 Essential Chemistry 1 OR **300808.1** Introductory Chemistry

Equivalent Units

300612 - Geochemical Systems

....

This unit covers the structures of minerals and determination of their structure and composition, interpretation of structural data in the literature, aspects of solid solutions, and the forces that stabilise mineral lattices. The unit explores the limits of chemical conditions in the natural environment (redox conditions, pH, speciation); mobilisation and transport of selected elements in primary and secondary environments; aqueous and supercritical fluids; complexing and ion-pairing phenomena. Exploration, extraction and ore processing will be illustrated with hands-on examples using advanced analytical instrumentation. A three day field trip to western NSW will be undertaken during the mid-session break.

101694.2   Geographies of Migration

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 80 credit points.

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An international and cross-institutional discussion of immigration and settlement. Covering the theory and experience of immigration. Considers the international and national regulation of immigration and settlement policies, as well as refugee policy. Case studies are from Australia and Canada, and Singapore. Within mixed tutorial groups (with students from Singapore, Vancouver & Sydney) students will exchange experiences and opinions of immigration.

101674.2 Global Histories of Food

Credit Points 10 **Level** 3

Incompatible Units

100886 - Special Topics in Cultural and Social Analysis

....

Are you what you eat? This unit explores the relationship between food, globalisation and human experience in an historical and cross-cultural context. Food is central to the formation of cultural identity, the emergence of social taboo and the expression of religious belief. While food has become associated with national identity, foodstuffs have also become symbols of cross-cultural interaction through the imperial experience or the effect of migration. The relationship between food, culture and identity is an important one, but the current world food price crises; the persistence of famine in the developing world; and the emergence of 'fast food' as a marker of globalisation remind us of the critical relationship between nutrition and political economies.

300917.1 Global Nutrition, Food and Community

Credit Points 10 **Level** 3

Assumed Knowledge

Understanding of human nutrition and associated health issues

Equivalent Units

300651 - Nutrition and Community Health, 300786 - Global Nutrition Food and Community

....

This unit aims to develop an understanding of the inter relationship between nutrition and health in Australian and Global contexts. The aim is to provide the student with a sound foundation in nutritional anthropology, public health nutrition and health promotion in order that they can systematically analyse nutritional problems associated with world food issues; including those affecting minority and culturally and linguistically diverse groups within Australia; diseases of affluence and current health and nutrition issues in the community. An important objective of the unit is that students learn the principles of health promotion and how to apply effective nutrition promotion strategies in community and population settings in order to reduce the burdens of various nutritional and lifestyle related disorders and diseases like: obesity, some cancers, diabetes and cardiovascular disease and malnourishment.

200588.2 Global Operations and Logistics Management

Credit Points 10 **Level** 3

Assumed Knowledge

Students must have an introductory level of knowledge in operations and supply chain management.

....

Global Operations and Logistics Management is an expansive unit designed for students interested in the organisational processes undertaken in providing products and services to customers. A range of tactical and strategic considerations are investigated to help students understand the role of global operations and logistics within an organisational context. The unit covers internal activities of manufacturing and service organisations. A range of quantitative tools and techniques that support managerial decision making involving trade-offs, priorities and choices are introduced. While the latest trends in logistics and operations management are also reviewed.

101735.2 Global Politics

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

The experiences of globalization are explored from a variety of levels across time and space, from the individual to the local, the national to the international. The focus in this course will be on issues of politics, both domestic and international, but we will keep in mind that globalization is a phenomenon that is explored and assessed by a wide range of disciplines, including history, sociology, politics, law, economics, anthropology, gender studies, human geography, economics, regional and area studies, science and technology, health and epidemiology.

200541.3 Globalisation and Trade

Credit Points 10 **Level** 2

Assumed Knowledge

200525 - Principles of Economics

Equivalent Units

200071 - International Trade Theory and Policy

....

This unit introduces students to the history and analytical methods of international trade theories and their applications. The theories are applied to contemporary issues in their institutional settings, in particular to: growth and development; economic integration and trading blocs; and the transformation of formerly planned economies as participants in global market structures.

101736.2 Governing the Globe

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

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....

Global governance is an increasingly important regulatory tool in an age of hyper-globalisation. Issues for study include: the roles of non-state actors and influences in global politics, from the United Nations to the broader global economy, from NGOs to terrorist regimes. Globalization implies a loss of control, particularly state control, or loss of sovereignty over issues such as security, environment, migration, finance/money/ investment, intellectual property, trade, manufactures, health, and infectious disease control. As such, it reveals new spheres of common interests that transcend states' interests. This development opens the way for a more prominent role in the system for international law, formal regimes, and multilateral intergovernmental organisations. This system of formal and informal institutions and rules has come to be known as a system of global governance.

300729.2 Graphic Communication and Design

Credit Points 10 **Level** 1

Equivalent Units

BG105A - Graphic Design and Communication

....

This unit is designed to provide students with the knowledge and skills necessary to develop graphic communication, basic CAD skills and elementary design skills suitable for application within the building industry. Content: This unit provides students with an introduction to elements of graphic communication skills necessary to comprehend various building types in plan, section, elevation, isometric and perspective views. The unit also introduces students to basic CAD (Computer Aided Design and Drafting) concepts and skills. Students will also be required to develop appropriate analytical and problem solving skills in dealing with a realistic building project.

101464.3 Great Texts of Islam: Qur'an and Hadith

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at level 1.

....

In 2013, this unit replaced by 101911 - The Qu'ran: An Introduction. An introduction, in English translation, to the two most important texts of Islam, the Qur'an and Prophetic Tradition (Hadith), which Muslims regard as the primary sources of Islam. Students will study: the origins of the Qur'an and Hadith; their overall structure and content; major themes; approaches to their interpretation; and their functions in Muslim religious, social and political life. The themes and topics covered should assist students in understanding contemporary debates on the relevance of Islam today. Students will also explore the relationship between text and traditions in various Muslim societies in the present day.

400896.1 Gymnastics and Dance

Credit Points 10 **Level** 3

Incompatible Units

100671 - Human Movement 5, 100672 - Introduction to Dance

....

Students will actively engage in a variety of dance styles and gymnastics movement experiences to develop their own composition and skill competencies and examine the elements of movement and composition that underpin these forms of physical activity. Development of student ability to plan and implement quality-learning experiences that will enhance enjoyment of these forms of physical activities will be an integral component of this subject.

101716.3 Healing and Culture

Credit Points 10 **Level** 3

Incompatible Units

100886 - Special Topics in Cultural and Social Analysis

Special Requirements

Successful completion of 60 credit points

....

This unit takes as its starting point the idea that disease has social and cultural as well as biological origins. What people define as good health and illness, and how they treat the latter are profoundly shaped by cultural frameworks. Healing practices, including biomedicine, are underpinned by cultural understandings and larger configurations of power. We will examine notions of disease causality across cultures and explore the argument that good and ill health are about more than just the body. Popular understandings of illness and its origins, and techniques for responding to and seeking to remedy illness can be a reflection of how different societies imagine their place in the world.

401009.1 Health in a Culturally Diverse Community

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, professional communication, foundational knowledge of the behavioural sciences and their relationship to nursing or midwifery and nursing or midwifery practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing; 4692 Bachelor of Nursing Graduate Entry; 4693 Bachelor of Nursing (Advanced) or 4684 Bachelor of Midwifery.

....

This unit enables nursing and midwifery students to investigate and discuss the concepts of health and illness in the context of culturally diverse communities. The unit promotes the attainment of critical knowledge and core principles necessary for students to become holistic, culturally sensitive and appropriately adaptable when meeting the health needs of Aboriginal and Torres Strait

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Islander People and people from other diverse cultural backgrounds. A case study approach provides a framework for students to explore the impact of different attitude and value systems relating to the health of people in Australia.

400275.2   Health Planning Project

Credit Points 10 **Level** 3

Prerequisite

400273.1 Health Politics, Policy and Planning

....

This unit extends the theoretical concepts introduced in the unit, Health Politics, Policy and Planning with an emphasis on practical application. It concentrates on the development of analytical skills required for comprehensive assessment, planning, implementation and evaluation of health programs or projects. The subject is designed so that students, functioning as a working party, undertake a real life health planning project on a current issue. Students thus develop knowledge of and skills in negotiation, group work, committee structure and functioning, the consultation and research processes, the planning process and report writing.

400966.2   Health Politics, Policy and Planning

Credit Points 10 **Level** 2

Equivalent Units

400273 - Health Politics, Policy and Planning

Special Requirements

Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

The Australian health care system is highly complex, consisting of inter-related sub-systems and is influenced by the broader socio-political environment. It is essential that health professionals understand and consider the economic, political and social context within which health policy and planning occur, so that strategies and policies are developed which are economically and politically viable, as well as socially acceptable and responsive to the actual needs of the community. This unit aims to develop an understanding of the policy making and planning processes within this broad context and to introduce the theory and skills related to such activities.

400784.2   Health Promotion Practice 1

Credit Points 10 **Level** 3

Prerequisite

400867.1 Approaches to Health Promotion

Special Requirements

Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

This unit builds on the knowledge gained in Approaches to Health Promotion. It provides the opportunity to apply health promotion theory to practical projects in the field related to current population health priorities, through 120 hours service learning experience. It is concerned with developing knowledge and skills related to needs analysis, prioritising, and awareness of core values and principles associated with health promotion practice.

400785.2   Health Promotion Practice 2

Credit Points 10 **Level** 3

Prerequisite

400867.1 Approaches to Health Promotion AND **400784.2** Health Promotion Practice 1

Equivalent Units

400276 - Community Development and Health

Special Requirements

Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

This unit builds on the knowledge gained in Health Promotion Practice 1 through continuing with phases necessary for project design and management health promotion. It provides the opportunity to apply health promotion theory to practical projects in the field related to current population health priorities, through 120 hours service learning experience. It is concerned with developing knowledge and skills related to implementation and evaluation of health promotion projects, showing awareness of core values and principles necessary for effective health promotion practice.

400279.3   Health Services Financial Management

Credit Points 10 **Level** 3

Prerequisite

400277.3 Health Services Management

Special Requirements

Students must be enrolled in 4545 and 4656 - Bachelor of Health Science. Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

The Australian health care system must account for use of resources, and ensure their equitable and efficient use. Increasingly devolution of management function to cost centre level in health care organisations is occurring. Managers must consider the financial implications of clinical decisions, understand and act on accounting information. They are held responsible for the financial outcomes of their activities. This unit develops a basic knowledge of

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accounting principles, health services funding arrangements, government reforms, financial reporting, preparation of budgets, business cases and economic appraisals. There are 140 hours of placement in the field working with health managers on financial issues.

400277.3 Health Services Management

Credit Points 10 **Level** 2

....

The health workplace is a complex and sophisticated environment that can be understood in many different ways and mean different things to different members of an organisation. Assumptions about organisational structure and action are based on ones conceptualisations and beliefs about the nature and goals of an organisation. This unit aims to develop an understanding of organisational theory and its application to management practice and organizational analysis in the health arena.

400787.2 Health Services Management Practice

Credit Points 10 **Level** 3

Prerequisite

400277.3 Health Services Management

Equivalent Units

400278 - Health Services Management 2

Special Requirements

Students must be enrolled in 4545 and 4656 - Bachelor of Health Science. Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

The unit begins with an overview of the complexity and variability of health services and provides an understanding of component organisations, federal and state policy issues and environmental factors including the role of the private sector and non-government organisations. The changing role of the health services manager and competencies required for effective managing are examined. Influences on organisations are reviewed, including structures, culture, power and politics. Various management functions are explored through 140 hours of placement e.g. strategic planning, performance management, people management including workplace relations, conflict resolution, resource management (financial and asset), risk management, OH&S and quality assurance.

400788.2 Health Services Workforce Management

Credit Points 10 **Level** 3

Prerequisite

400277.3 Health Services Management

Special Requirements

Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have

applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

This is a flexible learning unit looking at HRM as a strategic activity of health organisations especially as workforce shortages pose significant challenges to the health and aged care sectors. The workforce, with appropriate knowledge and expertise, is essential to the efficient and effective delivery of quality health services. Successful organisations shape their workforce to anticipate current and future business directions and goals. Workforce planning is a crucial element of this approach and its success.

401010.1 Health Variations 1

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, immunity, wound healing, infection control, basic concepts in pharmacology and pathophysiology and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Adanced) or 4692 Bachelor of Nursing Graduate Entry.

....

This unit provides the theoretical background knowledge for Professional Practice 3. It introduces the student to the fundamental principles of perioperative nursing care in supporting clients undergoing surgical interventions incorporating the related pathophysiology and pharmacology. In particular, nursing care of surgical interventions relating to the gastrointestinal, reproductive and musculoskeletal systems with a Health Priority Focus relating to Injury Control, Arthritis and Cancer Control will be the focus of case history reviews.

401014.1 Health Variations 2

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4692 Bachelor of Nursing Graduate Entry.

....

This unit explores the concepts of chronicity, disability, habilitation and rehabilitation in relation to chronic conditions, functional and intellectual disabilities and their implications for nursing practice. National Health Priority Case Studies drawn from across the lifespan will provide a focus for exploring pathophysiology, pharmacological interventions and nursing care related to chronic conditions of the endocrine, neurological and respiratory body

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systems. In addition, the nursing role in supporting those with physical and intellectual disability will be examined. This unit provides theoretical underpinnings directly related to Professional Practice Experience 4.

401024.1   Health Variations 2 (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit for advanced nursing students explores the concepts of chronicity, disability, habilation and rehabilitation in relation to chronic conditions, functional and intellectual disabilities and their implications for nursing practice. National Health Priority Case Studies drawn from across the lifespan will provide a focus for exploring pathophysiology, pharmacological interventions and nursing care related to chronic conditions of the endocrine, neurological and respiratory body systems. In addition, the nursing role in supporting those with physical and intellectual disability will be examined. This unit provides theoretical underpinnings directly related to Professional Practice Experience 4.

401015.1   Health Variations 3

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4692 Bachelor of Nursing Graduate Entry or 4693 Bachelor of Nursing (Advanced).

....

This unit uses National Health Priority case histories to further develop knowledge of pathophysiology, pharmacology and nursing implications for people across the lifespan who may experience acute exacerbations of chronic conditions. A major focus will be related to the nursing management of chronic conditions involving the cardiovascular and renal systems. Nursing management involving acute exacerbations of chronic conditions affecting the respiratory and musculoskeletal system will also be reviewed. This unit provides theoretical underpinnings for Professional Practice Experience 4.

401018.1   Health Variations 4

Credit Points 10 **Level** 3

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4692 Bachelor of Nursing Graduate Entry.

....

This unit introduces the theoretical background information required for Professional Practice 5 by providing the related pathophysiology, pharmacology and nursing implications to assist students in caring for people who experience an acute life-threatening and/or traumatic condition that may involve multiple systems failure. National Health Priority case histories used in the unit will focus on cardiovascular disease, injury prevention and control. Consideration will also be made in relation to habilation and rehabilitation of these people who have experienced acute life-threatening or traumatic complex health issues.

401026.1   Health Variations 4 (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit introduces the theoretical background information required for Professional Practice 5 by providing the related pathophysiology, pharmacology, nursing implications and advanced assessment skills to assist students in caring for people who experience either an acute life-threatening and/or traumatic condition or rapid deterioration in their health status which may also involve multiple systems failure. National Health Priority case histories will be used within the theoretical component of the unit and will predominantly focus on cardiovascular disease, injury prevention and control. Consideration will also be made in relation to habilation and rehabilitation of people who have experienced acute life-threatening or traumatic complex health issues. The workshops will be used to provide the student with the necessary advanced assessment, clinical skill and simulation experiences to recognise the deteriorating patient with potential life-threatening conditions and intervene with reporting, monitoring and initiation of treatments skills.

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401019.1   Health Variations 5

Credit Points 10 **Level** 3

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry.

....

This unit develops a student's knowledge and skills in a palliative approach when caring for individuals and their families who are experiencing Life limiting illness. Case histories featuring a lifespan approach and that address the National Health Priority Areas will be used to illuminate the palliative approach as a model of care. Students will explore the benefits a palliative approach when supporting dying individuals with any life limiting illness. Students will also acquire the capabilities to develop self-care strategies to manage their own grief and loss. This unit provides theoretical underpinning for Professional Practice 5.

10157.2   History and Theory of the Avant-Garde

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit views the avant-garde as a changing set of conditions and concerns. This is illustrated through an examination of major European and North American art movements from Cubism to Abstract Expressionism. Although the unit is organised chronologically, emphasis is placed on the critical analysis of key premises. In particular, the discourse of originality has been central to avant-garde theories, policies and practices. Originality has appeared in diverse forms: as violent rupture, transgressions, or through related organicist metaphors referring not so much to purely formal invention as to sources of life.

100507.4   History of Modern China to 1949

Credit Points 10 **Level** 3

Equivalent Units

63177 - History of Modern China 1850-1949: Reform and Revolution.

Special Requirements

Successful completion of 60 credit points

....

This Asian history unit is concerned with the transformation of China in a social, political and intellectual context since the middle of the nineteenth century. The unit focuses on China's modern transformation in the first half of the twentieth century and its contemporary relevance. The scope is broad, encompassing changes from the last decades of the Qing Dynasty to the Republican era and the rise to power of the Communists in 1949. The approach is issue-oriented, thematic and, where appropriate, chronological.

101452.2   History of the English Language

Credit Points 10 **Level** 2

Equivalent Units

A2911 - History of the English Language

....

In 2013, this unit replaced by 102043 – Historical Linguistics. The aim of this unit is to familiarise students with the historical development of English from Old English through to the modern varieties of English around the world today. It explores the linguistic and historical influences on English from early times to the present and examines these influences as they reveal themselves in the grammar, phonology and vocabulary of older and modern varieties of English

400945.1   Honours Research 1

Credit Points 20 **Level** 5

Prerequisite

400944.1 Evidence-Based Practice (Advanced)

Special Requirements

This unit is relevant to honours students in health science courses studying their honours as part of an embedded program of study. This unit is specifically tailored to accommodate the course and progression requirements of such students and therefore is not relevant as a general elective.

....

This unit commences the significant research component of the student's honours degree. Students will work on their specific research project in conjunction with their supervisor, engaging in the early stages of the research process related to critical review of the literature, designing their project, considering ethical dimensions of their study, and collecting data. The emphasis of this unit is on the application of research knowledge gained in other units to the practical conduct of the individual honours project.

400946.1   Honours Research 2

Credit Points 20 **Level** 5

Prerequisite

400945.1 Honours Research 1

Special Requirements

This unit is only relevant to honours students in health science courses studying their honours as part of an embedded program of study. This unit will be specifically tailored to accommodate the course and progression requirements of such students and therefore would not be relevant as a general elective.

....

In this unit students will complete the significant research component of their honours study. They will build upon the

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skills and knowledge of research, evidence-based practice and scholarly enquiry gained in units completed earlier in the program. The emphasis of this unit is the completion of a supervised honours research project. Each student will work individually with their supervisor to complete the stages of data collection and data analysis and will write their results into a format suitable for submission for examination. Students will also present their final at a student conference that is at professional conference level.

401046.1 Honours Research 2 (Podiatric Medicine)

Credit Points 20 **Level** 5

Prerequisite

400945.1 Honours Research 1

Special Requirements

Students must be enrolled in Podiatric Medicine Honours unit set.

....

In this unit students will complete the significant research component of their honours study. They will build upon the skills and knowledge of research, evidence-based practice and scholarly enquiry gained in units completed earlier in the program. The emphasis of this unit is the completion of a supervised honours research project. Each student will work individually with their supervisor to complete the stages of data collection and data analysis and will write their results into a format suitable for submission for examination. Students will also present their final at a student conference that is at professional conference level.

400872.2 Honours Research Design and Methodology

Credit Points 20 **Level** 4

Assumed Knowledge

At least one unit in research methodology in an undergraduate degree program.

Equivalent Units

400471 - Exercise & Health Science Research & Practice, 400472 - Exercise & Health Science Honours Seminar

....

Students will build upon the skills and knowledge of research, evaluation and scholarly enquiry gained in units completed in the undergraduate program. The unit aims to explore: the nature of research and experience of researching in health related areas, as well as technical skills of data collection, management, analysis and interpretation in health practice. A major outcome of the unit is the development of a formal project proposal for conducting the student's thesis inquiry. Ethical issues and aspects such as human rights and ethics clearances, confidentiality and respect for participants in research projects and the obligations placed on researchers will be covered. This unit will also provide students with a professional forum in which to discuss and present major aspects of their research project.

400959.1 Honours Research Project 1

Credit Points 0 **Level** 5

Prerequisite

400810.2 Integrated Clinical Rotations 1

Corequisite

400811.1 Integrated Clinical Rotations 2

Special Requirements

Students must be enrolled in 4641 - Bachelor of Medicine, Bachelor of Surgery.

....

Students studying 4641, Bachelor of Medicine Bachelor of Surgery are offered an embedded Honours program. The program runs over Years 4 & 5 and this Unit is undertaken in conjunction with Integrated Clinical Rotations 2 (400811) in 2H Session 2010. The Honours Research Project 1 consists of approximately 100 hours work. The main objectives are to give students a heightened awareness and knowledge of the principles and methodology of medical research, and an enhanced ability to critically evaluate scientific literature. The research component will be assessed by an Honours dissertation to be submitted by the end of the following year. The award of MBBS Honours will require satisfactory completion of this unit plus Honours Research Project 2 and the appropriate GPA across the MBBS course.

400960.1 Honours Research Project 2

Credit Points 0 **Level** 5

Prerequisite

400811.1 Integrated Clinical Rotations 2 AND **400959.1** Honours Research Project 1

Corequisite

400977.1 Integrated Clinical Rotations 3

Special Requirements

Students must be enrolled in 4641 - Bachelor of Medicine, Bachelor of Surgery.

....

Students studying 4641, Bachelor of Medicine Bachelor of Surgery are offered an embedded Honours program. The program runs over Years 4 & 5 and this Unit is undertaken in conjunction with Integrated Clinical Rotations 3 (400977) from 2011. The Honours Research Project 2 consists of approximately 100 hours work. The main objectives are to give students a heightened awareness and knowledge of the principles and methodology of medical research, and an enhanced ability to critically evaluate scientific literature. The research component will be assessed by an Honours dissertation to be submitted by the end of this year. The award of MBBS Honours will require satisfactory completion of this unit plus Honours Research Project 1 and the appropriate GPA across the MBBS course. (see UWS Policy).

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300675.2 Honours Thesis

Credit Points 40 **Level** 5

Prerequisite

300053.3 Professional Practice

Corequisite

81999.1 Industrial Experience (Engineering) OR
300741.2 Industrial Experience (Engineering)

Equivalent Units

300484 - Engineering Thesis, 300036 - Major Investigation and Report 1, 300037 - Major Investigation and Report 2

Incompatible Units

300483 - Engineering Project, 300668 - Advanced Engineering Thesis

Special Requirements

This unit will be only offered to Bachelor of Engineering and Bachelor of Construction Management Honours level students. 3621 - Bachelor of Engineering students must be enrolled in a Key Program. Students should have achieved at least 240 credit points and must have a course Grade Point Average greater than or equal to 5.0.

....

This unit provides honours level students with the opportunity to undertake research on a specialist topic within their Key Program of undergraduate study.

400898.2 Honours Thesis in Health Science A

Credit Points 20 **Level** 4

Incompatible Units

400558/400559/400560 - Honours Thesis in Health Science/F-T/P-T year 1/P-T year 2; 400477/400478/400479/400480 - Sport & Exercise Science Thesis A/B/C/D

....

This unit is the culmination of studies for students who have completed an undergraduate degree in Health Science and provides substantial training in research. Under staff supervision, students choose the particular topic for their research, design their own programme of research, perform the research and analyse the results. The culmination of this process is the production of a thesis in which students describe the rationale for their topic, their research programme, ethical issues, results, and their conclusions.

400899.2 Honours Thesis in Health Science B

Credit Points 40 **Level** 4

Incompatible Units

400558/400559/400560 - Honours Thesis in Health Science/F-T/P-T year 1/P-T year 2; 400477/400478/400479/400480 - Sport & Exercise Science Thesis A/B/C/D

....

This unit is the culmination of studies for students who have completed an undergraduate degree in Health Science and provides substantial training in research. Under staff supervision, students choose the particular topic for their research, design their own programme of research, perform the research and analyse the results. The culmination of this process is the production of a thesis in which students describe the rationale for their topic, their research programme, ethical issues, results, and their conclusions.

400900.2 Honours Thesis in Health Science C

Credit Points 20 **Level** 4

Incompatible Units

400558/400559/400560 - Honours Thesis in Health Science/F-T/P-T year 1/P-T year 2; 400477/400478/400479/400480 - Sport & Exercise Science Thesis A/B/C/D

....

This unit is the culmination of studies for students who have completed an undergraduate degree in Health Science and provides substantial training in research. Under staff supervision, students choose the particular topic for their research, design their own programme of research, perform the research and analyse the results. The culmination of this process is the production of a thesis in which students describe the rationale for their topic, their research programme, ethical issues, results, and their conclusions.

400901.2 Honours Thesis in Health Science D

Credit Points 20 **Level** 4

Incompatible Units

400558/400559/400560 - Honours Thesis in Health Science/F-T/P-T year 1/P-T year 2; 400477/400478/400479/400480 - Sport & Exercise Science Thesis A/B/C/D

....

This unit is the culmination of studies for students who have completed an undergraduate degree in Health Science and provides substantial training in research. Under staff supervision, students choose the particular topic for their research, design their own programme of research, perform the research and analyse the results. The culmination of this process is the production of a thesis in which students describe the rationale for their topic, their research programme, ethical issues, results, and their conclusions.

200708.2 Hospitality Industry

Credit Points 10 **Level** 3

Assumed Knowledge

Basic knowledge of hospitality.

Equivalent Units

200562 - Hospitality Markets, MK301A - Hospitality Marketing

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With focus on the experiential nature of hospitality products, the unit canvasses a contemporary selection of specialised food services, lodging and other hospitality businesses, including resorts, cruise ships and registered clubs. The unit develops students understanding of the micro and macro environments of such businesses, with concentration on the factors influencing business development. There is also consideration of the design, development and commercial viability of such products, especially in the context of consumer expectations.

200561.3   Hospitality Management Applied Project

Credit Points 10 **Level** 3

Assumed Knowledge

This is an advanced unit. Students are expected to have gained an introductory level of knowledge in hospitality management.

Prerequisite

200707.2 Service Industry Studies

Equivalent Units

200140 - Tourism and Hospitality Research Project

Incompatible Units

200580 - Sport Management Applied Project

....

Students studying Hospitality Management Applied Project may have the opportunity to undertake an international field trip to experience the hospitality industry from an international perspective. This unit provides students a unique opportunity to integrate knowledge gained from operational and theoretical perspectives of hospitality studies into application in an engaged research project in hospitality management. Students will engage in comprehensive projects which bring together real world industry problems and hospitality theory.

200584.3   Hospitality Management Operations

Credit Points 10 **Level** 3

Assumed Knowledge

This is an advanced unit. Students are expected to have gained an introductory level of knowledge in hospitality management.

Equivalent Units

HS206A - Hospitality Management Operations

....

Hospitality Management Operations emphasises the role of operations management in the hospitality sector, especially as an element of corporate strategy. The unit demonstrates how operations management is related to, and aligned with, the other functional areas of a hospitality organisation. The field of study includes revenue management in the hospitality industry, as well as variety of qualitative and quantitative techniques to enable students to analyse problems in hospitality operations.

101592.2   Housing Markets and Policy

Credit Points 10 **Level** 3

Equivalent Units

101340 Regional Planning

Special Requirements

Successful completion of 80 credit points.

....

Housing affordability and access are significant urban problems. This unit focuses on the past history and current challenges of housing markets and policy in Australia. Comparisons are drawn between rental and home ownership trends and supports, the roles of the public, social, and private sectors, and between Australian, European, and North American housing markets and policies. Discussions critically evaluate how policy and markets interact. Examining trends in local housing markets and in the structure of housing finance provides a basis for discussions about how housing policy could better respond to the evolving challenges of volatile markets.

400868.2   Human Anatomy and Physiology 1

Credit Points 10 **Level** 1

Incompatible Units

300361 - Introduction to Human Biology, 300319 - Introduction to Human Anatomy and Histology, 300320 - Introduction to Human Physiology, 400130 - Human Medical Sciences 1, 400256 - Human Medical Sciences 2

....

This is the first of two units covering systematic anatomy and physiology at an introductory level. This unit is designed to provide students especially those in applied health science programs with an overview of body systems and their functions to ensure a suitable basis for their future studies. The unit studies the basic concepts of biochemistry and histology, general anatomy and physiology of the major body systems such as central and peripheral nervous systems, integumentary system, musculoskeletal system (bones, muscles and joints), special senses and endocrine system. Emphasis will be placed on the interconnection and relationship between structure and function at every level of organisation.

400869.2   Human Anatomy and Physiology 2

Credit Points 10 **Level** 1

Assumed Knowledge

400868 - Human Anatomy and Physiology 1

Prerequisite

400868.2 Human Anatomy and Physiology 1

Incompatible Units

14466 - Human Biology 2, 300319 - Introduction to Human Anatomy and Histology, 300320 - Introduction to Human Physiology, 400256 - Human Medical Sciences 2, 400130 - Human Medical Sciences 1

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This is the second of two units covering systematic anatomy and physiology at an introductory level. This unit is designed to provide students especially those in applied health science programs with an overview of body systems and their functions to ensure a suitable basis for their future studies. The unit studies the general anatomy and physiology of the major body systems such as cardiovascular, respiratory, digestive, urinary, reproductive and lymphatic system/immunity, body fluids & acid-base balance and metabolism. Emphasis will be placed on the interconnection and relationship between structure and function at every level of organisation.

300807.1   Human Animal Interactions

Credit Points 10 **Level** 1

Incompatible Units

300426 - Introduction to Animal Science, 300560 - Human Animal Interactions

Special Requirements

Students require lab coats, closed in work boots, long pants and long -sleeved shirt for this unit.

....

This unit introduces students to the varying relationships between humans and animals including domestication, the role of animals for companionship, as workers, the traditional role of animals in agriculture, wildlife and zoo animals and their increasingly recognised aesthetic and therapeutic roles. Students will work with a variety of domesticated animals, captive native mammals, and reptiles on-campus, and in a variety of animal industries off campus, including wildlife parks and zoos. The unit includes a balance of theoretical and practical work in the areas of behaviour and handling, basic husbandry, health care, and ethical management.

101676.2   Human Learning

Credit Points 10 **Level** 2

....

Human Learning is concerned with the experimental analysis of human and animal behaviour and focuses upon associative learning, including classical conditioning, operant conditioning, and social learning approaches. Definitions, assumptions, and basic phenomena associated with the study of learning are described and evaluated in terms of their ability to account for various aspects of human behaviour and experience. The practical work highlights important concepts introduced in the lecture program and focuses upon practical techniques of use in everyday situations.

401005.1   Human Relations and Life Transitions

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4684 Bachelor of Midwifery. Unitrack students may study this unit as a miscellaneous unit.

....

This unit enables students to be aware of the complex nature of human relationships and life transitions and introduces relevant concepts that inform nursing and midwifery practice. The unit explores frameworks that support an understanding of human development, development of a sense of self, predictable and unpredictable transitions across the lifespan and in the context of people realising their health potential.

200740.3   Human Resource and Industrial Relations Strategy

Credit Points 10 **Level** 3

Incompatible Units

200618 - Human Resource Strategy, 200615 - Industrial Relations Strategy

....

This unit analyses the human resource and industrial relations strategies of the major employment relations stakeholders. While the principal focus is on the organisational level of analysis and on the strategic interventions introduced by management, the unit also analyses the strategic roles of government, trade unions, and employer associations. It covers the development of human resource management and industrial relations as a professional field, the relationship between business strategies and HR/IR strategies, stakeholders and strategic choice, ethics and professional standards, strategic HR/IR interventions; evaluation of strategy.

300570.3   Human-Computer Interaction

Credit Points 10 **Level** 3

Equivalent Units

300160 - Software Interface Design

....

A key component to the discipline of Information Systems is the understanding and the advocacy of the user in the development of IT applications and systems. IT graduates must develop a mind-set that recognizes the importance of users and organizational contexts. They must employ user-centered methodologies in the development, evaluation, and deployment of IT applications and systems. This unit examines human-computer interaction in order to develop and evaluate software, websites and information systems that not only look professional but are usable, functional and accessible.

300901.1   Human-Computer Interaction (Advanced)

Credit Points 10 **Level** 3

Incompatible Units

300570 - Human-Computer Interaction, 300160 - Software Interface Design

Special Requirements

Students must be enrolled in course 3684 - Bachelor of Information and Communications Technology (Advanced) or Bachelor of Computing (Information Systems) Advanced

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IT graduates must be able to develop and evaluate software, websites and mobile apps that not only look professional but are usable, functional and accessible. However, the study of HCI is often restricted to its use as a tool in the software development process. This advanced unit also examines HCI as a field of research and how to conduct research into human user factors. Students in this advanced unit will be required to complete a research project and produce a final research report, which is of a standard capable of being considered for publication in a HCI conference or journal.

100961.4 Humanities Internship

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of at least 40 credit points of level two and three units in the Humanities major area in which the internship project is focused

Equivalent Units

10360 - Art History Internship, VP301A - Communications Practicum, 63149 - History Internship, 100486 - Asian and International Studies Internship, 100857 - Cultural and Social Analysis Practicum

Special Requirements

Succesful completion of 60 credit points. Students will require at least 40 credit points worth of Level 2 and 3 units in one Humanities major area. The Internship unit demands that students have an in-depth understanding of the field in which the placement or project work is to be executed. This level of expertise can only be achieved by consistent study in the discipline area. Students will only be permitted to undertake the unit if a staff member has agreed to supervise them and has evaluated their proposal for a project.

....

This unit aims to provide third year humanities students with first-hand knowledge of workplaces or research processes related to their chosen field of study (major), such as art galleries, museums, libraries, local and state government, tourism and administration or in academic contexts. The unit will introduce students to various fields in which the skills developed over two years of study in humanities can be applied. It will augment their study and provide much needed work experience. The internship placement and/or project will be chosen by the student in consultation with the staff member responsible for the major area and the placement will be overseen and the academic work assessed by the member of staff responsible for the major area of study relevant to the internship.

300765.2 Hydraulics

Credit Points 10 **Level** 3

Assumed Knowledge

200238 – Mathematics for Engineers 2

Prerequisite

300762.2 Fluid Mechanics

....

The unit covers the principles of open channel hydraulics, pipe hydraulics and culvert hydraulics. Specific topics in open channel hydraulics include uniform flow, resistance equations, specific energy principle, flow types, gradually varied flow and rapidly varied flow. The purpose is to enable design of efficient open channels to meet engineering requirements. In addition, principles of pipe and culvert hydraulics are introduced, enabling analysis and design of pipe networks and culverts.

300766.2 Hydrology

Credit Points 10 **Level** 4

Assumed Knowledge

Assumed knowledge: a) solution to elliptical, parabolic and hyperbolic partial differential equations b) finding roots of an equation c) application of descriptive statistics to analyse a given set of data d) ability to apply distribution theory to fit a given set of data

Prerequisite

300740.1 Water Engineering OR **300765.2** Hydraulics

Equivalent Units

300479 - Drainage Engineering

....

The unit covers the principles of surface water hydrology. It will focus on catchment analysis, specifically focussing on rainfall-runoff relationships. Successful completion of this unit will enable hydrologic analysis of catchments to satisfy various regulatory requirements.

100870.2 Hypertext Fictions

Credit Points 10 **Level** 2

Equivalent Units

63216 - Hypertext Fictions

Special Requirements

Successful completion of 60 credit points at Level 1.

....

In this unit students create their own hypertext (electronically linked) fiction. They are introduced to an e-learning environment using the network platform WebCT and the creative writing program Storyspace. The unit explores and experiments with aspects of fiction, such as plot, narrative, genre and character in the context of the electronic medium of hypertext. It also considers the history and theory of hypertext writing, including postmodern and poststructuralist theories of text and of the subject, and the new rhetoric and stylistics of hypertext. Students also critically evaluate existing on-line hypertext fiction.

300136.4 I.T. Support Practicum

Credit Points 10 **Level** 3

Prerequisite

300150.3 PC Workshop AND **300138.3** LAN Workshop OR **300576.2** Networking Workshop

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Special Requirements

Students can only enrol in this unit in their final session of study. The unit is restricted to students undertaking the Bachelor of Technology (IT Support), the Bachelor of Computing, the Bachelor of Computer Science, the Bachelor of Information Technology, the Bachelor of Mathematics and Information Technology or the Bachelor of Information and Communications Technology.

....

This unit provides students real-world experience in the area of Information Technology (IT) support. Students are located with industry partners in the Greater Western Sydney region in IT support positions for 10 hours per week over a 12 week period. In addition, students receive instruction and tuition in aspects of professional practice such as code of ethics.

300864.1 Imaging Science & Photographic Evidence

Credit Points 10 **Level** 2

Prerequisite

300874.1 Digital Forensic Photography

Equivalent Units

300376 - Digital Forensic Photography 2

Special Requirements

Students must be enrolled in 3589 - Bachelor of Science (Forensic Science).

....

Imaging science and photographic evidence is a key area within the forensic sciences. This unit explores the application of imaging science and forensic photography to detect, preserve, enhance and examine forensic evidence. The unit focuses on; optical and digital enhancement methods that provide essential non-destructive methods of enhancing physical evidence; how photographic evidence is relied upon within the criminal and civil justice system including several case studies; and discusses concepts associated with the admissibility v's reliability of photographic evidence. It further provides the learner with the necessary theoretical concepts of imaging science that underpin the practice of forensic photographic evidence .

300847.1 Immunology

Credit Points 10 **Level** 2

Prerequisite

300936.1 Functional Proteins and Genes

Equivalent Units

300229 - Immunology

Incompatible Units

300223 - Cell Signalling and Molecular Immunology

Special Requirements

Successful completion of 60 credit points at Level 1 and 20 credit points at Level 2.

....

This unit aims to provide students with an understanding of structure and function of immune system and particularly highlights common and unique systems that exist across kingdoms and phyla. There is a focus on the organs and cells of the human immune system and peculiarities associated with the immune systems of marsupials due to their early developmental stage at birth will be examined. The students will also develop laboratory skills that involve some immunological principles, investigative skills leading to understanding the knowledge base, and self learning at a sophisticated level and enhance their science communication skills.

101543.2 India: Global Contexts

Credit Points 10 **Level** 3

Equivalent Units

100262 - India: History in the Making of a Nation

Special Requirements

Succseful completion of 60 credit points at Level 1.

....

This unit looks at the role of south Asia in global processes from historical, cultural and economic perspectives. It traces three broad themes: the significance of early south Asian contacts with other cultures; the impact of colonial interactions with Europeans; and the development of postcolonial identities in the Indian diaspora. In particular, we consider how new hybrid formations emerged as products of cross-cultural exchange. The unit contrasts India's role as an agent of cultural globalisation from the past with its place as a recipient of economic globalisation in the present. We also look at the ways in which issues of caste, religion, social class, gender and unequal access to resources have remained significant factors in thinking through the experience of India's relationship with the wider world.

101878.1 Indigenous Landscapes

Credit Points 10 **Level** 1

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

Equivalent Units

300631 - Indigenous Landscape

Special Requirements

The prerequisite will not apply to students enrolled in courses 3671 - Bachelor of Natural Science (Environmental Management) and 3637 - Bachelor of Natural Science or to students enrolled in the major M3050 - Environmental Management.

....

Indigenous Landscapes aims to exploretraditional Indigenous Australian ways of knowing landscape. Specifically, the unit incorporates UWS generic Indigenous core curriculum content that acknowledges and values pre-colonial Australian history and land-use practices. Content includes traditional land management practices; protected area management, joint management /co-management; Native Title; Land Rights; Indigenous versus statute law; sustainable land use; cultural heritage and heritage

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landscapes. This unit also aims to equip students with cultural competency in order to address issues of dispossession and disadvantage brought about by the historical destruction and disruption of ecological integrity.

300773.2   Industrial Design Project (Commencement)

Credit Points 30 **Level** 5

Assumed Knowledge

Knowledge related to the successful completion of year 3 Industrial Design or equivalent (e.g. Design & Technology) is assumed. Ability to use: E-mail, Internet Web Browser, WebCT or equivalent, Word processing program, CAD software, Workshop machinery (e.g. mill, lathe, sander, rapid prototyping machine). Knowledge and/or experience in: Referencing, Lab/Workshop O&HS, Report writing, Essay writing, Process Diary, Group work, Research Methods for Industrial Designers, Project Management, Ethical Research Approval Process.

Prerequisite

300313.3 Design Studio 4: Simulate to Innovate AND **300314.2** Designed Inquiry

Corequisite

10915.2 Industrial Experience

Equivalent Units

85032 - Industrial Design Project (Commencement)

Special Requirements

Successful completion of 240 credit points.

....

The Industrial Design Honours Program provides students with an opportunity to apply their industrial design skills to an in-depth year long design research project. In Industrial Design Major Project (Commencement), Honours candidates develop a research plan and methodology that yield design opportunities for conceptual development and resolution (to be carried out in Industrial Design Major Project Completion). In Commencement, candidates produce a comprehensive research design (and seek ethics approval as needed), literature review, preliminary concept explorations and a detailed industrial design brief.

300774.2   Industrial Design Project (Completion)

Credit Points 40 **Level** 5

Assumed Knowledge

Knowledge related to the successful completion of year 3 Industrial Design is assumed and successful completion of Industrial Design Project Commencement and Industrial Design Project Commencement's co-requisite units.

Prerequisite

300773.2 Industrial Design Project (Commencement)

Equivalent Units

85033 - Industrial Design Project (Completion)

....

The Industrial Design Honours Program provides students with an opportunity to apply their industrial design skills to

an in-depth year long design research project. In Industrial Design Major Project (Completion), Honours candidates respond to the research findings and design brief that they produced in Autumn semester. They undertake detailed design development to resolve and communicate a final design solution, which is publicly exhibited at the end of the year. Their design and research communications present a strong argument for the final design and demonstrate the honours candidates capacity to undertake postgraduate design research and to join professional design practice.

300775.2   Industrial Experience

Credit Points 0 **Level** 3

Assumed Knowledge

Successful completion of 160 credit points in either course 3502 - Bachelor of Design and Technology or 3503 - Bachelor of Industrial Design or 3504 - Bachelor of Industrial Design Engineering.

Equivalent Units

10915 - Industrial Experience

Special Requirements

Students must be enrolled in 3502 Bachelor of Design and Technology or 3503 Bachelor of Industrial Design.

....

Students will gain real-life experience in developing new products or services within a company or organisation and be exposed to some of the decision-making processes that affect the development process of consumer products or services. This is whilst experiencing the multidisciplinary nature of the interaction of all those involved in the product development process from the conception of the idea to the introduction of a new product or service to market. Students use this opportunity to test the validity of the concepts studied in various course units to date in a real life situation and develop a sense of a company's "culture".

300741.2   Industrial Experience (Engineering)

Credit Points 0 **Level** 3

Assumed Knowledge

A broad background knowledge in the relevant Engineering discipline (ie., equivalent to that obtained after completing 3 years of the Engineering program)

Equivalent Units

81999 - Industrial Experience (Engineering)

Special Requirements

Successful completion of 240 credit points.

....

Students will undertake 12 weeks full-time (37.5 hours per week) employment (or equivalent) to obtain relevant workplace experience in Engineering under the supervision of professional engineers in one company or more.

300302.2   Industrial Graphics 1: Presentation

Credit Points 10 **Level** 1

Equivalent Units

J3764 - Industrial Graphics (Presentation)

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....

The presentation and promotion of designs in the form of 2D graphics is a necessary component of the overall design process. The ability to apply a wide range of both manual and computer based processes in the production of these graphical images and presentations is essential. The objective of this subject is to introduce students to the industry standard software and hardware employed to generate this type of material, and more importantly this unit exposes students to the techniques used by professionals who currently work in this area of the design community. Industrial Graphics 1 Presentation is part of a sequence of five units that constitute the sub-major in Industrial Graphics and eight units that constitute the major in Interactive Industrial Graphics.

300282.2   Industrial Graphics 2: Transition

Credit Points 10 **Level** 2

Equivalent Units

J1756 - Industrial Graphics (2D Drawing), J1759 - Industrial Graphics (Transition), 10940 - Technical Presentation 2

....

Engineering drawing is the formal graphical communication language used by professionals engaged in design, manufacture and management of manufactured items. This language provides the facility to describe and document three dimensional objects or concepts in two dimensions using linework, characters and symbols. This language is based on guidelines provided by Standards Australia and is compatible with a range of international drawing standards. The aim of this unit is to examine in detail the language and tools used to generate engineering drawings and to provide students with practical skills that will allow them to communicate with other professionals using this language.

300310.3   Industrial Graphics 3: 3D Solids

Credit Points 10 **Level** 2

Assumed Knowledge

300282 Industrial Graphics 2 - Transition. Students from within the ID and Design & Technology degree courses should have completed this core unit before attempting Industrial Graphics 3. Students taking this as an elective fromoutside of the ID and Design & Technology courses should note that knowledge from this unit will be assumed.

Equivalent Units

10962 - Industrial Design Communication 2: 3D Kinetic, J2814 - Industrial Graphics (3D Modelling)

....

The documentation of design concepts in the form of three dimensional (3D) computer models provides data that can be applied in a wide variety of ways to facilitate the understanding and production of parts and assemblies. The objective of this unit is to introduce students to the industry standard software and hardware employed to generate these models, via a 'hands on' approach to creating 3D data. Issues such as data transfer, rapid prototyping, computer numerical control (CNC) machining and visualisation will also be discussed.

300312.3   Industrial Graphics 4: Surface

Credit Points 10 **Level** 3

Assumed Knowledge

It is assumed that students attempting IG4: Surface will be familiar with and capable at 3D solids modelling as delivered in 300310 (IG3: 3D Solids) and graphic design/illustration and page layout as delivered in 300302 (IG1: Presentation). Students from within the ID and Design & Technology degree courses should have completed these core units before attempting IG4: Surface. Students taking this as an elective from outside of the ID and Design & Technology degree courses should note that these skills will be assumed.

Equivalent Units

10963 - Industrial Design Communication 3: Materials and Properties, J2868 - Industrial Graphics (Surface)

....

Starting with a sketch, drawing, physical model, or only an idea, having the ability to accurately model your designs ready for rendering, animation, drafting, engineering, analysis and manufacturing is an essential skill set for designers in all disciplines. The ability to generate 3 dimensional data and in particular, free-form 3D data within a computer and display that data in a range of formats provides a powerful design, visualisation and analysis tool. This unit introduces students to the fundamentals of 3D Wireframe, NURBS Surface and Boundary Representation (Brep) Solids Modelling and then focuses on the tools and processes available for producing a range of image types from these 3D models.

300315.3   Industrial Graphics 5: Integrated

Credit Points 10 **Level** 3

Assumed Knowledge

It is assumed students have computer and hand rendering capabilities along with graphic computer presentation skills. Knowledge of consumer markets and Manufacturing is also essential.

Prerequisite

300310.3 Industrial Graphics 3: 3D Solids AND **300312.3** Industrial Graphics 4: Surface

Equivalent Units

J3824 - Industrial Graphics (Integration)

....

The ability to draw on a broad range of industrial graphics skills and techniques and to apply them appropriately to design projects is a cornerstone of the modern design process. It is the aim of this unit to synthesise the components of the industrial graphics strand and provide a single project with a range of components to which these skills can be applied and evaluated.

300724.2   Industry Based Learning

Credit Points 0 **Level** 5

Equivalent Units

BG311A - Industry Based Learning

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Special Requirements

Students must be enrolled in 2607 - Bachelor of Construction Management.

....

Students are required to undertake 1200 hours industry based experience as required by course and professional accreditation bodies.

300128.3 Information Security

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of data structures, number theory and probability theory. Basic programming skills in C or java, etc.

Prerequisite

200025.2 Discrete Mathematics OR **200031.2** Mathematics for Business OR **200190.1** Finite Mathematics AND **300103.2** Data Structures and Algorithms OR **300125.2** Fundamentals of Computer Science OR **300156.1** Programming Principles 2

Special Requirements

Students need to undertake one pre-requisite unit from the following three units: 200025 - Discrete Mathematics, 200031 - Mathematics for Business, 200190 - Finite Mathematics AND one pre-requisite from the following three units: 300103 - Data Structures and Algorithms, 300156 - Programming Principles 2, 300125 - Fundamentals of Computer Science

....

This unit is concerned with the protection and privacy of information in computer systems. The focus of the unit is primarily on introducing basic concepts in computer and information security and then using this knowledge as the vehicle to study the design and implementation of secure computer and network systems. This unit also provides students with practical experience with security programming. In more specific terms, the unit is intended to provide the following: basic concepts of conventional and public key encryption; number theory and its application in public key encryption and signatures; protocols used in secure computer systems.

300572.2 Information Systems Deployment and Management

Credit Points 10 **Level** 3

Assumed Knowledge

A general understanding of various Information Systems in the eBusiness environment - familiarity with information system development processes

Prerequisite

300580.2 Programming Fundamentals AND **300585.2** Systems Analysis and Design

Equivalent Units

300272 - Enterprise Information Management

....

This unit provides a detailed overview of system implementation stages taking into the consideration steps necessary to place the newly developed system into production, educate consumers and system users, confirm accuracy of data needed for the system's accurate functionality and assure that all business functions that interact with the system are performing properly. In addition, this unit aims to portray how project management skills are crucial in timely production and delivery of the final product. At the completion of the successful deployment system is usually transitioned to system support and maintenance therefore the overview of the transition process is also portrayed.

300573.2 Information Systems in Context

Credit Points 10 **Level** 1

Assumed Knowledge

2 Unit Mathematics and 2 Unit English (General)

Incompatible Units

200128 - Introduction to Information Systems

....

This unit aims to give students the ability to recognise and expound about business information systems with regard to type, function, and purpose, and the frameworks within which these systems are used. Topics in this unit include computing fundamentals; computer hardware and software; computers and society; use of business application packages – spreadsheets, word processing, database, graphics; organisational information systems; information systems development and acquisition; data and knowledge management; electronic commerce, internets, extranets; networking; enterprise-wide information systems; the internet and information systems security; privacy, ethics and computer crime.

700000.2 Information Systems in Context (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300573 - Information Systems in Context

Incompatible Units

200128 - Introduction to Information Systems

Special Requirements

Students must be enrolled at UWS College.

....

This unit aims to give students the ability to recognise and expound about business information systems with regard to type, function, and purpose, and the frameworks within which these systems are used. Topics in this unit include computing fundamentals; computer hardware and software; computers and society; use of business application packages – spreadsheets, word processing, database, graphics; organisational information systems; information systems development and acquisition; data and knowledge management; electronic commerce, internets, extranets; networking; enterprise-wide information systems; the internet and information systems security; privacy, ethics and computer crime. A major theme of this unit is in developing an understanding of the importance of the use of information for decision making in organisations.

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300486.2   Infrastructure Engineering

Credit Points 10 **Level** 2

Prerequisite

300738.2 Surveying for Engineers

Equivalent Units

85007 - Civil & Environmental Engineering Construction, 85008 - Engineering Urban Environments, 300296 - Road & Traffic Engineering

Special Requirements

Student must be enrolled in Bachelor of Engineering or Master of Engineering courses.

....

This unit will provide students with material to assist them with Civil Engineering Construction and Urban Development / Town Planning projects. The unit mainly focuses on the subdivision design including the design of various components of a subdivision.

400286.3   Injury Prevention

Credit Points 10 **Level** 3

Prerequisite

400867.2 Approaches to Health Promotion

Special Requirements

Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

Injury Prevention is a National Health Priority. Injury is the preferred term rather than accident with its connotations of inevitability and lack of apparent cause, to allow development of inter-disciplinary prevention initiatives. A systematic scientific approach to injury research and prevention is in evidence for road and occupational safety, backed by well resourced implementation structures. Other settings/sectors include sport, recreation, falls, firearms, farm, product and water safety, which are also seeing the benefits of injury prevention principles, which include health promotion issue analysis and strategic hierarchical implementation strategies using the 4Es of education, enforcement, engineering and environment.

200163.1   Innovation and Product Development

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed understanding of business management fundamentals in the context of an enterprise's competitive activities in the marketplace.

....

Innovation is an imperative for the competitiveness of enterprises. This unit gives students an understanding of innovation and product development as management processes within an enterprise that provide impetus for their continuing competitiveness. Studies have shown that the development of new products has a greater leverage on a company's profits than any other growth strategy, including acquisition. This unit also gives students insight into how the process of innovation can be enhanced within enterprises. It also examines various processes adopted by enterprises for undertaking new product development, and how product development can be a means of achieving growth for a firm.

300899.1   Inorganic Chemistry

Credit Points 10 **Level** 2

Prerequisite

300800.1 Essential Chemistry 1 OR **300808.1** Introductory Chemistry

Incompatible Units

300230 - Inorganic Chemistry 2, 300545 - Coordination Chemistry

Special Requirements

Students will require Laboratory coat, appropriate shoes and eye protection in this unit.

....

This unit introduces students to a thorough study of coordination chemistry (discussing complexes, ligands, structure, isomerism, stability, reaction mechanisms, oxidation states, elements in the first transition series, coordination chemistry in biological systems). The unit then moves on to areas of fundamental inorganic chemistry, including bonding, and solid state chemistry. Advanced Modules cover the following topics: comparative inorganic chemistry, inorganic speciation in solution, X-ray methods for characterising inorganic materials, spectroscopy in coordination complexes, physiology and inorganic chemistry, and medicinal inorganic chemistry. This unit also introduces many of the laboratory techniques and equipment that are used in synthetic procedures in coordination chemistry.

300075.3   Instrumentation and Measurement

Credit Points 10 **Level** 3

Prerequisite

300005.1 Circuit Theory

....

This unit covers all topics associated with the measurement of physical quantities and the instrumentation required to accurately present this information to a controller. Transducers used to measure common physical quantities are presented in detail, while instrumentation includes a detailed analysis of zero-span circuits, Wheatstone bridges, Instrumentation amplifiers, isolation amplifiers, voltage-to-current and voltage-to-frequency modules used for faithful signal transmission, digital-to-analog and analog-to-digital circuits. The application of these modules in modern measurement equipment – multimeters, digital CROs and PLC/PC interfacing modules is discussed.

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300075.4 Instrumentation and Measurement

Credit Points 10 **Level** 3

Prerequisite

300005.2 Circuit Theory

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This unit covers all topics associated with the measurement of physical quantities and the instrumentation required to accurately present this information to a controller. Transducers used to measure common physical quantities are presented in detail, while instrumentation includes a detailed analysis of zero-span circuits, Wheatstone bridges, Instrumentation amplifiers, isolation amplifiers, voltage-to-current and voltage-to-frequency modules used for faithful signal transmission, digital-to-analog and analog-to-digital circuits. The application of these modules in modern measurement equipment-multimeters, digital CROs and PLC/PC interfacing modules is discussed.

400979.1 Integrated Clinical Rotations (General)

Credit Points 120 **Level** 4

Prerequisite

400810.1 Integrated Clinical Rotations 1

Incompatible Units

400811 - Integrated Clinical Rotations 2 and 400977 - Integrated Clinical Rotations 3

Special Requirements

Students must be enrolled in 4641 Bachelor of Medicine, Bachelor of Surgery. Students will have achieved all following special requirements in the preceding years of the course. 1. Criminal record check 2. Immunisations required by Health Service 3. Registration with AHPRA 4. Child protection check. NSW ClinConnect compliance.

....

Integrated Clinical Rotations (General) is a specific unit for students who have deficiencies in performance at the end of Integrated Clinical Rotations 3. The content will be tailored to each student to enable them to achieve competence in medicine. The unit will run from the middle of one year to the middle of the following year and the assessment will be held in conjunction with Integrated Clinical Rotations 3.

400810.2 Integrated Clinical Rotations 1

Credit Points 80 **Level** 3

Prerequisite

400862.1 Foundations of Medicine 2

Special Requirements

Students must be enrolled in 4641 Bachelor of Medicine, Bachelor of Surgery. Students will have achieved all following special requirements in the preceding years of the course. 1. Criminal record check 2. Immunisations required by Health Service 3. Registration with AHPRA 4. Child protection check. NSW ClinConnect compliance.

....

ICR1 is the first major clinical year of the MB BS program. It consists of 10 weeks in each of Surgery, Medicine and Community based health care, and 5 weeks in Emergency Medicine/Anaesthetics. There will also be 3 Conference weeks where all students will be based on campus. Surgery, Medicine and Emergency rotations will be at Campbelltown, Blacktown, Mt Druitt, Bankstown and Fairfield hospitals. In each rotation students will spend 5 weeks in each of two sub-specialities. The Community rotations will involve general practice, aboriginal medical services and other community based aspects of the health care system. Students will also undertake 3 online learning modules. Students will additionally undertake an assignment in Evidence-based Practice, and a program of tutorials in development of clinical communication skills.

400811.1 Integrated Clinical Rotations 2

Credit Points 80 **Level** 4

Prerequisite

400810.1 Integrated Clinical Rotations 1

Special Requirements

Students must be enrolled in 4641 Bachelor of Medicine, Bachelor of Surgery. Students will have achieved all following special requirements in the preceding years of the course. 1. Criminal record check 2. Immunisations required by Health Service 3. Registration with AHPRA 4. Child protection check. NSW ClinConnect compliance.

....

ICR2 is the second major clinical year of the MB BS program. It consists of 9 weeks in each of Paediatrics, Obstetrics & Gynaecology and Psychiatry and four weeks in each of Oncology/Palliative Care and Community based Research project. There will also be 3 Conference weeks, which may be at either Campbelltown Campus or Blacktown Clinical School. Students will be based at a number of appropriate hospitals throughout Sydney, Bathurst and Lismore. Students will also undertake 3 online learning modules (Scientific Streams). Students will also undertake a reflective portfolio.

400977.1 Integrated Clinical Rotations 3

Credit Points 40 **Level** 4

Prerequisite

400811.1 Integrated Clinical Rotations 2

Special Requirements

Students must be enrolled in 4641 Bachelor of Medicine, Bachelor of Surgery. Students will have achieved all following special requirements in the preceding years of the course. 1. Criminal record check 2. Immunisations required by Health Service 3. Registration with AHPRA 4. Child protection check. NSW ClinConnect compliance.

....

Integrated Clinical Rotations 3 is the first session of the third major clinical year of the MB BS program. It consists of five weeks in each of Medicine, Surgery, General Practice, Indigenous Health and CU, ED & Anaesthetics. There will also be two Conference weeks where all students will be based on the Campbelltown campus. Students will be based at a number of appropriate hospitals

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throughout Sydney. Students will also undertake two online learning modules (Scientific Streams).

400978.1 Integrated Clinical Rotations 4

Credit Points 40 **Level** 4

Prerequisite

400977.1 Integrated Clinical Rotations 3 OR **400979.1** Integrated Clinical Rotations (General)

Special Requirements

Students must be enrolled in 4641 Bachelor of Medicine, Bachelor of Surgery. Students will have achieved all following special requirements in the preceding years of the course. 1. Criminal record check 2. Immunisations required by Health Service 3. Registration with AHPRA 4. Child protection check. NSW ClinConnect compliance.

....

Integrated Clinical Rotations 4 is the final Unit in the MBBS course and consists of clinical rotations in Medicine, Surgery and two of General Practice, Indigenous Health and ICU/Emergency/Anaesthetics. Students also undertake two Scientific Streams and two Conference weeks.

300931.1 Integrated Science

Credit Points 10 **Level** 2

Equivalent Units

300661 - Integrated Science, 300664 - Science in Society, 700096 - Integrated Science (UWSC)

....

Science and the scientific process of discovery have been successful in offering explanations for the world we live in. Due to scientific advances, we have eradicated some disease, explored the moon and the deepest parts of our oceans and created communication across distances on the planet previously unimaginable. We now face the major challenge of creating a future world which is sustainable for life on Earth. Solving our contemporary complex human and environmental issues to create a sustainable future, however, requires integrative and multidisciplinary research frameworks, an understanding of the relationship between science and society including cultural, social, economic and political and ethical factors. Students will critically examine such perspectives in a series of contemporary 'real-life' case studies such as climate change, indigenous health, medical breakthroughs, biodiversity loss, environmental sustainability and human-animal interactions. They will undertake research into the relationship of science integrated with society, and the uncertainty and bias of evidence in decision making. They will demonstrate their understanding by analysis of a contemporary issue by producing an eco-science advisory column.

700096.2 Integrated Science (UWSC)

Credit Points 10 **Level** 2

Assumed Knowledge

Oral and written communication skills

Equivalent Units

300661 - Integrated Science 1, 300664 - Science in Society, 300931 - Integrated Science

Special Requirements

Students must be enrolled at UWSCollege in 7003 Diploma in Science or 7009 Diploma in Science Fast Track. Students are required to have Safety glasses, lab coat and lab book.

....

Science and the scientific process of discovery have been successful in offering explanations for the world we live in. Due to scientific advances, we have eradicated some disease, explored the moon and the deepest parts of our oceans and created communication across distances on the planet previously unimaginable. We now face the major challenge of creating a future world which is sustainable for life on Earth. Solving our contemporary complex human and environmental issues to create a sustainable future, however, requires integrative and multidisciplinary research frameworks, an understanding of the relationship between science and society including cultural, social, economic and political and ethical factors. Students will critically examine such perspectives in a series of contemporary 'real-life' case studies such as climate change, indigenous health, medical breakthroughs, biodiversity loss, environmental sustainability and human-animal interactions. They will undertake research into the relationship of science integrated with society, and the uncertainty and bias of evidence in decision making. They will demonstrate their understanding by analysis of a contemporary issue by producing an eco-science advisory column.

401050.1 Integrating Research into Physiotherapy Practice

Credit Points 10 **Level** 7

Prerequisite

400865.2 Evidence-Based Practice OR **400944.1** Evidence-Based Practice (Advanced) AND **401051.1** Clinical Education B (Rehabilitation) OR **401052.1** Clinical Education C (Ambulatory Care) OR **401053.1** Clinical Education D (Paediatrics) OR **401054.1** Clinical Education E (Advanced Care)

Special Requirements

Students must be enrolled in course 4662 - Bachelor of Health Science/Master of Physiotherapy, 4667 - Master of Physiotherapy or 4668 - Bachelor of Health Science (Honours)/Master of Physiotherapy.

....

In this unit, students will further develop their evidence based practice skills and knowledge by applying it in practice settings. This will involve applying the academic knowledge and skills from three prior evidence based practice and research units by synthesising it with client goals and values, and experience gained during an advanced level clinical placement. Students will be allocated a topic area from which they will identify a clinical "problem" or health-related issue. Students will then plan and execute a clinical evidence based research investigation. This will involve the formulation of a clinical question, identification and appraisal of best available research evidence, and synthesis of this information to develop a client-group specific, evidence-based management strategy. Students will be expected to reflect on the barriers and facilitators of evidence based practice,

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and present the outcomes of their research at a student conference. This unit also involves students developing leadership skills by facilitating and participating in a journal club.

300368.2 Intelligent Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of data structures and algorithms and basic programming skills in Pascal C/C++ or Java etc.

Prerequisite

200025.2 Discrete Mathematics

Equivalent Units

300087 - Artificial Intelligence, 300137 - Knowledge Based Systems

....

This unit provides basic studies in the major areas of artificial intelligence: search, knowledge representation, logic programming, machine learning and knowledge based systems, agent planning and learning. The first part of this unit will focus on the foundation of artificial intelligence: search algorithms and their implementations, game playing, logics and knowledge representation, and inference in reasoning systems. The second part will cover the principles of knowledge based systems (intelligent systems), planning, and machine learning.

100789.3 Interactive Design I

Credit Points 10 **Level** 2

Assumed Knowledge

Computer literacy including working in a networked environment on a Macintosh computer; management, transportation and storage of digital information and digital production processes such as scanning, pdf production and cd creation.Skills in design principles: layout, colour and typography.Literacy with Image manipulation software - e.g. Photoshop or Fireworks

Prerequisite

300302.2 Industrial Graphics 1: Presentation

Equivalent Units

100778 - Designing Multimedia

Special Requirements

The pre-requisite unit 300302 - Industrial Graphics 1: Presentation as stated above is a prerequisite only for students enrolled in courses 3502 - B. Design and Technology and 3503 - B. Industrial Design and does not apply to students enrolled in course 1571 - B. Design (Visual Communication).

....

This unit focuses on design methodology for the development and delivery of contemporary interactive media applications. Particular concepts addressed will also include conceptual integration and convergence of various media forms, screen design, navigational hierarchy and structures, and designing engaging interactive interfaces. General principles of interface, interaction design and

information architecture will be introduced, alongside basic principles of digital media production.

100949.3 Interactive Design II

Credit Points 10 **Level** 2

Prerequisite

100789.3 Interactive Design I

Equivalent Units

100799 - Online Design

....

This unit focuses on interactive design from an experience design perspective. Approaches utilising current digital technologies for advanced interactive design are explored. Students will design and produce interactive products and examine and critique current content and trends within these technologies. The focus of the unit is communication and experience design, rather than technical implementation. Interactive design examples are examined from the context of shifting production languages, convergent technologies and the design professional contexts.

101454.2 Intercultural Pragmatics

Credit Points 10 **Level** 3

Assumed Knowledge

In addition to appropriate competence in English, students are expected to have equivalent Level 2 knowledge of one of the following languages: Arabic, Japanese, Chinese, Spanish, Italian.

....

In 2013, this unit replaced by 101950 - Intercultural Communication. This is an optional level 3 core unit for the major in Arabic, Japanese, Chinese, Spanish, and Italian, within the BA Languages Key Program. It also constitutes part of the linguistics major and sub-major. It can also be taken as an elective. This is a language-specific unit intended to develop the students' awareness of language usage issues which may have an impact on intercultural communication and, therefore, on cultural stereotyping as well as other real life interests, such as business relationships and professional performance. It covers issues such as the relationship between culture and language use, ingroup-outgroup relationships, speech acts across cultures, politeness in text and discourse, miscommunication and stereotyping.

200536.3 Intermediate Financial Accounting

Credit Points 10 **Level** 2

Assumed Knowledge

Sufficient grasp of introductory accounting to competently prepare external financial statements.

Prerequisite

200111.2 Financial Accounting Applications

Equivalent Units

200112 - Financial Accounting Issues, 61112 - The Anatomy of Financial Accounting

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Incompatible Units

AC304A - Advanced Financial Accounting, H3327 - Financial Accounting 3

....

This unit extends the knowledge and understanding of financial accounting through the application of problem solving to selected entities drawing upon accounting theory and critical analysis.

200595.3 International Business Finance

Credit Points 10 **Level** 3

Equivalent Units

61124 - International Business Finance

....

The unit is designed to provide students with an overview of the economic, political and institutional environment in which international business is conducted. Particular attention is given to the historical development of the international monetary system, the transnational corporation and the impact of globalization upon international financial transactions and international business practices.

200590.2 International Business Project

Credit Points 10 **Level** 3

Assumed Knowledge

This is a capstone International Business unit. It is assumed that students have basic international business knowledge and research skills.

Prerequisite

200591.2 Introduction to International Business

Equivalent Units

61125 - International Business Project 1

....

This is a capstone unit in International Business. The aim of the unit is to give students a real-life action learning project in which they undertake an international business strategic planning and analysis exercise for a client organisation. This project usually involves students working in small teams for a client organisation under the direct supervision of the lecturer.

200626.2 International Business Strategy

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of the basic principles of marketing and international business.

Prerequisite

200083.2 Marketing Principles OR **200591.2** Introduction to International Business

Equivalent Units

61119 - International Business Strategy

....

In an environment where operating internationally is becoming the norm rather than the exception, firms are faced with ever increasing complexity when formulating their business strategy. This requires an understanding of how firms become and remain international, the basic modes of international involvement, the practice of multinational management and how firms can establish a balance between the sometimes conflicting demands of headquarters, the subsidiary and the governments of all the countries where the multinational enterprise operates. This unit will cover these issues and will deal with both large and small companies that must be global to survive.

200055.4 International Finance

Credit Points 10 **Level** 3

Prerequisite

200488.3 Corporate Financial Management AND **200525.2** Principles of Economics

....

The study of international finance from the vantage point of a multinational enterprise provides students with a global insight into international trade for both manufactured and financial products. The unit recognises the increasing importance of global integration of money and capital markets - a trend that is creating expanded opportunities for both investors and organisations that need to raise capital. The recognition and management of risks associated with international operations are explored including cost of capital and financial structure, international financial markets crisis, international financial management, international monetary system, international diversification, foreign exchange risk management including the use of futures and options, foreign investment analysis, determination of exchange rates, balance of payments analysis, international debt crisis and country risk analysis.

200621.3 International Human Resource Management

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Equivalent Units

61472 - International Human Resource Management

....

This unit covers concepts of international human resource management (HRM). It examines the internationalisation of firms, a range of comparative systems and structures of employment relations internationally, global stakeholders, human rights, and strategic management of global organisations. It incudes analysis of issues including recruitment, training, management of expatriates, pay, and the impact of society, politics, economics and culture of host countries on human resource strategies.

200623.3 International Management

Credit Points 10 **Level** 3

Equivalent Units

61671 - International Management

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....

International Management provides an overview of issues confronting managers working in a complex globalised environment. Areas such as global and regional integration, the role of ethics and social responsibility, as well as the changing political, legal and technological environment require consideration by management in multinational organisations. The role of culture and human resource management is another significant area of failure by global managers. Finally global strategic issues such as managing political risk and government relations will be analysed to allow a deeper level of understanding of the complexities of managing in an internationally competitive marketplace.

61671.1   International Management

Credit Points 10 **Level** 3

Prerequisite

200571.1 Management Dynamics OR **MG102A.2** Management Foundations OR **61611.1** Management Studies OR **H1727.1** Business Management

Equivalent Units

200623 - International Management

....

In 2008 this unit replaced by 200623 - International Management. In an era of ever increasing globalisation, it is essential that students of management are aware of salient global factors and issues that determine the process of applying management concepts and techniques in a multinational environment. This unit provides this knowledge through an examination of topics such as: the nature of international management and emergence of the global economy; determinants of the international competitiveness of nations, agencies and firms (with a focus on the Australian Situation); the cultural/political/ economic/financial dimensions of the international management environment; international law; dimensions of internation business strategy; the internationalisation of the firm, and organisation and control of international operations.

200094.2   International Marketing

Credit Points 10 **Level** 3

Assumed Knowledge

Marketing principles including consumer/buyer behavioural concepts, business market dynamics, marketing research methods, marketing communications, channel management and distribution, brand and product management, competitive strategy and quantitative methods in marketing. The basics of economics, finance and accounting, statistics and general communications are also assumed.

Prerequisite

200083.2 Marketing Principles

....

Marketing internationally has become a necessity for many firms that wish to survive and grow in today's dynamic and increasingly linked world economy. Globalisation in its many forms is a powerful driver of change. 'International

Marketing' is concerned with understanding and successfully managing the different international economic, cultural, political and legal environments as they affect the marketing activities of companies. This unit will examine the role of marketing research, international finance, overseas market entry and expansion strategies and the marketing mix in international markets. This unit provides students with a sound theoretical basis and, particularly, a practical understanding of how companies operate in international markets.

200374.3   International Marketing Research

Credit Points 10 **Level** 2

Assumed Knowledge

An understanding of the basic principles of marketing, international business and statistics

Prerequisite

200032.5 Statistics for Business AND **200083.2** Marketing Principles AND **200591.2** Introduction to International Business

....

This unit aims to provide students with tools to undertake and critically evaluate simple international marketing research projects. It covers basic marketing research concepts and statistical techniques with emphasis on the impact of the international environment in conducting both primary and secondary data research.

100872.2   International Politics of North Asia

Credit Points 10 **Level** 2

Equivalent Units

100264 - International Relations of Northeast Asia

Special Requirements

Successful completion of 40 credit points at Level 1.

....

This unit examines contemporary foreign policy issues in North Asia from the perspective of China and Japan. Core issues include a critical evaluation of contemporary Sino-Japanese relations, the role both countries play in regional affairs and why North Asia (in particular the Korean Peninsular) is an intersection point for geo-politics.

100962.2   International Politics of the Southeast Asian Region

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points at Level 1.

....

The unit provides an overview of the main political features and issues of the Southeast Asian region. This region is adjacent to Australia and thus events there have great strategic and economic significance for us. The countries of Southeast Asia: Vietnam, Indonesia, Cambodia, Laos, Thailand, Burma, Malaysia, Singapore, Brunei and the Philippines, are organised into the Association of Southeast Asian Nations (ASEAN). The unit focuses on the political relationships between these countries, both bilateral and

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regional, within the ASEAN and other nearby states, including Japan, China and Australia. Some of the issues covered include sensitive border disputes, piracy, illegal immigration, Insurgencies, Islamist terror networks, as well as issues related to aid, development and economic cooperation and competition.

100871.3   International Texts and Contexts

Credit Points 10 **Level** 2

Equivalent Units

B2702 - International Texts and Contexts

Special Requirements

Successful completion of 40 credit points of study at level 1

....

This unit investigates social and political discourses of a selection of literary (the novel, poetry, memoir) and cultural texts that highlight aspiration, ideals and tragedies of national and global significance. It will explore concepts and manifestations of self, nation, community, empire, culture and art through a study of textual constructions of the individual's negotiation of interacting and often competing ideologies. A range of written and visual texts will be use.

300130.3   Internet Programming

Credit Points 10 **Level** 3

Assumed Knowledge

Basic knowledge on internet browsing and any object-oriented programming language.

Prerequisite

300147.3 Object Oriented Programming OR **300581.2** Programming Techniques OR **300027.2** Engineering Computing

Equivalent Units

300246 - Internet Computing

....

This unit offers students basic concepts and latest technologies of internet programming and web-based application development. Utilising one of the popular internet programming languages, such as Java, it aims to develop the programming skills and methodologies required for both client-side and server-side programming as well as general purpose programming. The range of topics covered by the unit includes HTML, XML, Java applets, desktop application in Java, servlets, JavaServer Pages and JDBC.

300574.2   Internet Structures and Web Servers

Credit Points 10 **Level** 2

Assumed Knowledge

Fundamentals of computer networking and basic knowledge of web technology

....

This unit seeks to develop an understanding of the structures of the Internet and the organization of the World Wide Web, and the basic skills in setting-up and

maintaining Web servers, proxy servers, email servers, and Internet firewalls.

100963.3   Interpreting Australia: Australian Historians and Historiography

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

The unit critically reflects on the practices and debates in the writing of Australian history. It examines the approaches of major Australian historians including Manning Clark, Geoffrey Blainey and Humphrey McQueen, as well as themes such as empiricism versus postmodernism, the 'new social history' and Marxism and Australian historiography.

101801.2   Interpreting Fascism

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

Fascism was the only major new political movement and ideology to emerge in twentieth century Europe. After 1922 it changed the world in profound ways and with disastrous consequences. In this unit we will examine the historiography of fascism and the key events in fascist history in Germany, Italy, Britain and other places in Europe. Questions to be considered include: What factors promoted the growth of fascism? Which factors caused fascism to establish itself and prosper in some places but not in others?

300825.1   Introduction to Anatomy

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Biology

Equivalent Units

300319 - Introduction to Anatomy and Histology, 300752 - Introduction to Anatomy and Histology, 300778 - Introduction to Anatomy

Incompatible Units

300361 - Introduction to Human Biology, 400130 - Human Medical Sciences 1, 400256 - Human Medical Sciences 2, 400134 - Human Medical Sciences 3

Special Requirements

Due to space and resource limitations, this unit will be restricted to students enrolled in 3673 Bachelor of Medical Science and 3682 Bachelor of Medical Science (Advanced)

....

This unit provides a basic understanding of human anatomy. It undertakes this by utilising a systems approach (in contrast to a regional approach), emphasising the special relationship between form and function.

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700097.1 Introduction to Anatomy (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Biology

Equivalent Units

300778 - Introduction to Anatomy, 300825 - Introduction to Anatomy

Special Requirements

Students must be enrolled at UWSCollege

....

This unit provides a basic understanding of human anatomy. It undertakes this by utilising a systems approach (in contrast to a regional approach), emphasising the special relationship between form and function.

400882.2 Introduction to Biomechanics

Credit Points 10 **Level** 2

Assumed Knowledge

It is assumed that students have knowledge of structural and functional anatomy of the human body. Students also need to be able to apply basic concepts in maths and physics.

Equivalent Units

400139 - Biomechanics & Kinesiology

Special Requirements

Students must be enrolled in courses 4658 - Bachelor of Health Science (Sport and Exercise Science), 4661 - Bachelor of Health Science/Master of Podiatric Medicine and 4662 - Bachelor of Health Science/Master of Physiotherapy.

....

The study of biomechanics, the science that examines the forces acting upon a structure and the effects of these forces, is essential for understanding how the human body moves during daily activities, exercise and sport. It is also important when considering where problems may arise with human movement, such as with disease processes, over exercising and injury and postural pathology. This unit is designed to introduce the student to biomechanics by studying: the mechanical principles of human movement: balance and equilibrium: mechanical factors involved in tissue type and motion; and the analysis of human movement.

200184.3 Introduction to Business Law

Credit Points 10 **Level** 1

Corequisite

200336.3 Business Academic Skills

Equivalent Units

LW110A - Business Law, F1012 - Introduction to Business Law, 61511 - Introduction to Legal Principles, 700004 - Introduction to Business Law (UWSC), 700079 - Introduction to Business Law (Creative Industries)

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major. Students in courses 2739 Bachelor of Business and Commerce and 2741 Bachelor of Business and Commerce (Advanced Business Leadership) must complete the co-requisite unit 200336 - Business Academic Skills.

....

This is an introductory law unit designed to introduce the fundamentals of law in a commercial context. The unit introduces students to the basic principles of law and the legal system as well as examining some of the major areas of law that impact on commercial dealings. This unit examines the structure of the legal system, the way law is made and the main areas of law relevant to starting and running a business including contracts, torts and consumer protection.

700004.1 Introduction to Business Law (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

200184 - Introduction to Business Law 700079 - Introduction to Business Law (Creative Industries)

Special Requirements

Students must be enrolled at UWS College.

....

This is an introductory law unit designed to introduce the fundamentals of law in a commercial context. The unit introduces students to the basic principles of law and the legal system as well as examining some of the major areas of law that impact on commercial dealings. This unit examines the structure of the legal system, the way law is made, and the main areas of law relevant to starting and running a business including contracts, torts and consumer protection.

300822.1 Introduction to Earth Science

Credit Points 10 **Level** 1

Equivalent Units

300232 - Introduction to Earth Science

....

The unit covers the nature of the Earth's surface and its physical properties; properties and behaviour of the crust and interior of the Earth; mineral products, especially energy, water and mineral products; maps and geological structures; minerals, rocks and fossils. This Unit will give you a broad appreciation of the Earth, and the Earths' changing and dynamic properties and evidence spanning a geological time scale of billions of years. We will examine the way the Earth works, and our place in the system.

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University of Western Sydney

700114.1 Introduction to Engineering Business Management (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit will cover aspects of modern engineering business management. This unit of study will provide students an opportunity to look at small, medium and large Engineering businesses and the role of the Engineering Associates in those organisations.

100964.2 Introduction to Film Studies

Credit Points 10 **Level** 2

Equivalent Units

VP212A - Introduction to Film Studies.

Special Requirements

Successful completion of 40 credit points at Level 1.

....

The unit will introduce students to the key theoretical strands of film studies and key concepts in the analysis of film. The unit will explore techniques of narrative, performance, genre, realism and spectatorship, as well as introducing methods to analyse the use of editing, cinematography and sound. A case study of several key historical film movements or genres will introduce students to the study of cinema in its cultural contexts. The unit will also address the transformations in screen cultures as a result of digital technologies and new media.

300566.2 Introduction to Health Informatics

Credit Points 10 **Level** 2

Assumed Knowledge

Familiarity with use of common business software, eg word proceeing, spreadsheets, database.

....

This introductory unit aims to give the student an insight into the key knowledge and skill set required in the emerging domain of Health Informatics. Critical topics include: The Australian healthcare system, health care improvement modelling, health information systems and management, paper-based v's electronic health records, clinical documentation and data quality, health information management, consumer information security, privacy and ethics, decision support and clinical delivery support systems, healthcare data representation and interchange standards, telehealth and Information Communication technologies (ICT). This will be complemented by practical exercises and assessment support sessions. Through these experiences students will gain an understanding of the application of ICT to the healthcare domain and the skills necessary to play a pivotal role in the design and delivery of healthcare systems and health information management.

300361.3 Introduction to Human Biology

Credit Points 10 **Level** 1

Equivalent Units

400130 - Human Medical Sciences 1, 25009 - Physical and Biological Sciences 1, E1231 - Human Biology 1

Incompatible Units

300825 - Introduction to Anatomy, 300818 - Introduction to Physiology

Special Requirements

Closed footwear is required in the workshops.

....

This unit gives a basic understanding of the human body and introduces the scientific and medical terminology used for anatomy, physiology and biochemistry. It deals with gross structure and microscopic structure of the human body. It also examines microbial organisms, their classification, how they differ from eukaryotic cells and how our body defends against them. Where appropriate, examples of functional diseases will be discussed.

700061.1 Introduction to Human Biology (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300361 - Introduction to Human Biology

Special Requirements

Students must be enrolled at UWS College

....

This unit gives a basic understanding of the human body and introduces the scientific and medical terminology used for anatomy, physiology and biochemistry. It deals with gross structure and microscopic structure of the human body. It also examines microbial organisms, their classification, how they differ from eukaryotic cells and how our body defends against them. Where appropriate, examples of functional diseases will be discussed.

300134.2 Introduction to Information Technology

Credit Points 10 **Level** 1

Equivalent Units

B1582 - Introduction to Computers, J1742 - Computer Fundamentals, 61211 - Information Technology

Special Requirements

Permission required for students enrolled in 3562 Bachelor of Science (Advanced).

....

This introductory unit gives students an insight into the history, structure, operations and uses of computers, and their impact on society. This will be complemented by hands-on use of computers and popular application software packages in a graphical user interface environment. Students gain a basic understanding of the uses of computers, and the skills necessary to use popular

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applications software, including word processing, spreadsheet and database packages, and Internet tools and services.

200591.2 Introduction to International Business

Credit Points 10 **Level** 1

Equivalent Units

61128 - International Business and Asian Environment

....

This unit introduces students to the nature of international business operations in the world economy. The first part focuses on the basic concepts and theories of international trade, investment, and foreign exchange which form the foundation of a firm's international business activities. The second part is devoted to the economic, cultural, political and ethical environments and their effects on a firm's international business operations. The third and last part provides an overview of how the functional areas of business i.e. Marketing, production, human resource and finance are conducted in and affected by the multifaceted environment of an internationally oriented firm.

100194.2 Introduction to Interpreting

Credit Points 10 **Level** 1

Equivalent Units

A1335 - Interpreting 1, A1336 - Interpreting 2, A3395 - Introduction to Interpreting

....

This is a core unit for students in the Bachelor of Arts (Interpreting and Translation) course and an elective foundation unit for language key field of study in the BA. It introduces students to the theory and practice of Interpreting. Lectures are held in English for students of all the languages available. The tutorials are language specific in Arabic, Japanese, Mandarin or Spanish. This unit requires native or near-native proficiency in English and one of the languages offered in the unit.

400244.2 Introduction to Leisure and Recreation Theory

Credit Points 10 **Level** 1

....

This unit uses a multidisciplinary approach to explore the different meanings of leisure and recreation. It explores the social psychology of leisure and recreation in addition to the principles and processes of leisure education and leisure counselling. This unit provides the knowledge base that underpins the practical skills of leisure and recreation assessment, program planning and evaluation for a variety of client groups.

401045.1 Introduction to Midwifery Practice Experience

Credit Points 10 **Level** 1

Corequisite

401030.1 Midwifery Knowledge 1

Special Requirements

Students must be enrolled in course 4684 - Bachelor of Midwifery.

....

In this unit students will learn the necessary midwifery skills for the provision of woman-centred antenatal care. In a simulated practice environment students will gain practical skills to provide midwifery care to the woman and her supportive others during pregnancy. This unit will also focus on preparing students for clinical placement. The importance of work health and safety and effective communication and documentation will be reinforced. This unit will include recruitment of women for the continuity of care experience.

400776.3 Introduction to Nursing Practice

Credit Points 20 **Level** 1

Incompatible Units

400640 - Foundations of Nursing Practice, 400462 - Medical-Surgical Nursing Therapeutics

Special Requirements

Restrictions on clinical practicum placements because of safety and professional issues dealing with the public. Students must be enrolled in the, the 4643 Bachelor of Nursing (Graduate Entry) and must have met Special Requirements for this course. It is not essential for enrolment however the following requirements will need to be fulfilled prior to any clinical placements: Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010, Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate, Adult Health Immunisation Schedule, Code of Conduct Agreement, First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit introduces the student to nursing concepts, principles and skills that identify, promote, maintain and support health and well being across the lifespan. Students will also acquire knowledge of nursing concepts and practices that support people who are affected by health breakdown. This introductory unit prepares students for entry into the second year of the Bachelor of Nursing 4642 degree course.

400160.3 Introduction to Occupational Therapy

Credit Points 10 **Level** 1

Special Requirements

This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy.

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....

This unit introduces students to the profession of occupational therapy, conceptual foundations underpinning the profession, and areas of clinical practice. Students will learn about the important and unique contribution made by occupational therapists in peoples lives to promote health and well-being. The important role of occupation in daily life will be discussed. In particular, this unit presents an overview of how occupational therapy reduces activity limitations people may have, and in doing so enhances the social participation for people of all ages and abilities. The problem solving process used by occupational therapists to assist clients will be introduced.

200042.3   Introduction to Operations Research

Credit Points 10 **Level** 2

Assumed Knowledge

HSC Mathematics or equivalent.

....

This unit introduces the ideas of systems and their mathematical modelling, with special reference to the allocation, inventory, scheduling, queuing and other processes taking place within social systems. It introduces modelling and heuristic problem solving techniques and goes on to introduce the standard techniques of linear programming, network analysis, critical path analysis, inventory control and simulation. Throughout, an emphasis is placed upon the mathematical development of algorithms and their computerisation.

300818.1   Introduction to Physiology

Credit Points 10 **Level** 1

Equivalent Units

300753 - Introduction to Human Physiology, 300620 - Physiology 1

Incompatible Units

300361 - Introduction to Human Biology

....

This unit introduces the concept of homeostasis and critically examines examples of how the body systems are regulated and homeostatically controlled. The unit uses a body-systems approach to examine the physiology of tissues, organs and systems in order to develop an integrated view of the regulated functioning of the human body.

700098.1   Introduction to Physiology (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300753 - Introduction to Human Physiology, 300620 - Physiology 1, 300818 - Introduction to Physiology

Incompatible Units

300361 - Introduction to Human Biology, 700061 - Introduction to Human Biology (UWSC)

Special Requirements

Students must be enrolled at UWSCollege in either 7003 Diploma in Science or 7009 Diploma in Science Fast Track.

....

This unit introduces the concept of homeostasis and critically examines examples of how the body systems are regulated and homeostatically controlled. The unit uses a body-systems approach to examine the physiology of tissues, organs and systems in order to develop an integrated view of the regulated functioning of the human body.

400906.2   Introduction to Physiotherapy Practice

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in course 4662 - Bachelor of Health Science/Master of Physiotherapy.

....

This unit introduces students to the concept of physiotherapy as a profession and its scope of practice in Australia. It includes exploration of the roles and responsibilities of physiotherapists in the context of the changing health environment. Ethical issues and relevant legal and regulatory requirements will be discussed. In addition, students will be introduced to complexity of normal development, and its relation to human movement. Finally students will learn therapeutic techniques of soft tissue mobilisation. Unit material is presented to students in three blocks.

400905.2   Introduction to Podiatry

Credit Points 10 **Level** 1

Special Requirements

Podiatry specific - students will be participating in podiatry related knowledge and skills that apply to podiatric practice units and designed to be an integrated part of the suite of units where one unit builds upon the competencies that complement units in Year 2, 3 and 4.

....

The broad aim of this unit is to introduce the work of podiatrists in health care and explain the important role of podiatric services in the community. Students will develop basic skills in dealing with professional and health issues. The focus will primarily be on areas designed to prepare students for incorporating the correct clinical protocols for infection control and to identify relevant clinical skills involving dermatology, functional anatomy, gait, cursory examinations and communication.

101251.2   Introduction to Psychoanalysis

Credit Points 10 **Level** 2

Equivalent Units

SS245A - Introduction to Psychoanalysis

Special Requirements

Successful completion of 60 credit points at Level 1.

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....

This unit provides an introduction to the work of Sigmund Freud by examining central concept and methodologies within Freudian theory. The unit is intended to provide a broad overview of psychoanalysis. In this unit particular attention is paid to key terms such as the unconscious and repression, as well as to the early case histories and Freud's later 'structural' models of the mind. Attention is paid also to critical assessments of psychoanalysis and to its status as a science.

300733.2 Introduction to Structural Engineering

Credit Points 10 **Level** 2

Prerequisite

300040.2 Mechanics of Materials

Equivalent Units

85006 - Introduction to Structural Engineering

....

This unit covers the basic concepts in analysing and designing simple structural members. It consists of the fundamentals of structural analysis, concrete structures and steel structures

700115.1 Introduction to Structural Engineering (UWSC Assoc Deg)

Credit Points 10 **Level** 2

Prerequisite

700116.1 Mechanics of Materials (UWSC Assoc Deg)

Equivalent Units

300733 - Introduction to Structural Engineering

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit covers the basic concepts in analysing and designing simple structural members. It consists of the fundamentals of structural analysis, concrete structures and steel structures.

100195.2 Introduction to Translation

Credit Points 10 **Level** 1

Equivalent Units

A1345 - Translation 1, A1346 - Translation 2, A3394 - Introduction to Translation

....

This is a core unit for students in the Bachelor of Arts (Interpreting and Translation) course and an elective foundation unit for language key field of study in the BA. It introduces students to translation theory and practice. Lectures are held in English for students of all languages. The tutorials are language specific in Arabic, Japanese, Mandarin and Spanish. The unit is only available to students with a high level of proficiency (native or near-native level) in one of the languages offered. The

languages offered, subject to demand, are: Arabic, Chinese, Japanese, and Spanish.

300808.1 Introductory Chemistry

Credit Points 10 **Level** 1

Assumed Knowledge

General Mathematics or equivalent.

Equivalent Units

300469 - Introductory Chemistry

Incompatible Units

300800 - Essential Chemistry 1

Special Requirements

Students require safety goggles, laboratory coat and laboratory book.

....

This unit is an introduction to the fundamental chemistry principles and skills required for students studying courses in food, nutrition, and the environment. The emphasis is on the structure and reactivity of substances and mixtures in different chemical environments, and exposed to different forms of electromagnetic radiation. The focus is on chemistry in aqueous environments and the atmosphere, and studied using a systems approach.

300808.2 Introductory Chemistry

Credit Points 10 **Level** 1

Assumed Knowledge

General Mathematics or equivalent.

Equivalent Units

300469 - Introductory Chemistry

Incompatible Units

300800 - Essential Chemistry 1

Special Requirements

Students require safety goggles, laboratory coat and laboratory book.

....

This unit is an introduction to the fundamental chemistry principles and skills required for students studying courses in food, nutrition, and the environment. The emphasis is on the structure and reactivity of substances and mixtures in different chemical environments, and exposed to different forms of electromagnetic radiation. The focus is on chemistry in aqueous environments and the atmosphere, and studied using a systems approach.

300469.2 Introductory Chemistry

Credit Points 10 **Level** 1

Incompatible Units

300224 - Chemistry 1, 300554 - Principles of Chemistry, 300469 - Introductory Chemistry, CH101A - Introductory Chemistry 1.1D, 80800 - Introductory Chemistry 1

....

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In 2012 this unit replaced by 300808 Introductory Chemistry. This unit is an introduction to the fundamental chemistry principles and skills required for students studying courses in food, nutrition, and the environment. The emphasis is on the structure and reactivity of substances and mixtures in different chemical environments, and exposed to different forms of electromagnetic radiation. The focus is on chemistry in aqueous environments and the atmosphere, and studied using a systems approach.

300809.1 Introductory Geochemistry

Credit Points 10 **Level** 1

Prerequisite

300822.1 Introduction to Earth Science

Equivalent Units

300613 - Introductory Geochemistry: Earth, Resources and Environments

Special Requirements

Students are required to wear enclosed footwear, safety goggles and lab coat in this unit.

....

The exploration for resources requires knowledge of rocks and minerals as chemical systems. This unit investigates the chemical aspects of ore genesis, minerals and phase equilibria, and biogeochemistry of the elements. The chemical principles for the formation of Earth are detailed and applied to real-world examples. Field and laboratory work will include the acquisition, presentation, and use of geochemical data. A three day field trip to Burraga will be undertaken during the mid-session break.

100873.3 Inventing Modernity

Credit Points 10 **Level** 1

Equivalent Units

63048 - Philosophy of the Enlightenment, B1892 - Political Thought

....

A historical survey of the development of modern European society and politics. A central focus will be the relationship of early modern and contemporary understandings of politics, society, nature and the individual.

300918.1 Invertebrate Biology

Credit Points 10 **Level** 3

Prerequisite

300802.1 Biodiversity OR **300816.1** Cell Biology

Equivalent Units

300334 - Invertebrate Biology

Special Requirements

Students must have covered footwear for practical classes and field excursions; laboratory coat and safety glasses.

....

Invertebrates are the most diverse and abundant organisms in aquatic and terrestrial environments. Due to their key role in many ecosystems, biologist E. O. Wilson coined the phrase of invertebrates as the 'little things that run the world'. Besides their ecological importance, many invertebrates are useful to humans, whereas others are harmful to agriculture, human and veterinary health. This unit highlights invertebrate diversity and life histories as well as their key ecological and economic importance. It also includes hands-on laboratory and field studies. This unit is designed for students with career pathways in science (e.g. animal, environmental, forensic and medical sciences) as well as agriculture, environmental management and education.

200057.3 Investment Management

Credit Points 10 **Level** 3

Assumed Knowledge

200488 - Corporate Financial Management

....

This unit describes the theory and practice of investment decision making. The general objective of the unit is to introduce students to the tools of financial decision making by providing a conceptual framework within which the key financial decision of investment can be analysed. The objectives of this unit are as follows: To provide an overview of the theory of investing in Australian Financial Markets: Equity Markets in Australia, Stock Exchange Trading, Taxation, Australian Debt Markets: Money and Bond Markets. International Investment Environment Foreign Exchange, Equity Debt and Property Market; To apply theoretical concepts of investing to practical applications; Evaluate Asset Allocation, Security selection and Security analysis in Australian Derivatives Markets, International Derivatives Market; Describe Equity Valuation Models, Macro and Industry Analysis of Share Markets; Futures and Forward Contracts. Characteristics of futures/forwards; Analyse Qualitative and Quantitative Stock Selection; Be knowledgeable about Investor Preferences and Passive and Active Portfolio Management; Describe the risk-return trade-off and know the meaning of efficient markets.

101467.2 Islam in Southeast Asia

Credit Points 10 **Level** 3

Equivalent Units

63213 - Islam in Asian and World Politics

Special Requirements

Successful completion of 60 credit points

....

Islam is a significant feature of Southeast Asia's past and present. Employing methodologies and insights drawn primarily from history, political science, and anthropology, this unit explores Islam's place in and contribution to contemporary Southeast societies and politics, as well as its history in the region. Major themes to be explored include: the debates about Islam's spread to Southeast Asia and its interaction with the region's established socio-religious features, the colonial experience, Islam's often contested place in the national life of Southeast Asian nations, its past and ongoing links with the rest of the

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Muslim world, as well as contemporary issues associated with the War on Terror and conflicts in Muslim societies.

101463.4 Islam in the Modern World

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit introduces students to Islam an its adherents within contemporary globalcontext. It looks at key Muslim intellectuals from the 19th Century till the present and examines their attempts to come to terms with modernity as a Western project while addressing critical issues facing Islam. Areas for consideration include: renewal and reform; the impact of colonialism and globalisation on Muslim discourse; independent judgment (ijtihad) versus emulation (taqlid); and issues associated with civil society. Students will also explore the challenge of shaping a Muslim identity in the modern world in the context of key Muslim institutions and social movements.

101822.3 Islam in the West

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

The unit focuses on the question of Muslim presence in the West with reference to the dynamics of inclusion and exclusion. Its aim is to enable students to look at the question of Muslim presence in terms of an action-reaction phenomenon in which different outlooks, ideas, institutions and nodes of information and authenticity interact to create an environment in which identities are developed. These identities then go on to shape the cooperative and conflictual relationships between different subsections of Muslim minorities and the majority non-Muslim Western states and societies. While focusing on the contemporariness of the question, the unit would locate the study of Muslim presence in the West in an historical context by providing an understanding of how Muslim-Western contacts shaped the nature of their relationship in the past. Then, the unit would move on to contrasting the changes before and after 9/11 with reference to a set of ideas, institutions and contexts.

101468.2 Islam, Media and Conflict

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

Provides students with an understanding of global, regional and local news media production and representations of Islam and Muslim societies. It discusses new, emerging and alternative forms of media discourses of conflict in the Muslim world, and analyses selected news reports as forms of case studies. Taking the notion of 'Orientalism' as its starting point, the subject/unit critically examines the extent to which the mediatisation of conflict impacts relations

between Islam and the West vis-a-vis debates on Orientalism, 'Asian values' and Islamic world views.

101465.2 Islamic Law in a Changing World

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points including either 101462 - Understanding Islam and Muslim Societies or 101464 - Great Texts of Islam: Quran and Hadith or equivalent.

....

This unit introduces students to Islamic legal theory, its sources and principles, and its application by different schools and scholars to derive religious verdicts. Students will study efforts to 'streamline' Islamic law through a number of Sunni and Shiite schools, various conceptions of shari'ah, and modern attempts at law reform through dynamic scholarship and ijtihad (independent judgment). Upon completion, students should be able to explain developments in Islamic legal thought within their socio-historical contexts, and identify key debates among Muslim scholars. Using current case studies, students will also study Islamic law issues affecting Muslims today, especially Muslim minorities.

100130.2 Italian 101

Credit Points 10 **Level** 1

....

This is a beginners level unit in Italian intended for those with little or no knowledge of the language. It aims to introduce students to the four skills of listening, speaking, reading and writing in elementary Italian. The unit includes a socio-cultural component which will examine aspects of contemporary Italy and its culture with a particular emphasis on the Italian community in Australia.

100131.2 Italian 102

Credit Points 10 **Level** 1

....

This is a post-beginners level unit in Italian intended for students with prior knowledge of the language. It aims to advance the development of the skills of aural comprehension, speaking, reading and writing acquired in Italian 1. The unit will provide students with the opportunity to extend their communication skills in Italian and provide them with additional lifelong language-learning strategies. It includes a continuation of the study of elements of contemporary Italy and its culture with a particular emphasis on the Italian community in Australia.

100138.2 Italian 303: Contemporary Italy in European and International Contexts

Credit Points 10 **Level** 3

....

This unit provides an overview of contemporary Italian culture and society and Italy's role within the European Community, as well as its cultural and trade relations with other areas of the world, specifically including Australia.

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These will be examined particularly through a critical appraisal of current print, radio and audio-visual media.

100140.1 Italian 305: Modern Literature

Credit Points 10 **Level** 3

....

This unit provides simultaneously an introduction to the social and cultural history of Italy from the Napoleonic era to the present day, and to the principal literary movements of the modern period. The unit is based on the joint study of a selection of representative narrative and poetic texts and appropriate background readings.

100141.2 Italian 306: Classical Literature

Credit Points 10 **Level** 3

....

This unit is an option within the Italian major program which provides an introduction to the social and cultural history of Italy from Roman times to the eighteenth century, and to the principal literary movements of this period. The study of classical Italian literature, beginning from the Middle Ages, is placed clearly in its historical context. The unit is based on the joint study of a selection of representative texts and appropriate background readings.

100143.2 Italian 308: Italian Cinema

Credit Points 10 **Level** 3

....

This is an elective unit for students with advanced language skills in Italian. Film is one of the most subtle and powerful means of communication in the twentieth and current centuries, and the moving image dominates popular consciousness on a global scale. This unit is designed to enable students to explore the different genres that are characteristic of Italian cinema, and to understand how these reflect the social, political and cultural changes in Italy in this and the last century.

100085.2 Japanese 101

Credit Points 10 **Level** 1

....

This unit introduces students to the four skills (listening, speaking, reading and writing) in basic Japanese. Students acquire the skill to carry out basic communicative transactions in speech, with the necessary grammatical structures and vocabulary. Students learn to read and write hiragana and katakana (the syllable characters used to spell words) characters.

100086.2 Japanese 102

Credit Points 10 **Level** 1

Assumed Knowledge
100085 Japanese 101 or equivalent knowledge

....

This unit builds on the skills developed in Japanese 101. It aims to have students increase the range of communicative transactions in the four skills and to acquire more complex grammatical structures and vocabulary. A further 110 kanji characters are taught in this subject.

100092.3 Japanese 302

Credit Points 10 **Level** 3

Assumed Knowledge
Japanese 301 or equivalent knowledge.

....

After covering basic Japanese grammar in previous units, this unit is designed to further improve and extend students' competence in Japanese. It enhances students' knowledge and comprehension of Japanese, and develops their ability to apply this knowledge and comprehension to written and spoken Japanese. In addition to the language skills, this unit covers further aspects of Japanese culture through the recommended texts and class discussions.

100093.2 Japanese 303: Contemporary Culture and Society

Credit Points 10 **Level** 3

....

This unit aims at providing students with a valuable insight into modern Japanese society and culture through print and audiovisual media. In addition, the unit aims to enhance students' skills in the language at an advanced level, especially speaking and listening.

100094.1 Japanese 304: Discourse in Japanese

Credit Points 10 **Level** 3

....

This unit is designed to enable post-intermediate students of Japanese to learn and practice advanced level discourse in Japanese in a range of situations, registers and levels of formality.

100096.2 Japanese 306: Japanese for Business

Credit Points 10 **Level** 3

....

This unit prepares students to function effectively in business and commercial contacts with Japanese people. It will encompass the study of various types of business documents and spoken language appropriate to a range of business-related situations. It will also cover aspects of business culture and conventions.

100098.1 Japanese 308: Japanese Textual Studies

Credit Points 10 **Level** 3

....

Nihonjinron (the theory of uniqueness of the Japanese) has been discussed for many decades. Some scholars advocate the need for re-examining the concept, while others still hold the view that the Japanese have different sensitivities and values from people with other ethnic

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backgrounds. This unit aims to develop students' awareness of some of the arguments on this topic by reading relevant texts written by sociologists, anthropologists and novelists. Students will have opportunities to examine, analyse, discuss and evaluate texts from a range of authors. Texts are all written in contemporary Japanese.

100001.3 Keeping the Past

Credit Points 10 **Level** 2

Equivalent Units

53403 - Keeping the Past

Special Requirements

Successful completion of 40 credit points at Level 1

....

Legislation requires the preservation of natural, built and movable heritage, but choices about what to keep often produce controversy and reveal starkly varying opinions. Physical deterioration can mean that some things can not be kept. The historian's investigation of places and objects is an important part of the assessment process and the evaluation of what might be kept and why. Parramatta has a rich selection of heritage places. How does heritage fit in a modern CBD? Site visits around the city will identify archaeological and architectural heritage to promote discussions, visits to nearby museums will put these places in context and historical research will unravel their meanings.

300035.3 Kinematics and Kinetics of Machines

Credit Points 10 **Level** 2

Prerequisite

200237.3 Mathematics for Engineers 1 AND **300463.2** Fundamentals of Mechanics

Equivalent Units

86222 - Engineering Mechanics 2

....

In this unit rigid body kinematics is analysed from the freedom-and-constraints point of view and graphical approaches to velocity and acceleration analyses are covered. The unit looks at how one or more particles move in one, two or three dimensions and how forces cause these movements. It also looks at how forces and couples cause the movement of a single rigid body in two and three dimensions. The movement of multi-body mechanisms and gear trains, and the geometry of gear teeth and cams are studied.

300883.1 Laboratory Quality Management

Credit Points 10 **Level** 3

Assumed Knowledge

A demonstrated understanding of and competence with laboratory techniques in analytical chemistry or microbiology, corresponding to successful completion of a Level 2 Microbiology or Analytical Chemistry unit.

Equivalent Units

300656 - Laboratory Quality Management

Special Requirements

Successful completion of 60 credit points at level 1 and 40 credit points at level 2 in Bachelor of Science or Bachelor of Medical Science of Bachelor of Natural Science.

....

This capstone unit is directed towards the accreditation of a laboratory for chemical, microbiological or forensic testing, using the standards that are applicable in industry. The unit focuses upon the importance and coordination of good laboratory management, teamwork, calibration, record keeping and laboratory manuals. Groups of students are required to develop, establish and operate a comprehensive Laboratory Quality Management system designed for a specific class of chemical, microbiological or forensic test. The students' technical competence and quality system are then assessed using the guidelines laid down by the National Association of Testing Authorities (NATA).

300138.3 LAN Workshop

Credit Points 10 **Level** 2

Assumed Knowledge

Ability to list, discuss and compare the elements of information coding and signal transmission. List, describe and explain the elements and functional relationships of communications hardware and software. Identify, locate, distinguish and describe the individual hardware components of a personal computer (PC) and explain their purpose, functions and operations. Install PC components, devices and peripherals in accordance with installation procedures and operational standards.

....

This unit provides students with the knowledge and skills necessary to install, test, tune, customise, repair and maintain networking hardware and software necessary to create a Local Area Network (LAN). Students also learn how to administer a LAN by setting up user accounts, access privileges, security procedures and back-up/recovery procedures.

300875.1 Landuse and the Environment

Credit Points 10 **Level** 2

Equivalent Units

300624 - Landuse and the Environment

....

This unit will assist students develop a sound framework for the analysis of land use and its interactions with the environment. The skills gained will assist in the evaluation of land use at various levels from household to international level. Particular emphasis will be placed on students gaining a sound conceptual framework from which to examine sustainability at the environmental, economic, social, and production levels. Emphasis will be placed on the use of ecological footprinting as a tool.

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University of Western Sydney

101699.2 Language and Communication Skills 2A: Arabic

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Arabic Language at Level 1.

Incompatible Units

100043 - Arabic 201, 101267 - Language Skills 203: Listening and Speaking

....

In 2013 this unit replaced by 102019 - Arabic 202. This is a post-beginner unit for intermediate level study of Modern Standard Arabic suitable for Post HSC entry. It aims to develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal styles of speech. However, the special focus of this unit is on developing, in particular, listening and speaking skills in the Arabic language. Cultural and social understanding is also fostered through research projects on specific cultural or social aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit.

101700.2 Language and Communication Skills 2A: Chinese

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Chinese Language at Level 1.

Incompatible Units

100058 - Chinese 201, 101267 - Language Skills 203: Listening and Speaking

....

In 2013 this unit replaced by 102024 - Chinese 201 and 102025 - Chinese 202. This is post-beginner unit for intermediate level study of modern Chinese (Mandarin) language and its culture suitable for Post HSC entry. It aims to develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal styles of speech. However, the special focus of this unit is on developing, in particular, listening and speaking skills in the Chinese language in relation to oral aspects of contemporary culture and society of China. Cultural and social understanding is also fostered through research projects on specific cultural or social aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit. The knowledge of Chinese characters is increased to 300 characters for reading and 200 for writing.

101701.2 Language and Communication Skills 2A: Italian

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Italian Language at Level 1.

Incompatible Units

100132 - Italian 201, 101267 - Language Skills 203: Listening and Speaking

....

In 2013 this unit replaced by 102013 - Italian 201 and 102014 - Italian 202. This is post-beginner unit for intermediate level study of modern Italian language suitable for Post HSC entry. It aims to develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal styles of speech. However, the special focus of this unit is on developing, in particular, listening and speaking skills in the Italian language in relation to oral aspects of contemporary culture and society of Italian-speaking countries. Cultural and social understanding is also fostered through research projects on specific cultural or social aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit.

101702.2 Language and Communication Skills 2A: Japanese

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Japanese Language at Level 1.

Incompatible Units

100087 - Japanese 201, 101267 - Language Skills 203: Listening and Speaking

....

In 2013, this unit replaced by 102028 - Japanese 201 and 102029 - Japanese 202. This is post-beginner unit for intermediate level study of modern Japanese language and its culture suitable for Post HSC entry. It aims to develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal styles of speech. However, the special focus of this unit is on developing, in particular, listening and speaking skills in the Japanese language in relation to oral aspects of contemporary culture and society of Japan. Cultural and social understanding is also fostered through research projects on specific cultural or social aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit. The knowledge of kanji is increased to 260 characters.

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University of Western Sydney

101703.2 Language and Communication Skills 2A: Spanish

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Spanish Language at Level 1.

Incompatible Units

100147 - Spanish 201, 101267 - Language Skills 203: Listening and Speaking

....

In 2013 this unit replaced by 102032 - Spanish 201 and 102033 - Spanish 202. This is post-beginner unit for intermediate level study of modern Spanish language suitable for Post Beginners HSC entry. It aims to develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal styles of speech. However, the special focus of this unit is on developing, in particular, listening and speaking skills in the Spanish language in relation to oral aspects of contemporary culture and society of Spanish-speaking countries. Cultural and social understanding is also fostered through research projects on specific cultural or social aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit.

101704.2 Language and Communication Skills 2B: Arabic

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Arabic Language at Level 1.

Incompatible Units

100044 - Arabic 202, 101268 - Language Skills 204: Reading and Writing

....

In 2013 this unit replaced by 102021 - Arabic 203 and 102022 - Arabic 204. This is post-beginner unit for intermediate level students learning Modern Standard Arabic and culture. This unit is suitable for Post HSC entry. It aims to further develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal styles of oral and written skills. However, the special focus of this unit is on developing, in particular, reading comprehension, and writing skills over a range of written registers. The content for reading and writing activities is selected from contemporary materials e.g. Daily exchanges in writing, book/film reviews, mini dramas, magazines as well as websites in relation to textual aspects of contemporary culture and society of the Arabic speaking world. This unit also fosters cultural and social understanding by presenting aspects of contemporary cultures and societies that use the language as well as through research work on specific socio-cultural aspects that are of interest to the student.

101705.2 Language and Communication Skills 2B: Chinese

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Chinese Language at Level 1.

Incompatible Units

100059 - Chinese 202, 101268 - Language Skills 204: Reading and Writing

....

In 2013 this unit replaced by 102027 - Chinese 204. This is post-beginner unit for intermediate level students of modern Chinese (Mandarin) language and its culture. This unit is suitable for Post HSC entry. It aims to further develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal styles of speech. However, the special focus of this unit is on developing, in particular, reading comprehension, and writing skills over a range of written registers. The content for reading and writing activities is selected from contemporary materials e.g. Daily exchanges in writing, book/film reviews, mini dramas, magazines as well as websites in relation to textual aspects of contemporary culture and society of China. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit. The knowledge of Chinese simplified characters will increase to 400 for reading and 260 for writing.

101706.2 Language and Communication Skills 2B: Italian

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Italian Language at Level 1 or equivalent knowledge.

Incompatible Units

100133 - Italian 202, 101268 - Language Skills 204: Reading and Writing

....

In 2013 this unit replaced by 102018 - Italian 203 and 102023 - Italian 204. This is a Level 2 unit in the Italian major within the Languages Key Program of the Bachelor of Arts. This unit is suitable for Post HSC entry. It aims to further develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal styles of the language. However, the special focus of this unit is on developing, in particular, reading comprehension, and writing skills over a range of written registers. This unit also fosters cultural and social understanding by presenting aspects of contemporary cultures and societies that use the language as well as through research work on specific socio-cultural aspects that are of interest to the student. The content for reading and writing activities is selected from contemporary materials e.g., daily exchanges in writing, book/film reviews, mini dramas, magazines as well as websites in relation to textual aspects of contemporary culture and society of Italy. A range of CALL (Computer

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Assisted Language Learning) activities are utilised for this unit. By the end of this unit, students can read and write approximately 3000 words.

101707.2 Language and Communication Skills 2B: Japanese

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Japanese Language at Level 1.

Incompatible Units

100088 - Japanese 202, 101268 - Language Skills 204: Reading and Writing

....

In 2013, this unit replaced by 102030 - Japanese 203 and 102031 - Japanese 204. This is a Level 2 unit in the Japanese major within the Languages Key Program of the Bachelor of Arts. This unit is suitable for Post HSC entry. It aims to further develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal styles of speech. However, the special focus of this unit is on developing, in particular, reading comprehension, and writing skills over a range of written registers. This unit also fosters cultural and social understanding by presenting aspects of contemporary cultures and societies that use the language as well as through research work on specific socio-cultural aspects that are of interest to the student. The content for reading and writing activities is selected from contemporary materials e.g., daily exchanges in writing, book/film reviews, mini dramas, magazines as well as websites in relation to textual aspects of contemporary culture and society of Japan. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit. By the end of this unit, students can read and write approximately 380 kanji.

101708.2 Language and Communication Skills 2B: Spanish

Credit Points 20 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Spanish Language at Level 1.

Incompatible Units

100148 - Spanish 202, 101268 - Language Skills 204: Reading and Writing

....

In 2013, this unit replaced by 102034 - Spanish 203 and 102035 - Spanish 204. This is an intermediate unit for students of Spanish. This unit also fosters cultural and social understanding by presenting aspects of contemporary cultures and societies that use the language as well as through research work on specific socio-cultural aspects that are of interest to the student. This is post-beginner unit for intermediate level students of Spanish language and culture. This unit is suitable for Post HSC entry. It aims to further develop all four core skills, listening, speaking, reading and writing, towards more sophisticated communicative transactions ranging from casual to formal

styles of speech. However, the special focus of this unit is on developing, in particular, reading comprehension, and writing skills over a range of written registers. The content for reading and writing activities is selected from contemporary materials e.g. Daily exchanges in writing, book/film reviews, mini dramas, magazines as well as websites in relation to textual aspects of contemporary culture and society of China. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit.

101709.2 Languages and Grammatical Concepts 3A: Arabic

Credit Points 20 **Level** 3

Assumed Knowledge

Successful completion of 40 credit points of Arabic Language at Level 2.

Incompatible Units

100047 - Arabic 301, 101269 - Languages 303: Grammatical Concepts Across Languages

....

This is an advanced Level 3 language and linguistics unit for students of modern Arabic. Lectures for the grammatical concepts component are held in English for students of all languages while other activities are language-specific. The aim of the unit is twofold. On the one hand it aims, to develop a practical and theoretical understanding of the ways in which major concepts used in everyday speech and writing are mapped and organized in the lexicon and the grammar of human languages, and how these forms develop in learners and users. On the other hand, it aims to develop advanced comprehension and production skills in Arabic language, including higher stages optional structures, through critical examination of contemporary and historical text and discourse samples from a variety of registers. An understanding of contemporary Arab culture and society is also fostered through comparative research projects on specific cultural, social and/or linguistic, aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit.

101710.2 Languages and Grammatical Concepts 3A: Chinese

Credit Points 20 **Level** 3

Assumed Knowledge

Successful completion of 40 credit points of Chinese Language at Level 2.

Incompatible Units

100062 - Chinese 301, 101269 - Languages 303: Grammatical Concepts Across Languages

....

In 2013 this unit replaced by 101951 - Chinese 301. This is an advanced Level 3 language and linguistics unit for students of modern Chinese. Lectures for the grammatical concepts component are held in English for students of all languages while other activities are language-specific. The aim of the unit is twofold. On the one hand it aims, to develop a practical and theoretical understanding of the

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ways in which major concepts used in everyday speech and writing are mapped and organized in the lexicon and the grammar of human languages, and how these forms develop in learners and users. On the other hand, it aims to develop advanced comprehension and production skills in Chinese language, including higher stages optional structures, through critical examination of contemporary and historical text and discourse samples from a variety of registers. An understanding of traditional and contemporary Chinese culture and society is also fostered through comparative research projects on specific cultural, social and/or linguistic, aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit.

101711.2   Languages and Grammatical Concepts 3A: Italian

Credit Points 20 **Level** 3

Assumed Knowledge

Successful completion of 40 credit points of Italian Language at Level 2.

Incompatible Units

100136 - Italian 301, 101269 - Languages 303: Grammatical Concepts Across Languages

....

In 2013 this unit replaced by 102011 - Italian 301 and 102012 - Italian 302. This is an advanced Level 3 language and linguistics unit for students of modern Italian. Lectures for the grammatical concepts component are held in English for students of all languages while other activities are language-specific. The aim of the unit is twofold. On the one hand it aims, to develop a practical and theoretical understanding of the ways in which major concepts used in everyday speech and writing are mapped and organized in the lexicon and the grammar of human languages, and how these forms develop in learners and users. On the other hand, it aims to develop advanced comprehension and production skills in Italian language, including higher stages optional structures, through critical examination of contemporary and historical text and discourse samples from a variety of registers. An understanding of contemporary Italian culture and society is also fostered through comparative research projects on specific cultural, social and/or linguistic, aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit.

101712.2   Languages and Grammatical Concepts 3A: Japanese

Credit Points 20 **Level** 3

Assumed Knowledge

Successful completion of 40 credit points of Japanese Language at Level 2.

Incompatible Units

100091 - Japanese 301, 101269 - Languages 303: Grammatical Concepts Across Languages

....

In 2013, this unit replaced by 101952 - Japanese 301. This is an advanced Level 3 language and linguistics unit for

students of modern Japanese. Lectures for the grammatical concepts component are held in English for students of all languages while other activities are language-specific. The aim of the unit is twofold. On the one hand it aims, to develop a practical and theoretical understanding of the ways in which major concepts used in everyday speech and writing are mapped and organized in the lexicon and the grammar of human languages, and how these forms develop in learners and users. On the other hand, it aims to develop advanced comprehension and production skills in Japanese language, including higher stages optional structures, through critical examination of contemporary and historical text and discourse samples from a variety of registers. An understanding of contemporary Japanese culture and society is also fostered through comparative research projects on specific cultural, social and/or linguistic, aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit.

101713.2   Languages and Grammatical Concepts 3A: Spanish

Credit Points 20 **Level** 3

Assumed Knowledge

Successful completion of 40 credit points of Spanish Language at Level 2.

Incompatible Units

100151 - Spanish 301, 101269 - Languages 303: Grammatical Concepts Across Languages

....

In 2013, this unit replaced by 101953 - Spanish 301 and 101954 - Spanish 302. This is an advanced Level 3 language and linguistics unit for students of Spanish. Lectures for the grammatical concepts component are held in English for students of all languages while other activities are language-specific. The aim of the unit is twofold. On the one hand it aims, to develop a practical and theoretical understanding of the ways in which major concepts used in everyday speech and writing are mapped and organized in the lexicon and the grammar of human languages, and how these forms develop in learners and users. On the other hand, it aims to develop advanced comprehension and production skills in Spanish, including higher stages optional structures, through critical examination of contemporary and historical text and discourse samples from a variety of registers. An understanding of contemporary Spanish culture and society is also fostered through comparative research projects on specific cultural, social and/or linguistic, aspects that are of interest to students. A range of CALL (Computer Assisted Language Learning) activities are utilised for this unit.

200183.4   Law of Business Organisations

Credit Points 10 **Level** 2

Prerequisite

200184.3 Introduction to Business Law

Equivalent Units

LW208A - Law of Business Organisations, 61522 - Business Associations Law, F2066 - Business Associations Law

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....

This unit version replaces 200183 Law of Business Organisations from Autumn 2011. This unit deals with legal issues concerning the creation and control of companies and compares this structure with other forms of business organisations, such as partnership, trusts and sole traders. This unit will provide students with an appreciation of the law of partnership, and companies and, for the sake of completeness and comparison, a brief examination of the law regarding unincorporated and incorporated non-profit associations.

101823.2   Lay Participation in Justice Processes

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

This unit examines the role lay people, or non-professionals, play in justice processes. This includes traditional forms of lay participation such as juries, and newer forms of community participation such as restorative justice and mediation. It encourages students to develop a deeper understanding of the legal institutions and practices of different traditions, improve their research skills and enhance their ability to work as part of a team.

400766.3   Leadership in Graduate Practice

Credit Points 10 **Level** 3

Assumed Knowledge

In order to attain a satisfactory level of knowledge related to this unit, It is expected that the student will have a sound understanding of psychosocial concepts and theories and their relationship to: interpersonal communication and role of the nurse, and; the contextual influence upon nursing practice. Due to the latter, it is expected that the student will be in the 3rd year of the Bachelor of Nursing program (or accredited equivalent) and have undertaken recent clinical practicum experience.

Equivalent Units

400063 - Nursing Context 6

Special Requirements

Students must be enrolled in the Bachelor of Nursing or Bachelor of Nursing (Graduate Entry)

....

This unit introduces the student to the role of the professional nurse as leader and manager.

401028.1   Leadership in Nursing (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of at least 190 credit points in an undergraduate advanced nursing program.

Equivalent Units

400849 - Leadership in Graduate Practice (Advanced)

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit for Bachelor of Nursing Advanced nursing students explores fundamental and advanced concepts and issues related to leadership in nursing. The unit focuses on exploration of contemporary, emerging and innovative approaches to leadership that may contribute to nursing standards, person-centred practice, evidence-based leadership, critical reflection and critical thinking in dynamic healthcare contexts.

401022.1   Leadership in Nursing and Midwifery

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of at least 190 credit points in an undergraduate nursing or midwifery program.

Equivalent Units

400766 - Leadership in Graduate Practice

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4692 Bachelor of Nursing Graduate Entry or 4684 Bachelor of Midwifery.

....

The unit explores fundamental concepts and issues related to leadership in nursing and midwifery. The unit focuses on exploration of contemporary, emerging and innovative approaches to leadership that may contribute to nursing and midwifery standards, person-centred practice, evidence-based leadership, critical reflection and critical thinking in dynamic healthcare contexts.

101259.2   Learning and Creativity

Credit Points 10 **Level** 2

Equivalent Units

SE111A - Learning and Creativity

....

This unit examines the inter-related processes of learning and creativity and the application and practice of these in all aspects of life. Learning and creativity is contextual. This context is personal, social, cultural and environmental. Unit content is critically positioned within diverse theories, with an emphasis on experiential learning and ongoing critical reflection. The unit promotes understanding of feeling and experience as much as concepts and ideas. It emphasizes the tools and skills of learning, the everyday nature of creativity and enables students to develop and apply their creativity. It is designed for students interested in personal, community and cultural development, in the context of far reaching change.

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101758.1   Learning through Indigenous Australian Community Service (Day Mode)

Credit Points 10 **Level** 3

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit is available to all Undergraduate students who have open electives. Learning through Indigenous Australian Community Service will provide students with an exciting opportunity to apply their disciplinary knowledge and skills in an Indigenous Australian cultural context. Students will negotiate a project with an Indigenous community and undertake a ten day / fifty hour placement. Students will gain cross cultural awareness and insights as well as knowledge about Indigenous community affairs including cultural protocols, decision-making and leadership. This experience will provide students with a level of cultural understanding and competency that can lead to improved communication skills and effective partnering with Indigenous people, organisations and communities.

401037.1   Legal and Ethical Issues in Midwifery

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge from all Year 1 units from the Bachelor of Midwifery and: 401009 Health in a Culturally Diverse Community; 401011 Research Principles for Nursing and Midwifery; and 401034 Midwifery Knowledge 3.

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit explores the nature and professional context of midwifery. The roles and functions of the midwife and their relationship to others are considered in terms of expected competence, responsibilities, accountabilities and scope of practice within the regulatory framework.

101568.3   Legislation, Courts and Policing

Credit Points 10 **Level** 2

Incompatible Units

400294 - Law, Evidence and Procedure

Special Requirements

Students must be enrolled in 4555 or 1662 - Bachelor of Policing

....

This unit introduces students to the adversarial system, the legislative context of everyday policing, and the different forms of state and federal courts. It includes an emphasis on police powers (NSW and elsewhere), summary and indictable offences, and the role of enforcement and discretion. In particular alternative resolution, specialist courts and Australian Indigenous Law are described and their role and function analysed. This unit is of value to students in policing, criminology, law, and community welfare.

400789.3   Leisure Education Programming and Mental Health

Credit Points 10 **Level** 3

....

In this unit students will explore leisure education that is used in a broad range of service industries that focus on the development and acquisition of a range of leisure, recreation and programming related skills, knowledge and attitudes. Students will develop a philosophical approach to leisure and recreation and skills in communication and facilitation strategies to enable them to use appropriate decision-making processes in developing recreation programs for a range of people across the lifespan. Students will utilise a variety of leisure,recreation and tourism resources to develop recreation programs that will assist in enhancing the lifestyle opportunities and leisure experiences for the client populations they serve.

200027.2   Linear Algebra

Credit Points 10 **Level** 2

Assumed Knowledge

Content of 200025 - Discrete Mathematics

Equivalent Units

J1730 - Mathematics 1.2, J2764 - Mathematics 2.1, 14501 - Mathematics 1, 14503 - Mathematics 3

....

The objective of this unit is to present the main fundamentals of linear algebra and includes such topics as solving systems of linear equations, matrix algebra, determinants, eigenvalues and eigenvectors, Euclidean vector spaces, general vector spaces, inner product spaces and linear transformations.

100928.3   Linguistics

Credit Points 10 **Level** 2

Equivalent Units

A1082 - Linguistics

Special Requirements

Successful completion of 40 credit points at Level 1

....

In 2013, this unit replaced by 101945 - Introduction to Linguistics. Language is an integral component of the human experience. Pervasive across the humanities and the world of communication and culture, language is multi-faceted and remarkably complex. This unit is designed to raise students' awareness of the nature of language. Students will gain the conceptual tools to understand language as both a social and a biological phenomenon. By providing a basic understanding and appreciation of language from different perspectives, the unit establishes points of contact between language, the humanities, and beyond.

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101724.2   Literary Animals

Credit Points 10 **Level** 3

....

This unit explores a selection of literary works that invite us to examine the tenuous border separating the "human" from the "non-human." Readings will allow students to learn how literary texts employ various formal techniques (allegory, anthropomorphism, etc.) that call into question the conventional opposition between human and animal. Particular attention will be given to the intersection of animality, race, gender, and sexuality. Readings may include one or more national literatures, such as American or Australian literature.

100875.4   Literature and Philosophy

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit will examine ways in which literature and philosophy interact. It will consider the ways in which literature and philosophy offer important and different ways of thinking. And it will consider the differences between literature and philosophy. Literature will be understood to involve thinking through sensations, while philosophy will be understood to involve thinking through concepts. The unit will examine examples of interaction between literary texts and philosophical texts, considering how literary effects can inhabit philoshical texts and philosophical ideas can permeate literary texts. The unit will consider frequently occurring themes within both literature and philosophy, such as ethics (ways of living and acting).

101739.3   Literature and Trauma

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit considers the relationship between narrative and trauma and writing and trauma. It looks at the discourses of trauma, including psychoanalytic and psychiatric, philosophical and that belonging to literary criticism. It considers the politics of testimony and trauma in history; the role of narrative in healing and the remaking of Self; the crises of the "witness" and the limits of narrative in recalling trauma in psychoanalysis, literature, and history. It considers the socially produced limits of narratives of trauma. It also considers the meeting point between trauma, its wound and writing. The unit canvasses a raft of life-writing and fictional writing whose subject is trauma and or traumatic experience.

100874.4   Literature, History and Culture

Credit Points 10 **Level** 3

Equivalent Units

B3849 - Nineteenth Century English and European Literature

Special Requirements

Successful completion of 60 credit points

....

This unit focuses on literary and cultural history up to the early twentieth century, and may encompass study of a range of texts from classical literature to modernism. Depending upon individual staff expertise, particular emphases will include early modern (sixteenth and seventeenth century), Augustan, Romantic and Victorian literature.

101733.2   Looking at Global Politics Through Film

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

Popular representations of world politics shape our collective understanding of political history and international relations. This unit examines the ways in which film can communicate political messages to its audience, as well as the far more difficult issue of the effects that those messages might have on viewers. Although the discipline of International Relations (IR) has overwhelmingly ignored popular culture, it is the argument of this unit that popular culture actually provides us with a wealth of significant representations of world politics.

400768.3   Maintaining Clinical Currency

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of the nature of health, principles and mechanisms involved in body function, principles of safe nursing practice including safe administration of medications and components of effective interpersonal communication.

Prerequisite

400064.1 Nursing Context 7 OR **400764.1** Transition to Graduate Practice

Equivalent Units

400619 Nursing Therapeutics 12

Special Requirements

Students must be in final session of course 4642. Special Requirements are those stipulated by the NSW Health and UWS. At present these include: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3)Adult Health Immunisation 4) Workcover accredited Senior First Aid Certificate

....

This unit provides students with the opportunity to review: the pathophysiological aspects of health breakdown in individuals; the knowledge of pharmacological processes

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within nursing practice; and to demonstrate competency in skills essential to the nursing management of individuals with various types of health breakdown. In addition, students will complete a four-week negotiated clinical practicum prior to graduate employment.

300459.2   Major Project Commencement

Credit Points 20 **Level** 4

Assumed Knowledge

Knowledge related to the successful completion of year 3 Industrial Design is assumed.

Prerequisite

300313.3 Design Studio 4: Simulate to Innovate AND **300314.2** Designed Inquiry

Corequisite

10915.2 Industrial Experience

Special Requirements

Successful completion of 220 credit points.

....

This unit prepares students to be flexible and innovative, with the emphasis placed on design, and its place in and effect on society and people. Students are challenged to respond to a real world design brief focusing on a specific user group and context-of-use. Students undertake desk, field and practical research in order to find design opportunities for detailed development in the second semester of the fourth year program. Peer learning is an important part of the learning experience, as is a user-centred design research approach and is facilitated by an intensive off-campus field trip in the project start-up phase.

300460.2   Major Project Completion

Credit Points 30 **Level** 4

Assumed Knowledge

Knowledge related to the successful completion of Year 3 Industrial Design is assumed and successful completion of Major Project Commencement and Major Project Commencement's co-requisite units.

Prerequisite

300459.2 Major Project Commencement

Corequisite

300013.3 Design Management 2: Corporate Image and Identity OR **300015.3** Design Management 4: Design Process OR **300315.3** Industrial Graphics 5: Integrated

....

Major Project Completion is the project realisation component of the student's final year program. The unit offers the student the chance to consolidate the range of methodologies and processes developed and evaluated in Major Project Commencement, that contextualise the principles and practices that will lead to the realisation of their identified design solution. The final design outcome will form part of the final year graduate exhibition. The design solution which students will be developing and submitting for this unit responds to the design brief developed in Major Project Commencement.

300536.2   Major Project in Construction

Credit Points 10 **Level** 4

Prerequisite

200485.2 Decision Making for Construction Professionals

Equivalent Units

BG402A - Major Project 1

....

This unit will enhance the ability of students to investigate a selected topic with a construction industry focus. The unit involves the preparation of a literature review, in consultation with an external supervisor from industry. Content: mechanics of a literature review, use of research (or strategic planning) in the construction industry, development of high-value competencies in terms of marketing, organisational structure and project management.

200116.4   Management Accounting Fundamentals

Credit Points 10 **Level** 1

Prerequisite

200101.3 Accounting Information for Managers OR **200103.1** Accounting Reports and Decisions

Corequisite

200111.2 Financial Accounting Applications

....

This unit provides an introduction to management accounting in an e-commerce environment. The interrelations of management accounting to other functional areas, to suppliers, to customers, and to other sources of external information relevant to planning and control are examined. Topics include the development and logic of routine and non routine analysis performed to support management decision making.

200571.3   Management Dynamics

Credit Points 10 **Level** 1

Corequisite

200336.3 Business Academic Skills

Equivalent Units

700080 - Management Dynamics, 700003 - Management Dynamics (UWSC)

Incompatible Units

MG102A - Management Foundations

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major.

....

The unit provides an opportunity for students to engage with the fundamental issues and theories of management as well as understand that management itself is dynamic and evolving. Students will be introduced to how work and

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management systems are organised and managed, and how these impact upon individuals, other organisations or society as a whole. The unit covers both the theory and the practice of management and employment relations and is an essential unit for business students in order that they achieve a broad initial understanding of management and employment relations.

700003.2 Management Dynamics (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

200571 - Management Dynamics; 700080 - Management Dynamics (Creative Industries)

Special Requirements

Students must be enrolled at UWS College.

....

The unit provides an opportunity for students to engage with the fundamental issues and theories of management as well as understand that management itself is dynamic and evolving. Students will be introduced to the connection how work and management systems are organised and managed, and how these impact upon individuals, other organisations or society as a whole. The unit covers both the theory and the practice of management and is an essential unit for business students in order that they achieve a broad initial understanding of management and employment relations.

MG102A.4 Management Foundations

Credit Points 10 **Level** 1

Incompatible Units

200571 - Management Dynamics

Special Requirements

This unit is restricted to students enrolled in the degrees offered by the Schools of: Computing, Engineering and Mathematics; Social Sciences and Psychology; Humanities and Communication Arts; and Education.

....

'Management Foundations' provides an opportunity for students to understand the linkage between organisational processes and managerial practices. The aim of the unit is to identify the dynamic nature of managerial practice in changing social, economic, technological and global environments. The unit investigates management theory, roles, and managerial skills and addresses the ongoing needs of decision making, quality management and worksite safety management. This unit is offered specifically to the School of Computing, Engineering and Mathematics and the School of Social Sciences and Psychology.

300824.1 Management of Aquatic Environments

Credit Points 10 **Level** 1

Equivalent Units

300633 - Management of Aquatic Environments

Special Requirements

Students will need a lab coat and suitable protective clothing for fieldwork.

....

This unit introduces students to the physical, chemical and biological nature of water systems and the linkages to human activity. These linkages include a development of an appreciation of the essential services and broad uses and values of water in modern human society, and the natural environment. Students are challenged to examine the causes and effects of water pollution and environmental degradation. Students are introduced to scientific water sampling, analysis and reporting of water quality and pollution.

300633.1 Management of Aquatic Environments

Credit Points 10 **Level** 1

Equivalent Units

EY104A - Management of Aquatic Environments

....

In 2012 this unit is replaced by 300824 - Management of Aquatic Environments. This unit uses the setting of surface freshwater aquatic environments to develop an understanding of a range of professional skills and values necessary for the theory and practice of environmental management. Working in small groups students investigate the philosophy and practice of science through the design and implementation of field studies that investigate the nature of pollution, evaluate the current condition of aquatic systems and recommend strategies that will improve ecosystem integrity and mitigate the risk of adverse human health outcomes.

200570.3 Management of Change

Credit Points 10 **Level** 3

Equivalent Units

H3741 - Management of Change

....

This unit introduces the concepts of organisational change, the need to manage change as a change agent and how to develop and optimise change models and schemes. In this unit we encourage you to consider the world from different perspectives. We wish you to challenge your own ways of learning and to try to include more reflection in the work that you do. The unit will be driven by theory as well as practice and will need you to read conflicting viewpoints in order to understand the complexity of the relationships we are discussing.

200150.2 Managing Diversity

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

....

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This unit explores the complexities and challenges of managing diverse workforces in contemporary organisations. Using applied learning approaches, students are required to formulate corporate policies relating to diversity and then evaluate the implications for implementing these policies in a real world setting. As a key component of human resource management, students are expected to appreciate both the theoretical and practical elements of managing diversity and are required to reflect on their own learning process throughout the unit.

200300.2 Managing People at Work

Credit Points 10 **Level** 1

Equivalent Units

200151 - Management of Employment Relations, 61428 - Introductory Employment Relations, 61411 - Australian Employment Relations

....

Managing People at Work provides an introductory framework for the study of employment relations. The unit is approached from a stakeholder perspective, emphasising the way that management, labour and the state, along with other key stakeholders, act, both separately and together, to structure the employment relationship. In doing so, the unit integrates industrial relations and human resource management theory and practice, illustrating the links between the two disciplines. The content of the unit is structured so as to provide an initial introduction to the disciplines of industrial relations, human resource management, and employment relations, and to the key stakeholders in the employment relationship. Building on this framework, a theoretical and empirical analysis of employment relations processes is provided, with particular emphasis given to recent changes in the role and perspectives of stakeholders.

200273.4 Managing Service and Experience

Credit Points 10 **Level** 2

Equivalent Units

200564 - Introduction to Sport Management, 400319 - Sport Management 1

....

As service provision becomes increasingly important across a number of industries, some firms are moving beyond the idea of providing a service to providing a total customer experience. Managing Service and Experience introduces students to the exciting concepts of management in the service and experience economy. The unit examines the development of the experience economy and the specialist skills required to manage commercial organisations in the emerging experience economy. Key areas which are covered include: the experience economy, the characteristics of service, service development, service evaluation & service improvement.

200709.2 Managing the Accommodation Experience

Credit Points 10 **Level** 2

Assumed Knowledge

Students are expected to have gained an introductory level of knowledge in hospitality management.

Equivalent Units

200144 - Lodging Management

....

The accommodation sector is an integral part of the hospitality experience. It requires the combination of intangible service and experience with the tangibility of a product which is used by guests. The need to stay competitive in this growing and competitive market creates a need for organisations to look beyond the historical components such as affordability, suitability and luxury. This unit gives students the opportunity to develop an understanding of these accommodation issues as they relate to hospitality organisations.

200710.2 Managing the Food and Beverage Experience

Credit Points 10 **Level** 2

Assumed Knowledge

Students are expected to have gained an introductory level of knowledge in hospitality management.

Equivalent Units

200145 - Food Service Systems

....

The provision of Food and Beverage is a key component of the hospitality industry and is a prominent feature of the experience economy. Future managers and decision-makers need a thorough knowledge of the nature and characteristics of modern food and beverage service to gain competitive advantage. This unit draws upon traditional gastronomy to examine the role of food & beverage in society. A systems approach to food and beverage service management is then utilized to understanding the delivery of a food and beverage experience.

200086.3 Marketing Communications

Credit Points 10 **Level** 2

Assumed Knowledge

Basic principles of marketing

Prerequisite

200083.2 Marketing Principles

....

Developing and managing an effective integrated marketing communications (IMC) program is a vital part of successful marketing. Moreover, IMC is a highly visible and demanding aspect of marketing communication effort at brand level. This unit, grounded in marketing principles, provides students with an understanding of coordinating major elements of the communication mix - advertising,

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sales promotions, personal selling, sponsorship marketing, public relations, direct marketing, and point of purchase material.

200090.3   Marketing of Services

Credit Points 10 **Level** 3

Assumed Knowledge

An advanced understanding of Marketing theory and practice

Prerequisite

200083.2 Marketing Principles

Equivalent Units

MK319A - Services Marketing, 61726 - Services Marketing

....

Given the service-based nature of modern economies, business graduates will either work for firms whose central offering is service or be employed by organisations that use service as an integral supporting element in what they do and what they offer. Therefore, increasingly, knowledge and skills in the field of marketing of services are required by personnel operating across various industries and in a range of roles. The unit aims to: expose students to relevant theory and practice in the field of services marketing; develop participants into more complete marketers capable of operating in service marketing environments.

200096.3   Marketing Planning Project

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of marketing concepts including the elements of consumer behaviour, marketing research methods, marketing communications, channel management and distribution, brand and product management, competitive strategy and quantitative methods in marketing. The basics of economics, finance and accounting, mathematics and statistics and general communications are also assumed.

Prerequisite

200083.2 Marketing Principles

Equivalent Units

61734 - Marketing Project, MK311A - Marketing Planning Project

....

Marketing planning project (MPP) assimilates and builds on the wide range of marketing units that students have previously completed. MPP assimilates students' specialist knowledge developed in other units through the use of a 'real-life' case context in which students demonstrate their mastery of marketing in the development and presentation of a professional marketing plan.

200083.2   Marketing Principles

Credit Points 10 **Level** 1

Equivalent Units

61711 - Marketing Principles, MK104A - Marketing Fundamentals, 700001 - Marketing Principles (UWSC), 700089 - Marketing Principles (Creative Industries)

Special Requirements

External offerings for this unit are only available to students who are enrolled in either a Property course, Key Program or Major.

....

This unit is a survey of the marketing process, introducing students to the marketing concept, strategic and marketing planning, marketing research, consumer and customer behaviour, issues of market segmentation, targeting and positioning as well as all the elements of the marketing mix (product/service, pricing, distribution and marketing communication strategies).

200592.2   Marketing Research

Credit Points 10 **Level** 2

Assumed Knowledge

Basic principles of marketing, consumer behaviour and statistics.

Prerequisite

200032.5 Statistics for Business AND **200083.2** Marketing Principles

Equivalent Units

200085 - Fundamentals of Marketing Research

....

Marketing Research provides a comprehensive appreciation of the methods, uses and limitations of contemporary marketing research. The emphasis is on a conceptual understanding of research method rather than applied research application, which is the focus of a later unit. Students gain exposure to concepts such as research design, information collection, data processing and analysis and results communication. Students gain exposure to qualitative and quantitative techniques with an appreciation of the role of computer processing in marketing research.

200472.3   Material Science in Construction

Credit Points 10 **Level** 2

....

This unit deals with the behaviour of building materials and products in the construction context, including concrete, timber, metal, composites and polymers. An introduction will be given first on how material behaviour and properties are affected by micro-structure, composition and environment. Materials will be discussed in detail according to their physical properties and how they degrade in context. We will also discuss how the materials are manufactured and used and what their environmental impacts are.

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200022.3 Mathematical Modelling

Credit Points 10 **Level** 3

Assumed Knowledge

Matrix algebra and how to find eigenvalues and eigenvectors.

Prerequisite

200030.2 Differential Equations

Equivalent Units

14336 - Mathematical Modelling 1, J3674 - Mathematical Modelling, 14407 - Differential Equations Modelling

....

Mathematical Modelling is about solving real world problems. The real world is a complicated place which we often need or want to understand better. One way to do this is to set up a mathematical model which we hope can provide insights, predictions and a greater understanding of a complex system. Selected real-world problems are approximated by mathematical models that are amenable to being written in terms of linear and non-linear equations or differential equations. Once equations are solved emphasis is placed on interpreting solutions, modifying models as required and using models for prediction.

300691.2 Mathematical Reasoning

Credit Points 10 **Level** 1

Equivalent Units

300589 - Mathematics Toolbox

Special Requirements

Only students enrolled in a Science / Computing / Business degree course should enrol in this unit and this enrolment must take place in their first year of study. Students may not concurrently enrol in Mathematical Reasoning and any other mathematics / statistics unit. Due to the requirements above, permission is required to enrol in this unit. 300691 Mathematical Reasoning is incompatible with the following units: DN206A Planning Research Methods, 200022 Mathematical Modelling, 200023 Analysis, 200024 Mathematical Finance, 200025 Discrete Mathematics, 200026 Advanced Maths for Business, 200034 Statistical Theory, 200036 Data Mining & Visualisation, 200037 Regression Analysis & Experimental Design, 200038 Time Series & Forecasting, 200041 Applied Regression and Forecasting, 200042 Introduction to Operations Research, 200237 Mathematics for Engineers 1, 200238 Mathematics for Engineers 2, 200242 Mathematics for Engineers 3, 200424 Statistics for Accountants, 200027 Linear Algebra, 200028 Advanced Calculus, 200030 Differential Equations, 200031 Mathematics for Business, 200032 Statistics for Business, 200033 Applied Statistics, 200045 Quantitative Project, 200182 Quantitative Techniques, 200189 Concepts of Mathematics, 200192 Fundamentals of Mathematics, 200192 Statistics for Science, 200193 Abstract Algebra, 200263 Biometry.

....

This unit will cover basic mathematical concepts, such as algebraic, graphical, trigonometric and arithmetic skills that are needed in a variety of contexts. In any one semester, six areas on content will be considered from the following -

Basic Numerical Operations, Basic Algebraic Operations, Functions and Graphs, Linear Equations, Quadratic Equations and Quadratic Functions, Basic Trigonometry, Financial Mathematics and Basic Statistics. In addition to the mathematical content, students will be exposed to strategies that will help them to learn to study mathematics effectively and also to lessen any mathematical anxiety problems that they may experience.

700044.2 Mathematics (UWSCFS)

Credit Points 10 **Level** Z

Assumed Knowledge

Completion of Year 10 Mathematics or equivalent.

Equivalent Units

900032 - Mathematics (UWSC)

Special Requirements

Students must be enrolled at UWS College.

....

The Mathematics unit is designed and written to prepare students for further mathematical study at first year university level. It provides a comprehensive introduction to the study of calculus and its applications in the real world. The unit develops those skills peculiar to the mathematical requirements of further study in the areas of Business, Computing, Information Technology, Science and Engineering.

300672.1 Mathematics 1A

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics achieved at band 4, 5 or 6 or equivalent, or 200191 Fundamentals of Mathematics

Equivalent Units

200189 - Concepts of Mathematics

Special Requirements

This unit is not available to students enrolled in 3621 Bachelor of Engineering.

....

This level one hundred unit provides a solid foundation in the theory and applications of differential calculus, as well as some introductory work on complex numbers. It is the first of two units developing aspects of calculus.

300672.2 Mathematics 1A

Credit Points 10 **Level** 1

Assumed Knowledge

Mathematics achieved at Bands 5-6, or knowledge equivalent to 300830 Analysis of Change.

Equivalent Units

200189 - Concepts of Mathematics

Special Requirements

This unit is not available to students enrolled in 3621 Bachelor of Engineering and 3664 Bachelor of Engineering Science.

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....

This level 1 unit provides a solid foundation in the theory and applications of differential calculus, as well as some introductory work on complex numbers. It is the first of two units developing aspects of calculus.

300673.2 Mathematics 1B

Credit Points 10 **Level** 1

Prerequisite

300672.2 Mathematics 1A

Equivalent Units

200189 Concepts of Mathematics

Special Requirements

This unit is not available to students enrolled in 3621 Bachelor of Engineering and 3664 Bachelor of Engineering Science.

....

This Level 1 unit provides a solid foundation in the theory and applications of integral calculus, as well as some introductory work on linear algebra and infinite sequences and series. It is the second of two units developing aspects of calculus.

700069.2 Mathematics B (UWSCFS)

Credit Points 10 **Level** Z

Assumed Knowledge

Completion of Year 10 Mathematics or equivalent.

Equivalent Units

900033 - Mathematics B

Special Requirements

Students must be enrolled at UWSCollege in 7015 Diploma in Construction Management or 7003 Diploma in Science.

....

This unit has been specifically designed for students who need to refresh or upgrade their understanding of basic mathematical concepts taught in high school mathematics. The topics include basic arithmetic and algebra, geometry, trigonometry, coordinate geometry, quadratic functions, indices, logarithms and an introduction to differential calculus.

700025.1 Mathematics C (UWSCFS)

Credit Points 10 **Level** Z

Special Requirements

Students must be enrolled at UWS College.

....

The Mathematics C unit is designed and written to prepare students for mathematical study at first year university level, specifically in the area of Engineering. It provides a comprehensive introduction to the study of calculus and its applications in the real world.

200237.3 Mathematics for Engineers 1

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics achieved at Band 5 or 6. This is the minimum requirement.

Equivalent Units

14505 - Engineering Mathematics 1, 200195 - Mathematical Methods A, 200196 - Mathematical Methods B

Incompatible Units

200031 - Mathematics for Business, 200189 - Concepts of Mathematics, 300672 - Mathematics 1A, 300673 - Mathematics 1B

....

This unit is the first of two mathematics units to be completed by all students enrolled in an engineering degree during their first year of study. The content covers a number of topics that underpin the later-stage engineering mathematics units. The subject matter includes: differential and integral calculus of a single variable, complex numbers, aspects of matrix algebra, vectors, and some elementary statistics and probability theory. The aim of this unit is to introduce a number of key mathematical concepts needed in the study of Engineering, and to provide a solid foundation for the follow-on unit Mathematics for Engineers 2.

700101.1 Mathematics for Engineers 1 (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Maths achieved at Band 5 or 6. This is the minimum requirement.

Prerequisite

700103.1 Mathematics for Engineers Preliminary (UWSC Assoc Deg)

Equivalent Units

200237 - Mathematics for Engineers 1, 700019 - Mathematics for Engineers 1 (UWSC)

Incompatible Units

300672 - Mathematics 1A, 300673 - Mathematics 1B, 200191 - Fundamentals of Mathematics, 300743 - Mathematics for Engineers Preliminary

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

The content of this unit covers a number of topics that underpin the later-stage engineering mathematics units. The subject matter includes: differential and integral calculus of a single variable, complex numbers, aspects of matrix algebra, vectors, and some elementary statistics and probability theory. The aim of this unit is to introduce a number of key mathematical concepts needed in the study

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of Engineering, and to provide a solid foundation for the follow-on unit - Mathematics for Engineers 2.

700019.4   Mathematics for Engineers 1 (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

200237 - Mathematics For Engineers 1, 700101 - Mathematics for Engineers 1 (UWSC Assoc Deg)

Incompatible Units

300672 - Mathematics 1A, 300673 - Mathematics 1B, 200191 - Fundamentals of Mathematics, 300743 - Mathematics for Engineers Preliminary

Special Requirements

Only UWSCollege students can enrol in this unit unless specific permission has been granted by the School of Computing, Engineering and Mathematics. Prerequisite requirements for students enrolled in 7006: 700025 - Mathematics C (UWSCFS).

....

This unit is the first of two mathematics units to be completed by students enrolled in an engineering degree during their first year of study. The content covers a number of topics that underpin the later-stage engineering mathematics units. The subject matter includes: differential and integral calculus of a single variable, complex numbers, aspects of matrix algebra, vectors and some elementary statistics and probability theory.

200238.2   Mathematics for Engineers 2

Credit Points 10 **Level** 1

Prerequisite

200237.3 Mathematics for Engineers 1

Equivalent Units

14506 - Engineering Mathematics 2

....

This unit is the second of two mathematics units to be completed by students enrolled in an Engineering degree during their first year of study. The content covers a number of topics that build on the calculus knowledge from Mathematics for Engineers 1. The subject matter includes: ordinary differential equations, Laplace transforms and multi-variable calculus.

700102.1   Mathematics for Engineers 2 (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Prerequisite

700101.1 Mathematics for Engineers 1 (UWSC Assoc Deg)

Equivalent Units

200238 - Mathematics for Engineers 2, 700022 - Mathematics for Engineers 2 (UWSC)

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

The content of this unit covers a number of topics that build on the student's calculus knowledge from Mathematics for Engineers 1. The subject matter includes: ordinary differential equations, Laplace transforms and multi-variable calculus.

700022.2   Mathematics for Engineers 2 (UWSC)

Credit Points 10 **Level** 1

Prerequisite

700019.4 Mathematics for Engineers 1 (UWSC)

Equivalent Units

200238 - Mathematics for Engineers 2, 700102 Mathematics for Engineers 2 (UWSC Assoc Deg)

Special Requirements

Only students enrolled at UWSCollege may enrol in this unit unless specific permission has been granted by UWS.

....

This is a Level 1 unit to be undertaken by students enrolled in an Engineering Diploma. It covers the following topics: Ordinary Differential Equations and Multivariable Calculus.

200242.3   Mathematics for Engineers 3

Credit Points 10 **Level** 2

Prerequisite

14506.1 Engineering Mathematics 2 OR **200238.2** Mathematics for Engineers 2

Equivalent Units

200194 - Engineering Mathematics 3

Special Requirements

This unit is designed to meet the requirements of students enrolled in an engineering degree. There are other mathematics units more suitable for students from other disciplines.

....

This unit is a core unit in the Computer, Electrical, or Telecommunications key programmes of the Bachelor of Engineering course. It builds on the first two mathematics units in that course and provides mathematical tools and techniques needed for the above key programmes. The unit covers topics from advanced calculus including vector calculus, complex analysis, Fourier series, heat and wave equations, Fourier integrals and transforms; discrete mathematics including logic and set theory; random variables and random processes including mean, correlation and covariance functions, ergodicity, ensemble averages, and Gaussian processes.

300743.2   Mathematics for Engineers Preliminary

Credit Points 10 **Level** 1

Incompatible Units

200195 - Mathematical Methods A, 200191 - Fundamentals of Mathematics

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Special Requirements

Only those students enrolled in the Bachelor of Engineering course, who do not have a mathematical background equivalent to NSW HSC Mathematics, achieved at Band 4 or higher, should enrol in this unit. This unit is specifically designed to complement the existing unit 200237 Mathematics for Engineers 1.

....

This unit is specifically designed for students enrolling in the Bachelor of Engineering degree course, who do not have a mathematical background in differential and integral calculus. The content of the unit consists of topics in arithmetic and algebra, trigonometry and trigonometric functions, logarithmic and exponential functions, differential and integral calculus.

700103.1   Mathematics for Engineers Preliminary (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Equivalent Units

300743 - Mathematics for Engineers Preliminary

Incompatible Units

200191 - Fundamentals of Mathematics

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering course.

....

This unit consists of topics in arithmetic and algebra, trigonometry and trigonometric functions, logarithmic and exponential functions, differential and integral calculus.

700100.1   Mathematics for Engineers Preliminary (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300743 - Mathematics for Engineers Preliminary, 700103 - Mathematics for Engineers Preliminary (UWSC Assoc Deg)

Incompatible Units

200191 - Fundamentals of Mathematics

Special Requirements

Students must be enrolled in the 7023 Diploma in Engineering Science or 7024 Diploma in Engineering Science Fast Track courses.

....

This unit consists of topics in arithmetic and algebra, trigonometry and trigonometric functions, logarithmic and exponential functions, differential and integral calculus.

200413.3   Mathematics Honours Thesis

Credit Points 40 **Level** 5

Special Requirements

Students must be enrolled in a Bachelors honours course. Understanding and knowledge equivalent an undergraduate BSc (Mathematics) degree or key program

in Mathematics/Statistics is required. Normally the student will have a grade point average > 5 unless a case can be made.

....

The aim of this unit is to further develop the student's research and problem solving skills. The student is required to implement the research plan, complete a substantive piece of research in the field of Mathematics/Statistics, and to communicate the results of that work to an interested and technically literate audience. All projects will therefore contain at least two broad areas of assessment: the substantive work itself, and the oral and written communication of the work to others. All assessment components submitted in both of these areas are expected to be of a high professional standard. Students will present their research in the thesis. The thesis topic and structure will vary according to the area of interest of the student and the expertise of the supervisor. Throughout this unit regular planned consultations between the student and supervisor will occur. Students are expected to work to a schedule devised in consultation with their supervisor. The schedule will include set dates for the presentation of draft chapters for review by the supervisor.

300764.1   Mechanical Design

Credit Points 10 **Level** 3

Assumed Knowledge

This subject assumes that the student has undertaken first and second year studies in UWS engineering courses or equivalent.

Prerequisite

300040.1 Mechanics of Materials AND **300035.2** Kinematics and Kinetics of Machines

Equivalent Units

300478 - Design of Servo-Systems

....

This unit introduces students to the design of machine components. The unit covers the design of components to ensure their functionality, strength and durability. Components designed include drive components,gears, shafts,belt drives, and bearings and structural components, welds and treaded fasteners.

300040.2   Mechanics of Materials

Credit Points 10 **Level** 2

Prerequisite

300463.2 Fundamentals of Mechanics

Equivalent Units

300039 - Mechanics and Materials

....

Mechanics of Materials is the study of the stresses and deformation of a body made of any elastic solid material, and how these are related to the bodys shape and the load applied to it. This unit looks at how and why structural components including bars and beams deform and break. It concentrates on how these are affected by the geometry of the body and loading. Types of loadings considered include normal loads, torsional loads and bending loads. The main

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objective of the unit is to introduce students to the aspects of stress, strain and internal force development in the components and the methods to determine the deformation and deflections of the components. Energy methods and impact loadings are also considered.

700116.1 Mechanics of Materials (UWSC Assoc Deg)

Credit Points 10 **Level** 2

Prerequisite

700113.1 Fundamentals of Mechanics (UWSC Assoc Deg)

Equivalent Units

300040 - Mechanics of Materials

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

Mechanics of Materials is the study of the stresses and deformation of a body made of any elastic solid material, and how these are related to the body's shape and the load applied to it. This unit looks at how and why structural components including bars and beams deform and break. It concentrates on how these are affected by the geometry of the body and loading. Types of loadings considered include normal loads, torsional loads and bending loads. The main objective of the unit is to introduce students to the aspects of stress, strain and internal force development in the components and the methods to determine the deformation and deflections of the components. Energy methods and impact loadings are also considered.

300487.3 Mechatronic Design

Credit Points 10 **Level** 3

Prerequisite

300040.2 Mechanics of Materials

Equivalent Units

300041 - Mechatronic Design 1, 300042 - Mechatronic Design 2

....

The aim of the unit is to integrate the basic skills of mechanics, mechanical systems and automation in the practice of engineering design as applied to mechatronic devices and systems. The ability to perform detailed design analysis of such machine elements as bearings, brakes, clutches, belt drives and shaft and motor systems is the intended outcome of undertaking this unit and project based tasks will form part of the learning process and team work experience.

101734.2 Media and Visual Cultures: Case Studies

Credit Points 10 **Level** 1

....

Three modules focussing on different media and methods of analysing visual culture provide a multidisciplinary foundation unit for students' study in the major area of Media and Visual Cultures. The modules will vary from year

to year based on the expertise of staff co-teaching the unit. Media to be studied will include, for example, film, television, digital media, "fine arts" such as paintings, engravings and sculpture, including commemorative sculpture and monuments.

101732.2 Media, The Everyday and Uneven Modernities

Credit Points 10 **Level** 3

....

This unit examines critiques of power in relation to everyday media cultures and the uneven development of modernity. The history of concepts of power is considered in terms of the relationship between socio-cultural, technical, political, and economic conditions shaping media cultures in the context of the everyday. Working with the concept of 'uneven modernities', this unit provides students with an understanding of the shift from industrial production to flexible accumulation and the impacts of this on media cultures globally.

101800.2 Media, Violence, Protest, Terror

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit investigates the relationship between the media and forms of political resistance constructed as 'violence' or 'terrorism'. Practices and representations of political violence have transformed in the shift to post-modernity and raised questions about the connections between the media, political agency, and processes of globalisation. We will consider traditional and current debates about the media's relationship to violence; the importance of spectacle in global cultures; the media's role in the reproduction of hegemony; the changing relationship between the media and the public sphere; and the media's perceived role in counter-terrorism policy and practice.

300826.1 Medical Microbiology

Credit Points 10 **Level** 3

Prerequisite

300833.1 Microbiology 1 AND **300896.1** Microbiology 2

Equivalent Units

300233 - Medical Microbiology, 300749 - Medical Microbiology

....

Infectious diseases worldwide are the most common cause of illness. Medical microbiology is subdivided into four areas: virology, bacteriology, mycology (the study of fungi) and parasitology. The rapid evolution of microbes means that this is an area that does not remain static. This unit has a modern approach to the study of the balance between the host, humans, and the very large army of potential invaders. Students will embark on a journey into the world of pathogenic micro-organisms exploring the molecular mechanisms by which these override host defences leading to disease. Infectious diseases of the human body systems

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as well those of the immunocompromised and infections contracted in the healthcare setting (nosocomial) are discussed. The theory will be supported with laboratory experience representing diagnostic procedures for the identification of infectious agents.

400813.2   Medical Research Project

Credit Points 60 **Level** 3

Assumed Knowledge

Knowledge from successful completion of years 1 and 2 of Bachelor of Medicine, Bachelor of Surgery (MBBS).

Prerequisite

400861.1 Foundations of Medicine 1 AND **400862.1** Foundations of Medicine 2

Corequisite

300768.1 Methods of Scientific Researching AND **400864.2** Research Methods (Quantitative and Qualitative) AND **400863.1** Foundations of Research and Evidence-Based Practice

Special Requirements

This program requires the background of at least two years of a medical degree before it can be successfully attempted. It will therefore be available only to currently enrolled UWS medical students as part of an intercalated year leading the Bachelor of Medical Research. If any clinical work is to be undertaken as part of the research project, the students will need to continue to meet the same requirements for immunisation and child protection as for all other students in the medical course.

....

This unit is the principal component in the Bachelor of Medical Research. It aims to give students, enrolled in the UWS MBBS, the opportunity to develop their critical thinking and gain a more detailed experience in medical research than is provided in the medical course. It consists of a research project in any area of medical research for which the School can provide suitable supervision. Students will study the relevant literature, develop and conduct the program of research with the assistance of their supervisor, take part in research seminars in their research group, and present the results as a dissertation.

300892.1   Medical Science Project

Credit Points 10 **Level** 3

Equivalent Units

300542 - Biomolecular Science Project

Special Requirements

Student must be enrolled in 3577 - Bachelor of Medical Science, 3673 - Bachelor of Medical Science, 3674 - Bachelor of Medical Science (Nanotechnology) or 3682 - Bachelor of Medical Science (Advanced). Must have a minimum of 80 credit points at Level 2 or 3.

....

Students will undertake a short research project specific to the field of Medical Science. This will involve undertaking a review of the literature and generating appropriate hypotheses that will subsequently be tested and analysed.

Findings will be presented orally and as a written manuscript.

400753.4   Medical-Surgical Nursing 1

Credit Points 10 **Level** 2

Assumed Knowledge

Content and achievement of learning outcomes derived from Year One nursing units.

Prerequisite

400749.3 Nursing and Health Breakdown OR **400776.3** Introduction to Nursing Practice

Corequisite

400814.2 Alterations in Nutrition, Elimination and Sexuality

Incompatible Units

400058 - Nursing Therapeutics 6, 400059 - Nursing Therapeutics 7, 400642 - Medical-Surgical Nursing Therapeutics

Special Requirements

Restrictions on clinical practicum placements because of safety and professional issues dealing with the public. Students must be enrolled in the Bachelor of Nursing, the Bachelor of Nursing (Graduate Entry) or the Bachelor of Nursing Advanced and must have met Special Requirements for these courses. First Aid Certificate, Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include; 1. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2. A completed vaccination card with serology results attached 3. Four forms completed and taken to every placement (with a copy) a. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010, b. Code of Conduct, c. TB Assessment Form, d. Student Undertaking/Declaration form 4. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace. A student is required to wear closed shows (covering heels and instep). Students who do not wear the correct clothing will be excluded from clinical practicum sessions.

....

This unit will elaborate on professional nursing concepts and practices that promote, maintain and support people who are experiencing health breakdown affecting eating, drinking, nutrition, elimination and sexuality.

400757.3   Medical-Surgical Nursing 2

Credit Points 10 **Level** 2

Assumed Knowledge

Achievement of learning outcomes related to Year One nursing units as well as Medical Surgical Nursing 1 and Alterations in Nutrition Elimination and Sexuality units offered in Autumn Year 2 of the Bachelor of Nursing.

Prerequisite

400749.1 Nursing and Health Breakdown OR **400776.1** Introduction to Nursing Practice

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Corequisite

400815.1 Alterations in Breathing, Work/Leisure and Mobility

Incompatible Units

400055 Nursing Therapeutics 4

Special Requirements

Special Requirements are those stipulated by the NSW Health and UWS. At present these include: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3)Adult Health Immunisation 4) Workcover accredited Senior First Aid Certificate

....

This unit will elaborate on professional nursing concepts and practices that promote, maintain and support people who are experiencing health breakdown affecting breathing, work/leisure, sexuality and mobility.

400759.4   Mental Health Nursing 1

Credit Points   10 **Level**   2

Prerequisite

400749.2 Nursing and Health Breakdown OR **400776.2** Introduction to Nursing Practice OR **400640.2** Foundations of Nursing Therapeutics

Equivalent Units

400054 - Nursing Therapeutics 3, 401013 - Promoting Mental Health and Wellbeing 1

Special Requirements

There are considerable restrictions on the availability of clinical placements so students must be enrolled in one of the Bachelor of Nursing courses, 4642, 4643 or 4648 and must meet special requirements for these courses. This is a risk management strategy to ensure that enrolled students are able to satisfy safely and professional issues when dealing with the public. As per NSW Health: First Aid Certificate, Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include; Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; Criminal Record Clearance form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; Adult Health Immunisation Schedule; Code of Conduct Agreement; First Aid Certificate. Additional - For Internationals students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit will extend the students understanding of the relationships between stress, adaptation, mental health and the person's capacity to function in everyday life and the implications for professional nursing practice

400762.2   Mental Health Nursing 2

Credit Points   10 **Level**   3

Assumed Knowledge

Content and achievement of learning outcomes for years two Bachelor of Nursing Units 4642 Bachelor of Nursing, 4643 - Bachelor of Nursing - Graduate Entry, or 4648 Bachelor of Nursing (Advanced)

Prerequisite

400759.1 Mental Health Nursing 1

Equivalent Units

400066 - Nursing Therapeutics 11

Special Requirements

As per NSW Health and UWS: First Aid Certificate Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include; 1. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. 2. A completed vaccination card with serology results attached 3. Four forms completed and taken to every placement (with a copy) a. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. b. Code of Conduct, c. Form 2: TB Assessment Form d. Form 3: Student Undertaking/ Declaration form 4. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace.

....

This unit will elaborate the mechanisms of health breakdown and their application to professional nursing practice in supporting people who are affected by serious mental health breakdown.

300848.1   Metabolism

Credit Points   10 **Level**   2

Assumed Knowledge

Basic biology, chemistry and maths

Prerequisite

300936.1 Functional Proteins and Genes OR **300818.1** Introduction to Physiology OR **300801.1** Animal Science OR **300816.1** Cell Biology OR **300802.1** Biodiversity

Equivalent Units

300220 - Biochemistry 2; 300548 - Human Metabolism & Disease

Incompatible Units

300227 - General Biochemistry

Special Requirements

Successful completion of 60 credit points at Level 1 and 20 credit points at Level 2

....

Organisms degrade food molecules to generate energy and converts excess food molecules into internal fuel stores. This unit will cover topics including: bioenergetics; the structures of key molecules; glycolysis, gluconeogenesis,

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glycogen synthesis and breakdown; fatty acid oxidation and synthesis; amino acid catabolism; urea synthesis; citric acid cycle; electron transport and oxidative phosphorylation. Emphasis will be on the regulation and integration of these pathways, including their responses to hormonal regulation. The effects of altered dietary and hormonal status on metabolic pathways and their consequences for the organism will be discussed.

300768.2   Methods of Scientific Researching

Credit Points 10 **Level** 7

Assumed Knowledge

Appropriate background in a scientific discipline to conduct research in that area. No previous research experience is required.

Equivalent Units

SC809A - Research methodology and experimental design, 14429 - Science research project, proposal and seminar, 300411 - Research methodology and experimental design

Incompatible Units

300398 - Methods of Researching

Special Requirements

Students must be enrolled in a postgraduate degree.

....

This unit introduces students to the principles and tools of scientific research. It is designed for students who are undertaking Master of Science and those who have not previously undertaken training in research. Students attend a series of classes covering topics such as critical thinking, problem definition, formulation and testing of hypotheses, analysis of quantitative and qualitative results, communication of research findings, bibliographic techniques and advanced information retrieval methods. Students are required to prepare an intention to research, an annotated bibliography, seminar, and a research poster.

300833.1   Microbiology 1

Credit Points 10 **Level** 2

Prerequisite

300802.1 Biodiversity OR **300816.1** Cell Biology

Equivalent Units

300300 - Microbiology 1

Incompatible Units

300331 - General Microbiology

....

In this unit students will use an inquiry-based approach to explore the origin and diversity of microorganisms and their significance in the environment, in foods and industry as well as in health and disease. Students will be introduced to the structure, reproduction, classification, cultivation and enumeration of bacteria, viruses, fungi and protists. The conditions required for growth and survival of microorganisms will be studied as well as physical and chemical methods of control. In laboratory classes students will develop skills in culturing and observing microorganisms and in designing experiments to test

microbiological concepts. This unit is a pre-requisite for Microbiology 2 and Level 3 Microbiology units.

300896.1   Microbiology 2

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of the major groups of microorganisms and their structure and functions including DNA and key metabolic pathways.

Prerequisite

300833.1 Microbiology 1

Equivalent Units

300321 - Microbiology 2

....

The unit focuses on the origins of genetic variation and the process of gene regulation in prokaryotes and explores the metabolic diversity of microorganisms from a variety of habitats and their application in industry. Using published scientific literature, students will learn how scientists research functional microbial physiology in the postgenomic era. The principles and applications of recombinant DNA techniques are discussed. Classification and identification of bacteria and yeasts is presented, including an introduction to molecular systematics. Laboratory classes introduce students to techniques used to study microbial physiology and genetics.

300044.2   Microcontrollers and PLCs

Credit Points 10 **Level** 2

Prerequisite

300025.2 Electronics OR **300021.1** Electrical Fundamentals

....

The aim of this unit is for students to develop an understanding of the hardware, architecture and the assembly language of microcontrollers and to control a mechanical system with a programmable logic controller (PLC). The unit looks at the applications of timers, interrupts and serial ports. Furthermore, the general approach in designing a microcontroller in mechanical systems will be studied. It uses an Omron PLC to control a factory represented by four pneumatic cylinders. After covering the Ladder Logic programming language, it moves on to cover sequential programming and numerical manipulation using PLCs.

300076.3   Microprocessor Systems

Credit Points 10 **Level** 2

Prerequisite

300018.2 Digital Systems 1

Equivalent Units

84137 - Microprocessor Systems

....

This unit introduces students to the internal structure of microprocessors and its fundamental operations. Topics include assembly language programming, interrupt processing, CPU functions, memory organization, and

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peripheral programming. Intel 8088 microprocessor will be discussed in great detail. Embedded processor will also be covered.

401030.1   Midwifery Knowledge 1

Credit Points 10 **Level** 1

Corequisite

401002.1 Bioscience 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit introduces students to the meaning of birth in society and the historical and social contexts of midwifery, from its early beginnings, to its current professional standing. The philosophy of midwifery and the role of the midwife within a continuity of care framework will be explored including approaches for working in partnership with women and their families. Students will investigate, identify and access scientific information and research in order to develop academic literacy at a beginning level; identify the principles of communication and consent; and explore issues related to professional behaviour and educational resources for childbirth.

401032.1   Midwifery Knowledge 2

Credit Points 10 **Level** 1

Prerequisite

401030.1 Midwifery Knowledge 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit introduces students to midwifery knowledge for childbirth within a woman centred partnership model. It provides the theoretical foundations to equip students in understanding the role of the midwife during pregnancy, labour and birth and the initial care of the newborn. The educational, psychological and social needs of women are explored and integrated with learning from the Bioscience for Midwifery unit. The unit briefly introduces students to midwifery care related to the postnatal and newborn period including lactation and breastfeeding.

401034.1   Midwifery Knowledge 3

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge from all Year 1 core units from the Bachelor of Midwifery.

Prerequisite

401032.1 Midwifery Knowledge 2

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit provides students with the midwifery knowledge related to the postnatal period. It will focus on maternal postnatal and newborn care including infant feeding,

bonding and attachment. Breastfeeding is a core maternity indicator and is a focus for improving public health. Midwifery skills and knowledge to assist women in the preparation, initiation and establishment of breastfeeding will be examined as well as the historical and social contexts of infant feeding and challenges that this and other problems may pose for women. The midwives role in supporting women who are breastfeeding is addressed including the need to offer consistent evidence-based information.

401043.1   Midwifery Practice - Models of Care

Credit Points 10 **Level** 3

Prerequisite

401038.1 Midwifery Practice Experience 3 AND **401036.1** Complex Care 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

In this unit students will undertake a three week practice placement. The purpose of this placement is for students to experience an alternative model of midwifery care which can be in an urban, rural or international setting.

401041.1   Midwifery Practice - Teaching and Learning

Credit Points 10 **Level** 3

Prerequisite

401036.1 Complex Care 1 AND **401038.1** Midwifery Practice Experience 3

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

In this unit students will gain knowledge of adult education principles and skills in facilitating learning in a range of hospital-based and community settings, including group antenatal care and childbirth and parenting education sessions. In addition students will gain knowledge and skills

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in facilitating student learning and will begin to understand their role in teaching and learning as a registered midwife.

401033.1 Midwifery Practice Experience 1

Credit Points 10 **Level** 1

Prerequisite

401045.1 Introduction to Midwifery Practice Experience

Corequisite

401032.1 Midwifery Knowledge 2

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

In this unit students will develop skills for the provision of midwifery care across the birthing continuum. The primary focus of this unit will be the acquisition of skills for supporting women during normal pregnancy and birth. Students will apply knowledge gained from Midwifery Knowledge 1 and 2 in simulated practice environments and will gain a comprehensive understanding of the practical aspects of midwifery care for women experiencing normal labour and birth. Students will gain practical experience in designated clinical areas and will follow women through pregnancy, birth and the postnatal period in a continuity of care experience.

401035.1 Midwifery Practice Experience 2

Credit Points 10 **Level** 1

Prerequisite

401033.1 Midwifery Practice Experience 1 AND **401031.1** Bioscience for Midwifery

Corequisite

401034.1 Midwifery Knowledge 3

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

In this unit students will learn the necessary midwifery skills for the provision of woman centred post birth care. In a simulated practice environment students will gain practical

skills to provide midwifery care to both the woman and her baby up until six weeks postpartum. The importance of effective communication and documentation will also be reinforced. This unit will also include blocks of practical experience in designated clinical areas and the provision of continuity of care.

401038.1 Midwifery Practice Experience 3

Credit Points 10 **Level** 2

Prerequisite

401035.1 Midwifery Practice Experience 2

Corequisite

401036.1 Complex Care 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

In this unit students will develop the necessary skills to provide midwifery care to women with complex health needs. In lab based simulation environments students will gain confidence in providing midwifery care following the detection of deviations from normal. Students will gain practical experience in designated clinical areas and will follow women through pregnancy, birth and the postnatal period in a continuity of care experience.

401042.1 Midwifery Practice Experience 4

Credit Points 10 **Level** 3

Prerequisite

401038.1 Midwifery Practice Experience 3

Corequisite

401039.1 Complex Care 2 AND **401040.1** Collaborative Care

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

In this unit students will further develop midwifery skills for the management of complications and emergency situations. In simulated practice environments students will

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gain the skills necessary to work collaboratively with interdisciplinary colleagues. Students will gain practical experience in designated clinical areas and will follow women through pregnancy, birth and the postnatal period in a continuity of care experience.

401044.1 Midwifery Practice Experience 5

Credit Points 10 **Level** 3

Prerequisite

401042.1 Midwifery Practice Experience 4 AND **401039.1** Complex Care 2 AND **401040.1** Collaborative Care AND **401041.1** Midwifery Practice - Teaching and Learning

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit provides the opportunity for students to consolidate their knowledge and midwifery skills in preparation for their role as a midwife. Students will be assessed across the four competency domains of legal and professional practice, midwifery knowledge and practice, midwifery as primary health care and reflective and ethical practice. Students will gain practical experience in designated clinical areas and will follow women through pregnancy, birth and the postnatal period in a continuity of care experience.

300043.3 Mobile Robotics

Credit Points 10 **Level** 4

Prerequisite

300463.2 Fundamentals of Mechanics

....

To develop an understanding of the basic concepts involved in Mobile Robotics. The areas of mobile robot mechanics, localisation, map building and path planning of mobile robots will be introduced. Various sensors and their applications in mobile robotics are also to be introduced.

100271.3 Modern Japanese History

Credit Points 10 **Level** 3

Equivalent Units

63036 - Themes in Asian History

Special Requirements

Successful completion of 60 credit points.

....

This unit presents a social and cultural history of Japan from the mid nineteenth century to the present. The principle organising theme is the question of modernity:

what are the different ways that Japan has expressed its modern identity? How has this been shaped by Japan's position in relation to both the West and its Asian neighbours? What is the relationship among the state, its citizens, and history in negotiating identity? How has war affected Japanese modernity and what we know of modern Japan?

101033.4 Modernism

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit aims to introduce students to important works of literature from the earlier part of the 20th century. Throughout the course we will be concentrating on literature but will make reference to other art forms (in particular the visual arts) to provide the intellectual context necessary to understanding the ideas of the period. There will be a close study of a small number of important novels or works of poetry from the period, with a close consideration of techniques of writing and the way these techniques contribute to an understanding of the themes in the works.

101001.3 Modernity and Cinema

Credit Points 10 **Level** 3

Equivalent Units

VP215A - Modernity and Cinema

Special Requirements

Successful completion of 60 credit points

....

This unit will engage with the question of how social and aesthetic issues interact in films by examining specific questions which are related to cinema history. Issues of identity will be used to focus upon the ways in which historical contexts interrelate with artistic practice. The unit will consider the process of creating emotions, the consideration of techniques of production and the manipulation of cinema language, the use of narrative or non-narrative form to convey the sense of reality, (or the unreal, the uncertain).

300817.1 Molecular Biology

Credit Points 10 **Level** 2

Prerequisite

300936.1 Functional Proteins and Genes OR **300845.1** Genetics OR **300848.1** Metabolism

Equivalent Units

300234 - Molecular Biology, 300549 - Human Molecular Biology

Special Requirements

Laboratory Safety Glasses

....

Molecular biology is central to many fields of the biomedical and natural sciences, and includes genetics, immunology,

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cell biology, biochemistry, and forensics. Through comparative studies of different organisms, this unit will describe fundamental concepts and methods in the study of DNA and RNA and the application of molecular biology in advanced fields such as genomics. Subjects will include DNA replication; transcriptional, post-transcriptional and epigenetic regulation of gene expression; microarrays, and an introduction to bioinformatics. Practical work will provide opportunities to become familiar with the methods of molecular biology, with an emphasis on the development of problem solving and analytical skills

300927.1 Molecular Medicine

Credit Points 10 **Level** 3

Prerequisite

300817.1 Molecular Biology

Equivalent Units

300551 - Molecular Basis of Disease, 300407 - Mamalian Molecular Medicine

....

Molecular Medicine is an inquiry based capstone unit that integrates core concepts in molecular and cell biology with a focus on cancer as a framework to discuss autoimmune, infectious and genetic diseases. This unit aims to enhance critical thinking for the professional environment and prepares students for future innovations in prevention, management and cure of catastrophic diseases. Current research, diagnosis, treatment and policy issues, related to health and disease states, are placed in the context of real world experiences and changing imperatives.

300912.1 Molecular Pharmacokinetics

Credit Points 10 **Level** 3

Prerequisite

300849.1 Physical Chemistry

Equivalent Units

300475 - Molecular Pharmacokinetics

Special Requirements

Students are required to have a Lab coat and safety glasses in this unit.

....

This Unit examines the Kinetics of the bioavailability, degradation and removal of drug molecules from the body and its response to drug structure, stability and delivery system.

400886.2 Motor Control and Skill Acquisition

Credit Points 10 **Level** 2

Prerequisite

400868.2 Human Anatomy and Physiology 1 OR **400869.2** Human Anatomy and Physiology 2 OR **400881.3** Functional Anatomy

Equivalent Units

100679 - Motor Control and Learning

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

Motor Control and Skill Acquisition is an investigation of the physiological and psychological processes involved in both the control and the learning of movement. As such, it considers the control mechanisms which are innate to the learner, how these mechanisms change by virtue of both maturation and experience, and how the latter type of changes may be facilitated by manipulation of the learning environment.

400891.2 Movement and Skill Development

Credit Points 10 **Level** 1

Prerequisite

300361.3 Introduction to Human Biology AND **400880.2** Fundamentals of Exercise Science

Incompatible Units

400794 - PDHPE: Exploring Movement Skills, 400796 - PDHPE: Efficient Movement Principles

Special Requirements

Students must be enrolled in course 4659 - Bachelor of Health Science (PDHPE) or 4549 - Bachelor of Health Science (PDHPE).

....

This unit examines the scientific basis for movement and sports skill development. An understanding of the principles of movement and motor skill and how they apply to performance is examined through a range of movement tasks required for track and field athletics and some team sports. Laboratory activities will focus upon the basic movement tasks of throwing, jumping, balancing, striking, running and rotary activities. An examination of the instruments used in efficient movement analysis is undertaken.

100877.3 Multicultural Studies

Credit Points 10 **Level** 3

Equivalent Units

63057 - Multicultural Studies, SS203A - Multicultural Australia

Special Requirements

Successful completion of 60 credit points

....

At the beginning of the twenty-first century, multiculturalism remains an important topic of debate both in Australia and the world at large. This unit explores the concept of multiculturalism in a historical perspective and across a variety of sites. While concentrating upon Australian multiculturalism, the syllabus also encompasses the study of multiculturalism in a variety of international contexts. Particular attention is paid to the relations between multiculturalism and nationalism, the role of religion, the relation of multiculturalism to Indigenous politics, and to the increased pressures placed upon cultural difference and diversity by globalisation.

Units

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300046.2   Multimedia Signal Processing

Credit Points 10 **Level** 4

Prerequisite

300069.3 Digital Signal Processing

Equivalent Units

84492 - Honours/Pass Subject 1

....

This unit introduces students to the digital processing of speech and image signals. Topics include speech generation, analysis, synthesis, speech identification, image processing techniques, image compression and standards. On the completion of this unit, students will gain an understanding of the latest developments in the area of multimedia signal processing.

300895.1   Nanochemistry

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of the content of the units Nanotechnology 1 and Nanotechnology 2 or equivalent.

Prerequisite

300800.1 Essential Chemistry 1

Equivalent Units

300590 - Nanochemistry, 300416 - Nanopowders and Nanomaterials

....

The unit covers basic theory of surface chemistry, latest technologies of surface depositions and industrial and commercial applications of nanomaterials and nanopowders. Upon successful completion, the students will achieve an in-depth understanding of techniques of preparation of nanomaterials and nanopowders that includes plasma arching, chemical vapour deposition, electrodeposition, sol-gel synthesis, ball milling and the use of natural particles. Technical aspects of process control on the microstructure and properties of coatings will be discussed. Case studies of applications of nanopowders and nanomaterials such as biomedical implants, insulators, high power magnets, molecular sieves, supercomputers, jet engines and other industrial applications will be pursued.

300827.1   Nanotechnology

Credit Points 10 **Level** 1

Equivalent Units

300705 - Nanotechnology

....

This unit provides a broad introduction to nanoscience, the current status of nanotechnology and their applications. It introduces main areas that are central to understanding the importance of nanoscale applications and to study the connection between the underlying nanoscience of various nanotechnology devices. Emphasis will be placed to reflect the true interdisciplinary nature that encompasses a broad understanding of basic sciences intertwined with engineering sciences and information sciences pertinent to nanotechnology.

300932.1   Natural Science Research Methods

Credit Points 10 **Level** 2

Equivalent Units

300290 - Research Communities and their Environments, 300662 - Research Methods, 300561 - Animal Research

Special Requirements

Successful completion of 60 credit points at Level 1 in order to enrol in this unit.

....

Formulating research questions to solve problems by designing and selecting a systematic methodology to test hypotheses and evaluate evidence are an essential part of research and inquiry. This unit will provide students with the critical thinking skills needed to undertake applied research, especially how to incorporate quantitative and qualitative evidence into arguments. Students will communicate the results of investigations using a variety of modes for different purposes. The ethical, regulatory and risk frameworks for research on human and animals will be discussed including the UWS humans and animal ethics approval process required for research.

200613.2   Negotiation, Bargaining and Advocacy

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Equivalent Units

61430 - Negotiation, Bargaining and Advocacy

....

Negotiation, bargaining and advocacy are central activities in employment relations processes. Effective human resource management and industrial relations practitioners require knowledge of the theoretical perspectives in negotiation together with an ability to critique the relevance and application of these perspectives. The importance of strategy and judgement in negotiation is highlighted and students are given the opportunity to develop their skills through negotiation exercises. An important theme in the unit is the assessment of the contextual and regulatory factors that shape negotiation, bargaining and advocacy practice. This aspect draws on contemporary debates in these spheres most notably concerning the Australian context.

300143.3   Network Security

Credit Points 10 **Level** 3

Assumed Knowledge

Good understanding of the principles of information security, and computer networks and internets.

Prerequisite

300094.2 Computer Networking Fundamentals OR **300565.2** Computer Networking

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....

This unit is concerned with the protection of information transferred over computer networks. It includes discussion of techniques for securing data transported over local and wide area networks. At the conclusion of the unit students will have a good understanding of the practical aspects of securing a computer network against internal and external attacks.

300575.2   Networked Systems Design

Credit Points 10 **Level** 3

Prerequisite

300095.3 Computer Networks and Internets

Equivalent Units

300088 - Broadband Networking

....

This unit builds on and consolidates the skills and knowledge gained in Computer Networking and Computer Networks and Internets. Students successfully completing this unit will acquire the necessary design skills and knowledge required to build and configure enterprise scale networks. The unit provides students with an opportunity to develop problem-solving techniques and decision-making skills to resolve networking issues. Students completing this unit and its prerequisites should also now be prepared to attempt world recognized network industry certification (CCNA).

300576.2   Networking Workshop

Credit Points 10 **Level** 2

Assumed Knowledge

• List, discuss and compare the elements of information coding and signal transmission, • List, describe, and explain the elements and functional relationships of communications hardware and software, • Identify, locate, distinguish, and describe the individual hardware components of a personal computer (PC) and explain their purpose, functions and operations, • Install PC components, devices and peripherals in accordance with installation procedures and operational standards.

Prerequisite

300150.3 PC Workshop AND **300565.2** Computer Networking

Equivalent Units

300138 - LAN Workshop

....

This unit covers in depth the basics of networking and provides students with the knowledge and skills necessary to install, test, tune, customise, repair and maintain networking hardware and software necessary to create a Local Area Network (LAN). Students also learn how to administer a LAN by setting up user accounts, access privileges, security procedures, and back-up/recovery procedures.

300754.1   Neuroanatomy

Credit Points 10 **Level** 3

Assumed Knowledge

The outcomes of: 300543 Cell Biology, 300554 Principles of Chemistry, 300752 Introduction to Anatomy and Histology, 300753 Introduction to Human Physiology; or 400868 Human Anatomy & Physiology 1, 400869 Human Anatomy & Physiology 2; or equivalent units.

Equivalent Units

300322 - Neuroanatomy, 400964 - Clinical Neurosciences, 400166 - Clinical Neurosciences

Special Requirements

Due to space limitations, students must be enrolled in the following courses: 3577 Bachelor of Medical Science, 3657 Bachelor of Medical Science/Bachelor of Information and Communication Technology, 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4662 Bachelor of Health Science/Master of Physiotherapy, 4663 Bachelor of Health Science/Master of Occupational Therapy, 4666 Bachelor of Health Science (Honours)/Master of Podiatric Medicine, 4668 Bachelor of Health Science (Honours)/ Master of Physiotherapy.

....

This unit builds on the human anatomy and physiology studied in first and second year, equipping students with detailed knowledge of functional neuroanatomy, with particular emphasis on the central nervous system. Cadaver specimens are used to facilitate the learning of spatial relationships between structures. The study of neurological function and dysfuntion integrates many previously learned scientific principles.

300754.2   Neuroanatomy

Credit Points 10 **Level** 3

Assumed Knowledge

The outcomes of: 300543 Cell Biology, 300554 Principles of Chemistry, 300752 Introduction to Anatomy and Histology, 300753 Introduction to Human Physiology; or 400868 Human Anatomy & Physiology 1, 400869 Human Anatomy & Physiology 2; or equivalent units.

Equivalent Units

300322 - Neuroanatomy, 400964 - Clinical Neurosciences, 400166 - Clinical Neurosciences

Special Requirements

Due to space limitations, students must be enrolled in the following courses: 3577 Bachelor of Medical Science, 3657 Bachelor of Medical Science/Bachelor of Information and Communication Technology, 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4662 Bachelor of Health Science/Master of Physiotherapy, 4663 Bachelor of Health Science/Master of Occupational Therapy, 4666 Bachelor of Health Science (Honours)/Master of Podiatric Medicine, 4668 Bachelor of Health Science (Honours)/ Master of Physiotherapy.

....

This unit builds on the human anatomy and physiology studied in first and second year, equipping students with

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detailed knowledge of functional neuroanatomy, with particular emphasis on the central nervous system. Cadaver specimens are used to facilitate the learning of spatial relationships between structures. The study of neurological function and dysfuntion integrates many previously learned scientific principles.

400986.1   Neurological Physiotherapy

Credit Points 10 **Level** 3

Prerequisite

400982.1 Core Competencies in Physiotherapy Practice AND **300754.1** Neuroanatomy AND **400981.1** Clinical Pharmacology AND **400864.2** Research Methods (Quantitative and Qualitative) AND **400866.2** Culture, Diversity and Health

Corequisite

400983.1 Orthopaedic Physiotherapy AND **400984.1** Cardiorespiratory Physiotherapy AND **400985.1** Clinical Education A

Special Requirements

This unit is restricted to students who are enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff. Students cannot enrol in Year 3 Physiotherapy units until they have completed 160 credit points in the Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs.

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This unit builds on the knowledge and skills developed in the first 2 years of physiotherapy study. It focuses on client assessment and evidence-based management in acute neurological physiotherapy contexts. This will require strong communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include introductory skills in neurological physiotherapy assessment, interpretation and prioritisation of findings along with the implementation and evaluation of appropriate treatment strategies.

400998.1   Neurological Rehabilitation

Credit Points 10 **Level** 3

Assumed Knowledge

Human anatomy, human physiology, neuroanatomy, and pathophysiology

Prerequisite

400986.1 Neurological Physiotherapy OR **400987.1** Neurological Physiotherapy Practice

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy and 4667 Master of Physiotherapy. Students in courses 4662 Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy are to complete prerequisite unit 400986 - Physiotherapy Practice. Students in course 4667 Master of Physiotherapy are required to complete prerequisite unit 400987 Neurological Physiotherapy Practice. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

....

This unit focuses on client assessment and evidence-based physiotherapy management in neurological rehabilitation. This will require strong communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include clinical reasoning in neurological physiotherapy assessment and treatment, implementation and evaluation of evidence-based interventions and management of complex conditions.

100273.3   New Ethnicities, Old Racisms

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 60 credit points at Level 1.

....

In 2013, this unit replaced by 101990 - The Racial State. The notion of 'New Ethnicities', introduced first by Stuart Hall in the 1980s in the context of the ascendancy of the New Right in Britain stressed, among other things, the importance of social and cultural identities, including ethnic and racial identities, generated by the process of globalisation, and the convergence of trans-national and trans-racial loyalties. Based on this notion, this unit critically examines the essentialist definitions of 'ethnicity', 'race' and 'nation', across many areas of cultural policy and practice. It draws theoretical perspectives from many schools of social thought including modernism, Marxism and postmodernism. Empirical examples are drawn from both the western and non-western world.

200029.2   Numerical Analysis

Credit Points 10 **Level** 2

Assumed Knowledge

200189 - Concepts of Mathematics

Equivalent Units

J2788 - Numerical Analysis; 14701 - Numerical Methods and Modelling

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This unit covers a substantial range of computational techniques in formulating and solving mathematical, scientific and engineering problems. Topics include: algorithmic approaches to solving nonlinear equations; systems of linear equations; differential equations; polynomial interpolation; numerical differentiation and integration; and curve fitting to approximate functions.

300488.3   Numerical Methods in Engineering

Credit Points 10 **Level** 3

Prerequisite

200238.2 Mathematics for Engineers 2 AND **85006.2** Introduction to Structural Engineering AND **85012.2** Soil Engineering

Equivalent Units

85019 - Civil/Environmental Engineering Pass/Hons Elective 1

....

The finite element method is a powerful numerical tool for analysing a wide range of engineering problems. The objective of this unit is to introduce the basic and fundamental principles of the finite element techniques by primarily focusing on their applications in the area of structural, solid and soil mechanics.

400204.2   Nursing Honours Thesis (Part-time)

Credit Points 60 **Level** 5

Assumed Knowledge

A basic knowledge of research methods at undergraduate leve or equivalent is required.

....

This unit aims to provide an opportunity for students to plan and implement a research project related to nursing which results in the production of a thesis. In consultation with an academic supervisor, the student will select a topic, conduct a literature review, design a research study, and report the findings and their implications. Attendance and participation at research seminars/colloquia is expected.

400202.2   Nursing Honours Thesis A (Full-time)

Credit Points 20 **Level** 5

Assumed Knowledge

A basic knowledge of research methods at undergraduate leve or equivalent is required.

....

This unit aims to provide an opportunity for students to plan and implement a research project related to nursing which results in the production of a thesis. In consultation with an academic supervisor, the student will select a topic, conduct a literature review, design a research study, and report the findings and their implications. Attendance and participation at research seminars/colloquia is expected.

400203.2   Nursing Honours Thesis B (Full-time)

Credit Points 40 **Level** 5

Assumed Knowledge

A basic knowledge of research methods at undergraduate leve or equivalent is required.

....

This unit aims to provide an opportunity for students to plan and implement a research project related to nursing which results in the production of a thesis. In consultation with an academic supervisor, the student will select a topic, conduct a literature review, design a research study, and report the findings and their implications. Attendance and participation at research seminars/colloquia is expected.

300933.1   Nutrition and Health 1

Credit Points 10 **Level** 2

Assumed Knowledge

Sound understanding of undergraduate Level 1 chemistry and biology.

Equivalent Units

300649 - Nutrition and Health 1

....

Nutrition is the science that applies knowledge of the nutritional components of foods to ensure the wellbeing of the human body. This unit presents the basic principles and concepts of human nutrition including nutrient requirements, functions, deficiency symptoms and the effects of dietary excess as well as energy balance and weight control. Students will gain a general understanding of the macronutrients such as carbohydrates, proteins and lipids in human metabolism, energy release and common diseases and disorders such as obesity, malnutrition, diabetes etc. The role of water and electrolytes in cellular and tissue functions, as well as alcohol metabolism and its impact on human health will be covered. The micronutrients are also studied, including the properties, general requirements, functions and the effects of deficiency and excess consumption of vitamins and essential minerals.

300934.1   Nutrition and Health 2

Credit Points 10 **Level** 2

Prerequisite

300933.1 Nutrition and Health 1

Equivalent Units

300650 - Nutrition and Health 2

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This unit explores the basic concepts of human nutrition in relation to various stages of the lifespan (inclusive of infants to late adulthood). It also explores several nutrition related issues such as obesity, cardiovascular disease and eating disorders. This unit provides information regarding the development of Australian dietary practices and introduces students to Australian dietary guidelines and nutrient reference values. This unit provides students with relevant

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and up to date information so that they may make informed decisions with regard to nutritionally critical moments of the life span in addition to emerging nutrition opinion or fact.

300144.4   Object Oriented Analysis

Credit Points 10 **Level** 2

Assumed Knowledge

General understanding of what an information system is and how information systems development is undertaken and; Introductory knowledge about system analysis and design, including - basic problem solving experience in computerised information systems - ability to derive systems requirements from problem definitions - ability to produce system models using process, data, object and network modelling. - understanding design and implementation issues include, (but may not be limited to), elementary database design, input, output and user interface design and prototyping.

....

Analyzing and modeling requirements using the object-oriented (OO) approach is the core strength of this unit. The system analysis is taken to greater depths within the context of Object Orientation. The Unified Modeling Language version 2.0 (notably use cases, activity diagrams, class diagrams and sequence diagrams) is used as a modeling standard for creating OO models in the problem space. This unit also covers methodologies for OO analysis work through practical case studies.

300888.1   Object Oriented Analysis (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

General understanding of what an information system is and how information systems development is undertaken and Introductory knowledge about system analysis and design, including - basic problem solving experience in computerised information systems - ability to derive systems requirements from problem definitions - ability to produce system models using process, data, object and network modelling. - understanding design and implementation issues including, (but may not be limited to), elementary database design, input, output and user interface design and prototyping.

Incompatible Units

300144 - Object Oriented Analysis

Special Requirements

Students must be enrolled in course 3684 - Bachelor of Information and Communications Technology (Advanced)

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Analyzing and modeling requirements using the object-oriented (OO) approach is the core strength of this unit. The system analysis is taken to greater depths within the context of Object Orientation. The Unified Modeling Language version 2.0 (notably use cases, activity diagrams, class diagrams and sequence diagrams) is used as a modeling standard for creating OO models in the problem space. The unit covers in-depth methodologies and advanced solutions in problem, solution and

background modeling spaces. It also includes well-documented and detailed class diagrams through practical case studies.

700039.1   Object Oriented Analysis (UWSC)

Credit Points 10 **Level** 2

Assumed Knowledge

General understanding of what an information system is and how information systems development is undertaken and Introductory knowledge about system analysis and design, including - basic problem solving experience in computerised information systems - ability to derive systems requirements from problem definitions - ability to produce system models using process, data, object and network modelling. - understanding design and implementation issues include, (but may not be limited to), elementary database design, input, output and user interface design and prototyping.

Equivalent Units

14924, 48525, 61231 - Systems Analysis 1, 14998 - Systems Analysis 1A, 14935, 48526, 61232 - Systems Analysis 2

Special Requirements

Only UWSCollege students enrolled in 7004 Diploma in Information Communications Technology Fast Track and 7005 Diploma in Information Communications Technology can enrol in this unit.

....

Analyzing and modeling requirements using the object-oriented (OO) approach is the core strength of this unit. The system analysis is taken to greater depths within the context of Object Orientation. The Unified Modeling Language version 2.0 (notably use cases, activity diagrams, class diagrams and sequence diagrams) is used as a modeling standard for creating OO models in the problem space. This unit also covers methodologies for OO analysis work through practical case studies.

300147.4   Object Oriented Programming

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals

....

This unit presents the concepts and principles of programming languages with the emphasis on object oriented paradigm. It addresses the importance of the separation of behaviour and implementation as well as effective use of encapsulation, inheritance and polymorphism. The students will gain intensive training in programming skills with supervised laboratory sessions and task oriented assignments.

400176.3   Occupation and Ageing

Credit Points 10 **Level** 3

Prerequisite

400912.1 Occupational Therapy Process

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Special Requirements

Students must be enrolled in courses 4663 Bachelor of Health Science/Masters of Occupational Therapy and 4664 Master of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) successfully completed an approved Child Protection Workshop 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) possess a current WorkCover Authority approved First Aid Certificate.

....

The process of ageing will be examined critically using the biopsychosocial model. Students will use research evidence to prepare occupational therapy intervention for older people and their families that promotes quality of life and maximum social participation. Students will reflect on their own attitudes towards ageing and how social stereotypes of older people must be challenged to promote a positive view of this stage of life.

400169.3   Occupation and Mental Health

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy or 4664 - Master of Occupational Therapy. Prerequisite requirements for students enrolled in 4663: 300754 - Neuroanatomy, 101614 - Psychology and Health and 400908 - People, Environment and Occupations. Corequisite requirement for students enrolled in 4664: 400911 - Occupational Therapy Theory and Practice.

....

This unit provides an understanding of the impact of major mental illnesses and disorders on occupational participation. These illnesses/disorders are examined from varying perspectives including consumer, recovery, population health and biomedical. Mental health legislation, policies, strategies and standards are examined in relation to clinical practice in this field. Occupational therapy theory, assessments, interventions and outcomes are incorporated together with cross-disciplinary approaches and current evidence in order to provide a foundation for practice in mental health settings.

400171.3   Occupation and Neurology

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy or 4664 - Master of Occupational Therapy. Prerequisite requirements for students enrolled in 4663: 300754 - Neuroanatomy and 400908 - People, Environment and Occupations. Corequisite requirement for students enrolled in 4664: 400911 - Occupational Therapy and Practice.

....

This unit prepares occupational therapy students to work in a variety of settings with individuals who have a

neurological condition. The impact of common neurological conditions on the person, their environment and their occupations will be examined. Students will be exposed to a variety of assessments, interventions and evaluation tools suitable for this client population.

400165.2   Occupation and the Environment

Credit Points 10 **Level** 3

Prerequisite

400908.1 People, Environment and Occupations OR
400911.1 Occupational Therapy Theory and Practice

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy and 4664 - Master of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) successfully completed an approved Child Protection Workshop 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) possess a current WorkCover Authority approved First Aid Certificate.

....

Students will demonstrate skills in the analysis and modification of the environment using principles of ergonomics and appropriate Australian standards in building design. The ICF will provide the context for assessment and modification of the environment to enable individuals with impairments to overcome activity limitations or restrictions in participation.

300919.1   Occupational Health and Safety

Credit Points 10 **Level** 3

Equivalent Units

300794 - Occupational Health and Safety

Special Requirements

Successful completion of 60 credit points at Level 1 and 20 credit points at Level 2.

....

The unit aims to provide students with an essential working understanding of occupational health and safety legislation, risk assessment and risk management currently required for graduate employment across a broad range of industries and workplaces. The unit explores current occupational health, safety and welfare issues in the workplace with specific reference to the enforcement of OHS legislation, workers' compensation, and principles of hazard identification and risk management as required by Australian legislation. The unit also equips students with the capacity to recommend OHS policies to ensure compliance with this legislation and relevant research risk assessment strategies.

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200753.2 Occupational Health and Safety

Credit Points 10 **Level** 3

Equivalent Units

61442 Occupational Health and Safety, 200617 - Occupational Health and Safety

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The nature and history of occupational health and safety in Australia, legal frameworks including occupational health and safety acts and workers' compensation. OH&S is considered using the medical, legal, economic, industrial relations and management perspectives. Identifying, assessing, monitoring risks; and specific occupational hazards and intervention strategies are also covered.

400916.1 Occupational Justice

Credit Points 10 **Level** 7

Assumed Knowledge

Students are expected to have completed all of the units of their first three years.

Prerequisite

400912.1 Occupational Therapy Process

Equivalent Units

400170 - Occupation & Social Participation

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy and 4664 - Master of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. If students are visiting a NSW Health facility they will need to comply with the occupational screening and immunisation policy of NSW Health.

....

This unit critically examines practice in the community with a focus on social inclusion and occupational justice. Life perspectives of people experiencing occupational injustice are explored. Current and historical ideologies which underpin global and national legislation and policies on human rights are examined. The promotion of occupational participation through occupational therapy practice is outlined. This unit challenges popular myths and stereotypes of people with disabilities. Issues such as de-institutionalisation, duty of care, dignity of risk, choice-making, rights and negligence are critiqued against legal, ethical and personal perspectives. This unit assists students to develop critical thinking and reflection skills for practice.

400907.3 Occupational Therapy Practice 1

Credit Points 10 **Level** 1

Prerequisite

400160.3 Introduction to Occupational Therapy

Equivalent Units

400161 - Ocuupational Therapy Clinical Practice 1

Special Requirements

Students must be enrolled in 4663 - Bachelor of Health Science/Master of Occupational Therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students. To be able to enrol in the first year Spring unit 400907 Occupational therapy practice 1, all students must have a NSW Health National Criminal Record Check, a Prohibited Employment Declaration Form and a First Aid Certificate. To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. NB These are course requirements

....

This unit introduces students to the principles of professional practice. Students will be provided with learning opportunities through a variety of experiential and community engagement activities that will begin to develop their skills and competence. Professional competencies addressed include communication, documentation, reflection and professional and ethical behaviour. A professional practice placement is incorporated in this unit. Students will complete practice hours in accordance with World Federation of Occupational Therapy accreditation guidelines

400909.2 Occupational Therapy Practice 2

Credit Points 10 **Level** 2

Assumed Knowledge

Completion of the occupational therapy core unit 400160 - Introduction to Occupational Therapy and 400907 - Occupational Therapy Practice 1 is assumed knowledge.

Prerequisite

400907.3 Occupational Therapy Practice 1

Equivalent Units

400167 - Occupational Therapy Clinical Practice 2

Special Requirements

Students must be enrolled in course 4663 - Bachelor of Health Science/Masters of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) provide evidence of compliance with the occupational screening

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and immunisation policy of NSW Health 4) possess a current WorkCover Authority approved First Aid Certificate.

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This unit provides opportunities for students to implement skills and integrate theory with practice. In class students will be provided with learning opportunities through a variety of experiential and self-directed learning exercises that will begin to develop their clinical skills and competence in professional practice. The two week block placement is conducted at the end of the teaching period. This placement will allow students to work with occupational therapists in one of the many settings where therapists currently practice.

400910.1   Occupational Therapy Practice 3

Credit Points 10 **Level** 3

Prerequisite

400909.1 Occupational Therapy Practice 2

Equivalent Units

400174 - Occupational Therapy Clinical Practice 3A

Special Requirements

Students must be enrolled in course 4663 Bachelor of Health Science/Masters of Occupational Therapy. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. If students are visiting a NSW Health facility they will need to comply with the occupational screening and immunisation policy of NSW Health.

....

This unit will enable students to consolidate academic knowledge and practice skills. There will be opportunities to actively participate in assessment, analysis, goal setting, intervention and evaluation under the supervision of an occupational therapist. Students will experience full time work with occupational therapists in practice settings. Students will complete practice hours in accordance with World Federation of Occupational Therapy accreditation guidelines.

400914.1   Occupational Therapy Practice 4

Credit Points 20 **Level** 7

Assumed Knowledge

Completion of all core Occupational Therapy units.

Equivalent Units

400179 - Occupational Therapy Clinical Practice 4

Special Requirements

Students must be enrolled in courses 4663 Bachelor of Health Science/Masters of Occupational Therapy or 4664 - Master of Occupational Therapy. Prerequisite requirements: 400910 - Occupational Therapy Practice 3 (for students enrolled in 4663) or 400911 - Occupational Therapy Theory and Practice (for students enrolled in 4664). To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this

unit students must have: 1) successfully completed an approved Child Protection Workshop 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) provide evidence of compliance with the occupational screening and immunisation policy of NSW Health 4) possess a current WorkCover Authority approved First Aid Certificate.

....

This unit will allow students to consolidate academic knowledge and practice skills in preparation for becoming a competent beginning practitioner. Students will be expected to actively participate in assessment, analysis, goal setting, intervention and evaluation under the supervision of an occupational therapist. Students will complete practice hours in accordance with World Federation of Occupational Therapy accreditation guidelines.

400915.1   Occupational Therapy Practice 4 Workshop

Credit Points 10 **Level** 7

Assumed Knowledge

Completion of all core Occupational Therapy units.

Prerequisite

400913.1 Occupational Therapy Project

Equivalent Units

400179 - Occupational Therapy Clinical Practice 4

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy or 4664 - Master of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy.

....

This unit will facilitate the transition from student to occupational therapy practitioner. The unit will allow students to consider employment opportunities for their future and strategies for career and professional development.

400912.1   Occupational Therapy Process

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy or 4664 - Master of Occupational Therapy. Pre-requisite for 4663 - 400160 Introduction to Occupational Therapy. Co-requisite for 4664 - 400911 Occupational Therapy Theory and Practice

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....

This unit provides students with the knowledge and skills to apply the occupational therapy problem-solving process in an evidence-based way, across a diverse range of practice situations. Students will gain knowledge in the application of each stage of the occupational therapy process, learn skills in the selection and implementation of assessments and outcome measures, and undertake intervention planning to suit clients with different occupational needs and health trajectories. Different occupational therapy approaches will be reviewed and students will gain skills in tailoring intervention approaches to suit client need and practice context.

400913.1   Occupational Therapy Project

Credit Points 10 **Level** 7

Assumed Knowledge

Knowledge of issues and concerns relevant to the occupational therapy profession and occupational therapy clients and consumers. This knowledge will ideally have been gained in part by undertaking several fieldwork experiences in preceding years of the course.

Prerequisite

400912.1 Occupational Therapy Process AND **400865.2** Evidence-Based Practice

Special Requirements

Students must be enrolled in 4663 - Bachelor of Health Science/Masters of Occupational Therapy or 4664 - Master of Occupational Therapy. This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students.

....

The aim of this unit is for students to critically apply their knowledge of professional theory, practice, research and evaluation skills to the investigation of an occupational therapy professional issue of interest or concern. Students will apply unobtrusive research methods to investigate their chosen topic. Students develop an extensive knowledge of their chosen topic and critically analyse the implications of their findings in terms of theory, policy and contemporary health care practice. Students will synthesise their findings into a scholarly research project report and present their findings at a professional-level capstone student conference.

400917.1   Occupational Therapy Specialties

Credit Points 10 **Level** 7

Assumed Knowledge

It is assumed that students entering this unit will have completed all previous occupational therapy units from the third year of the Bachelor of Health Science/Masters of Occupational Therapy.

Prerequisite

400912.1 Occupational Therapy Process

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy or 4664 - Master of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) successfully completed an approved Child Protection Workshop 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) possess a current WorkCover Authority approved First Aid Certificate.

....

This unit provides occupational therapy students with the opportunity to select from, and undertake advanced study in, a range of occupational therapy clinical specialty areas. Several streams will run concurrently in this unit representing key clinical areas of specialisation in occupational therapy. Students will be able to focus their study, by selecting a combination of clinical specialty streams. Streams will cover relevant clinical content, examining the unique occupational therapy contribution in each specialty area.

400911.1 Occupational Therapy Theory and Practice

Credit Points 10 **Level** 7

Special Requirements

Students must be enrolled in course 4664 - Master of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have 1) successfully completed an approved Child Protection Workshop; 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 3) provide evidence of compliance with the occupational screening and immunisation policy of NSW Health; and 4) possess a current First Aid Certificate.

....

This unit introduces master's entry students to the theory and practice of occupational therapy. Students will explore the unique contribution of occupational therapists in the health care setting, apply theoretical and philosophical principles underpinning the profession to client groups, and learn analytical skills to examine the relationship between a person, their environment and their participation in daily occupations. The occupational therapy problem solving process will be briefly introduced. In addition, students will study clinical and professional competencies related to practice as a health professional. Finally, the above knowledge and skills will be applied during supervised fieldwork experience.

300149.3 Operating Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Basic structure and functioning of computer hardware.

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Prerequisite

300167.3 Systems Programming 1

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This unit provides an introduction to the theory and practice of the internal structure, implementation and functionality of operating systems. The unit is relevant not only for systems programmers, but also for applications developers who need to understand how operating systems control computer hardware, and how they provide convenience, efficiency and security for application development and implementation.

300698.3   Operating Systems Programming

Credit Points 10 **Level** 3

Assumed Knowledge

The students are expected to have general understanding of computer systems, computer fundamentals and programming techniques.

Prerequisite

300581.2 Programming Techniques OR **300903.1** Programming Techniques (Advanced)

Equivalent Units

300149 - Operating Systems

Incompatible Units

300943 - Operating Systems Programming (Advanced)

....

This unit provides the knowledge of the internal structure and functionality of Operating Systems. An operating system defines an abstraction of hardware behaviour and provides a range of services more suitable for ICT application development than what raw hardware could deliver, in terms of convenience, efficiency and security. It is important that ICT Professionals have some understanding of how these services are realized. For ICT Professionals whose role includes supporting the operating system this unit provides the introduction to the relevant theory and practice.

300943.1   Operating Systems Programming (Advanced)

Credit Points 10 **Level** 3

Prerequisite

300903.1 Programming Techniques (Advanced) OR **300581.2** Programming Techniques

Incompatible Units

300689 - Operating Systems Programming, 300149 - Operating Systems

Special Requirements

Students must be enrolled in course 3684 - Bachelor of Information and Communications Technology (Advanced)

....

This unit provides the knowledge of the internal structure and functionality of Operating Systems. Through the use of case studies the abstraction that Operating Systems

provide will be investigated, and techniques for programming with these abstractions will be developed.

300670.2   Optimisation Techniques

Credit Points 10 **Level** 3

Equivalent Units

200197 - Optimisation 1, 14346 - Linear Programming, J3638 - Operations Research 3.1

....

This unit presents the fundamental mathematical aspects of operations research and develops skills in quantitative approaches in decision making. Students will learn how the optimisation techniques work and how they can be applied by the decision maker in order to generate efficient solutions. The unit focuses on problem formulation and solution methods and covers linear programming primarily and integer programming and dynamic programming briefly.

300876.1   Organic Chemistry

Credit Points 10 **Level** 2

Prerequisite

300803.1 Essential Chemistry 2

Equivalent Units

300553 - Molecules of Life: Synthesis and Reactivity, 300301 - Organic Chemistry

Special Requirements

Splash proof safety glasses and laboratory coat, laboratory notebook and closed shoes are required.

....

Organic molecules are at the heart of the chemistry of life and industry. This unit builds on the fundamental chemical principles, exploring reaction mechanisms and the concept of reactivity and stereo- and regio-selectivity of many of the central reactions that form the basis of living processes, modern research, and contemporary industrial transformations. The unit contains a problem-based module on the application of spectroscopic methods to organic structure elucidation, focusing on spectroscopic data and a practical section on organic synthesis. The unit will focus on complex organic molecules including biologically relevant molecules, and examples from chemical industries, medicinal and pharmaceutical industries.

200159.4   Organisation Analysis and Design

Credit Points 10 **Level** 3

Prerequisite

200571.2 Management Dynamics OR **MG102A.3** Management Foundations OR **61611.1** Management Studies OR **H1727.1** Business Management

....

This unit analyses the nature and role of organisational structures and designs within the context of rapidly changing, external environments. It equips future managers with the theoretical and practical tools to understand and deal with tensions and paradoxes that arise through processes of 'getting things done' in an era of increased globalisation and 'virtualisation' of work processes.

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Students are invited to learn through involvement in, and reflection upon, a range of individual and collaborative activities.

200585.2 Organisational Behaviour

Credit Points 10 **Level** 2

Prerequisite

200571.2 Management Dynamics OR **MG102A.3** Management Foundations

Equivalent Units

MG204A - Organisational Behaviour

....

Organisational Behaviour focuses on people in the work place, what motivates them, their attitudes, and how they interact with others. The effects of different communication and types of conflict are also examined. The unit focuses on the individual and group processes of organisational behaviour. Students will also gain an understanding of the importance of research in what might be classified as the non-tangibles in organisational effectiveness. This unit aims to develop personal and interpersonal skills of prospective managers for working in contemporary organisational settings.

200157.3 Organisational Learning and Development

Credit Points 10 **Level** 3

Prerequisite

200571.2 Management Dynamics OR **61611.1** Management Studies OR **H1727.1** Business Management

....

Organisational Learning and Development introduces a powerful way of understanding the nature of contemporary organisations and the key strategic tasks they face. Promotion of individual self-development within a continuously self-transforming organisation is presented as essential if organisations are to innovate and evolve, and so meet the challenges of a turbulent world. The unit introduces the idea that promoting organisational learning means adopting an appropriate management philosophy, one that challenges traditional theories of management. The concept and practice of organisational learning and implications for management approaches are introduced and critically evaluated. Students are stimulated to learn through involvement in reflection upon a range of individual and collaborative activities.

400983.1 Orthopaedic Physiotherapy

Credit Points 10 **Level** 3

Prerequisite

400982.1 Core Competencies in Physiotherapy Practice AND **400981.1** Clinical Pharmacology AND **400871.1** Professional Health Competencies AND **101614.1** Psychology and Health AND **400864.2** Research Methods (Quantitative and Qualitative)

Corequisite

400984.1 Cardiorespiratory Physiotherapy AND **400986.1** Neurological Physiotherapy AND **400985.1** Clinical Education A

Special Requirements

Students must be enrolled in 4662 - Bachelor of Health Science/Master of Physiotherapy, 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy or 4667 Graduate Entry Master of Physiotherapy programs. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff. Students cannot enrol in Year 3 Physiotherapy units until they have completed 160 credit points in the Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs.

....

This unit builds on the knowledge and skills developed in the first 2 years of physiotherapy study. It focuses on client assessment and evidence-based management in acute orthopaedic physiotherapy contexts. This will require strong communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include introductory skills in cardiorespiratory physiotherapy assessment, interpretation and prioritisation of findings along with the implementation and evaluation of appropriate treatment strategies.

400808.3 Outdoor Recreation

Credit Points 10 **Level** 1

Equivalent Units

100666 - Outdoor Recreation 1

Special Requirements

Students must be enrolled in course 4659 - Bachelor of Health Science (PDHPE) or 4549 - Bachelor of Health Science (PDHPE).

....

Students will learn about the variety of outdoor recreational pursuits available to individuals, whether in a school-based or community setting. Through active participation and guided instruction, students will also learn how to supervise specific forms of outdoor recreation. Lecture content will reinforce learning and skill development through the study of the development, administration and delivery of school-based and community public recreation programs, as well as study the role of recreation within Australia.

401047.1 Paediatric Physiotherapy

Credit Points 10 **Level** 7

Prerequisite

400997.1 Exercise Rehabilitation AND **400998.1** Neurological Rehabilitation

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Special Requirements

Students must be enrolled in course 4662 - Bachelor of Health Science/Master of Physiotherapy, 4667 - Master of Physiotherapy or 4668 - Bachelor of Health Science (Honours)/Master of Physiotherapy

....

This unit aims to prepare the student as a competent entry-level practitioner in paediatric physiotherapy. It focuses on understanding the changes which occur from infancy to maturity and the impact of congenital or acquired conditions, or lifestyle diseases causing dysfunction. Clinical and ethical reasoning and family-centred practice are both stressed. The approach will also emphasise the role of physiotherapy within inter-professional teams to prepare for different work settings (acute care, rehabilitation and/or community). The unit integrates prior learning from previous years (especially units related to neurology musculoskeletal and cardiopulmonary physiotherapy and exercise rehabilitation).

300889.1   Pathological Basis of Disease

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of cell structure and function of cellular components (consistent with the unit Cell Biology); Knowledge of biochemical pathways and energy production (consistent with the unit Functional Proteins and Genes).

Prerequisite

300818.1 Introduction to Physiology

Equivalent Units

300323 - Pathological Basis of Disease

Incompatible Units

400138 - Pathophysiology 1

Special Requirements

Students must be enrolled in 3577 - Bachelor of Medical Science, 3657 - Bachelor of Medical Science/Bachelor of Information and Communications Technology, 3673 - Bachelor of Medical Science, 3682 - Bachelor of Medical Science (Advanced), or 3674 - Bachelor of Medical Science (Nanotechnology).

....

Pathology is the study of disease. Students will gain an understanding of human pathogenesis, general and systems pathological processes, and the scientific basis of diagnostic and treatment options. The unit also introduces normal human tissue and organ histology, and examines histopathological changes evident in disease states.

400138.3   Pathophysiology 1

Credit Points 10 **Level** 2

Prerequisite

400868.2 Human Anatomy and Physiology 1 AND **400869.2** Human Anatomy and Physiology 2

Incompatible Units

300323 - Pathological Basis of Disease

....

This unit is intended for students enrolled in a range of health science courses within the School of Science and Health. It is designed to equip students with a detailed knowledge of pathophysiological processes evident in a number of key human diseases that are vocationally relevant to these students. The content is organised using a systems based approach. Problem-based learning methods will be adopted in the tutorial component of this unit to help students develop crucial problem solving skills.

400267.3   Pathophysiology 2

Credit Points 10 **Level** 2

Prerequisite

300323.3 Pathological Basis of Disease OR **400138.3** Pathophysiology 1

....

This unit extends the scope of topics explored in Pathophysiology 1 and is designed to equip students enrolled in health science courses of the School with detailed knowledge of pathophysiological processes evident in a number of key human diseases that are vocationally relevant to these students. Problem-based learning methods will be adopted in the tutorial component of this unit to help students develop crucial problem solving skills.

300150.3   PC Workshop

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of personal computers.

....

This unit introduces students to the hardware and software components of a stand-alone personal computer (PC). Students become familiar with the CPU, memory, secondary storage, IO peripherals and communications devices commonly found in a PC. They learn to assemble and disassemble a PC and to install hardware and software components according to supplier specifications. Students also learn to use and customise the PC operating system to maintain and optimise PC performance.

400798.2   PDHPE: Games for Diverse Groups

Credit Points 10 **Level** 2

Equivalent Units

100832 - Sports Coaching with Juniors

Special Requirements

Child protection training, Senior First Aid Certificate

....

This unit focuses on the principles of teaching and coaching young children in a range of Indigenous, striking/fielding, and target sports. The aim is to build on students' knowledge, understanding and application of various teaching /coaching styles with a focus on the game sense approach. In particular, the unit addresses issues of diversity and difference, and inclusion in school, sport and recreation activities. As part of the unit, students will implement a coaching/teaching program in a local primary

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school. Students are also required to a number of Level 0 coaching certificates in both traditional and modified sports. Some of these aspects (e.g. project/coaching clinic hours for AFL/ARU) may occur outside of timetabled class lectures and tutorials.

400908.2 People, Environment and Occupations

Credit Points 10 **Level** 2

Prerequisite

400160.3 Introduction to Occupational Therapy AND **400907.3** Occupational Therapy Practice 1

Equivalent Units

400734 - Functional Analysis

Special Requirements

Students must be enrolled in course 4663 - Bachelor of Health Science/Master of Occupational Therapy. This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students.

....

Analysing an individuals participation in meaningful occupations is an essential clinical reasoning process to be mastered by occupational therapists. Therapists must be able to analyse three factors to do so: the persons abilities; the demands of the occupation; and the impact of the environmental context on participation. This unit will facilitate the development of these skills so that students can maximise the person-environment-occupation fit to optimise participation for people with a variety of health challenges or disabilities.

101680.3 Perception

Credit Points 10 **Level** 2

Equivalent Units

100022 - Biological Psychology and Perceptual Processes

....

This unit examines the fundamental principles underlying human perception and expands upon the sensation and perception content introduced in the foundational psychology units. After reviewing the biological basis of sensing and perceiving, we will explore the way this relatively raw information is processed and organised into the complex perceptions of the visual, auditory, olfactory, gustatory and somatosensory systems, which constitute the fundamental basis of our experience of the world. The unit will also examine the history of perceptual theories and the use of psychophysical methods and experimental approaches to the study of perceptual processes

300920.1 Pharmacological Chemistry

Credit Points 10 **Level** 3

Assumed Knowledge

This unit is aimed at undergraduates with a grounding in chemistry and biochemistry.

Equivalent Units

300324 - Pharmacological Chemistry

....

This unit is aimed at undergraduates with grounding in chemistry and biochemistry who have an interest in a career related to medicinal chemistry. Because it concerns the manner in which foreign molecules can interact with the body's mechanisms it is of direct relevance not only to the pharmaceutical industry but also to the food, agricultural, cosmetic (etc) industries. It conveys the fascination of designing chemical structures for particular uses within biological systems and which overlap the disciplines of chemistry, biochemistry, cell biology and pharmacology. Emphasis is placed upon design of the chemical structure itself rather than an investigation of the specific chemical structure of its site of action in the body. This is reflected in the laboratory work which traces the historical development of drug design, essentially through a process of a series of inorganic syntheses, relevant to a range of common drugs.

300884.1 Pharmacology

Credit Points 10 **Level** 2

Assumed Knowledge

Introductory biochemistry and general anatomy of the major body systems such as central and peripheral nervous systems, cardiovascular, respiratory, digestive, endocrine, and urinary systems.

Prerequisite

300818.1 Introduction to Physiology

Equivalent Units

300505 - Pharmacology

Incompatible Units

400981 - Clinical Pharmacology, 400135 - Clinical Pharmacology and Microbiology

....

Pharmacology is the study of the therapeutic interactions of drugs with the human body, focusing on mechanisms of action at the biochemical and cellular level, on adverse reactions and on clinical applications. This unit provides students with a sound understanding of fundamental aspects of this field to prepare for further study of advanced pharmacology or other biomedical sciences. General principles of pharmacokinetics and pharmacodynamics, will be discussed in detail. The major drug categories that affect different organ systems will be addressed, and research methods in pharmacology and the drug development process will also be introduced.

300505.2 Pharmacology

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed knowledge equivalent to 300320 - Introduction to Human Physiology or 300323 - Pathological Basis of Disease

....

In 2013 this unit will be replaced by 300884 - Pharmacology. Pharmacology is the study of the

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therapeutic interactions of drugs with the human body, focusing on the drug's mechanisms of action at the biochemical and cellular level, on adverse reactions and on clinical applications. The aim of this unit is to provide students with a sound understanding of fundamental aspects of this field to prepare for further study of advanced pharmacology or other biomedical sciences. The general principles of pharmacokinetics and pharmacodynamics will be discussed in detail. This will be followed by the discussions of the major drug categories that affect different organ systems. Research methods in pharmacology and drug development process will also be introduced.

100275.4   Philosophies of Love and Death

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

The Western experience of the fundamental questions of love and death will be examined. Literary as well as philosophical works will be utilised. Ancient Greek, Christian and medieval attitudes will be contrasted with more modern romantic and existentialist views. Authors will include: Sophocles, Plato, Augustine, Goethe, Austen, Sade, Dostoyevsky and Heidegger.

101843.2   Philosophy and Environment

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1.

....

Philosophy and Environment focuses on how we understand and value our interactions with the natural environment, how humans have changed the world and themselves through those interactions and the questions and problems created through that dynamic. Contemporary issues such as climate change, resource depletion, land degradation, conflict over resources, and treatment of animals have become prominent ethical, political and philosophical concerns. This unit looks at these sort of environmental problems through philosophical methods that reveal the traditions of thought, attitude and action underlying them. Students will be introduced to the major apporaches and questions most relevant to explaining contemporary environmental problems.

101881.1   Philosophy and the Good Life

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at level 1.

....

What does it mean to live a "good life"? One conception of philosophy that goes back to the teachings of the ancient Greeks and Romans is that it is the discipline pre-eminently concerned with teaching people how to live a good life. This unit will investigate the idea of "the good life" through an examination of select texts in ancient and modern philosophy. It will address questions that both ancient and

modern philosophers have grappled with: on the right relation between reason and emotion, on the role of pleasure in human life, on the development of character, on the "care of the self," and on pursuing a meaningful life.

101761.2   Philosophy and the Visual

Credit Points 10 **Level** 3

Assumed Knowledge

It is assumed that the students enrolled in this unit will have completed core units for the BA at the first year level, and all of the general prerequisites for taking a level three unit. No additional knowledge will be assumed.

Special Requirements

Successful completion of 60 credit points

....

In the past and present, vision has been both privileged as a metaphor for truth, and denigrated as the source of distortion, illusions, and lies. This unit begins by situating the contemporary fascination with 'visual cultures' within the context of a long tradition of philosophical discourse on vision and sight. It traces the relationship between the emergence of visual technologies and the language used by philosophers to discuss truth and falsehood. It explores the manner in which current visual cultures call for both to repeat and to rewrite our philosophical inheritance.

100879.2   Philosophy Today

Credit Points 10 **Level** 3

Equivalent Units

63283 - Contemporary Social and Political Theory

Special Requirements

Successful completion of 60 credit points.

....

Philosophy Today provides an introduction and analysis of selected issues in contemporary philosophy, with an emphasis on moral and ethical controversies, problems in modern social life, and explanations of human subjectivity and consciousness. Themes and philosophers are selected to provide students with a series of focused perspectives on recent and current philosophical debate - particularly on controversial issues and areas of public debate.

400892.2   Physical Activity, Nutrition and Health

Credit Points 10 **Level** 2

Equivalent Units

400780 - Nutrition, Physical Activity & Mental Health

....

Australian society is currently facing critical challenges in the areas of health & wellbeing, mental health, and nutrition. This unit examines the interdependence between these areas, and how personal and socio-cultural health issues can be addressed in a pro-active, holistic and sensitive manner.

Units

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University of Western Sydney

300849.1 Physical Chemistry

Credit Points 10 **Level** 2

Assumed Knowledge

This unit requires a knowledge of introductory concepts in differential and integral calculus.

Prerequisite

300800.1 Essential Chemistry 1 AND **300803.1** Essential Chemistry 2

Equivalent Units

CH205A - Chemistry 2; J2776 - Physical Chemistry 2; 300236 - Physical Chemistry 2; 300540 - Bimolecular Dynamics

....

Physical Chemistry describes the fundamentals of energy changes in chemical systems (thermodynamics), the rates and mechanisms of chemical reactions (kinetics), and electrochemistry and/or ion and electron transport. These concepts will be applied to a range of chemical and/or biochemical processes. A major focus of the unit will be to develop the ability to study quantitative chemical/biochemical problems, and develop useful physical chemistry experimental and data-analysis skills.

700026.2 Physics (UWSCFS)

Credit Points 10 **Level** Z

Equivalent Units

900068 - Physics (UWSC)

Special Requirements

Students must be enrolled at UWS College.

....

This unit serves as an introduction to the fundamentals of physics with appropriate applications in a wide range of engineering areas.

300828.1 Physics 1

Credit Points 10 **Level** 1

Assumed Knowledge

HSC 2 Unit Mathematics Band 4 (Not General Mathematics).

Equivalent Units

300558 - Physics 1

Special Requirements

Students must have a Scientific Calculator and Laboratory Notebook (good quality A4 size book in which graphs, computer printouts and other relevant information may be added in as required) in this unit.

....

This unit provides an introduction to physics for science and medical science students as well as providing a basis for further study of more advanced physics for students pursuing courses in nanotechnology, chemical, physical and mathematical sciences. It provides a foundation to understand the physical principles which underlay scientific instrumentation and analysis Topics covered include systems of units; Introductory mechanics, Newtons laws, work, conservation of energy and momentum; Electricity, electrostatics, DC and AC circuits and components, introductory electromagnetism; Waves and optics, electromagnetic radiation, reflection, refraction, image formation, polarisation, interference and diffraction.

300558.1 Physics 1

Credit Points 10 **Level** 1

Assumed Knowledge

2 units of HSC mathematics or equivalent

Equivalent Units

14201 - Foundation Physics 1, 14227 - Engineering Physics, 300050 - Physics 1, 300077 - Physics 1D, EN102A - Engineering Science, J1733 - Physics 1.1, J1763 - Fundamentals of Physics

....

In 2012 this unit will be replaced by 300828 - Physics 1. This unit provides an introduction to physics for science and medical science students as well as providing a basis for further study of more advanced physics for students pursuing courses in nanotechnology, chemical, physical and mathematical sciences. It provides a foundation to understand the physical principles which underlay scientific instrumentation and analysis Topics covered include systems of units; Introductory mechanics, Newton's laws, work, conservation of energy and momentum; Electricity, electrostatics, DC and AC circuits and components, introductory electromagnetism; Waves and optics, electromagnetic radiation, reflection, refraction, image formation, polarisation, interference and diffraction.

300829.1 Physics 2

Credit Points 10 **Level** 1

Assumed Knowledge

HSC 2 Unit Physics or one semester of university level Physics or equivalent plus HSC 2 Unit Mathematics Band 4 (Not General Mathematics) or one semester of university level Mathematics or equivalent.

Equivalent Units

300559 - Physics 2

Special Requirements

Students must have a Scientific calculator and laboratory notebook (this should be a good quality A4 size book into which graphs, computer printouts and other relevant information may be added in as required).

....

This unit develops a deeper understanding of physics for students pursuing courses in nanotechnology, chemical, physical and mathematical sciences. Topics covered include Mechanics: Equilibrium, stress and strain, harmonic oscillators, rotational motion, moment of inertia. Gravitation, types of force in nature. Thermal Physics: temperature, specific & latent heat, heat transfer, kinetic theory of gases, first law of thermodynamics, isothermal, isobaric & adiabatic processes. Introduction to Modern Physics: special relativity, time dilation, length contraction, momentum, mass, rest energy, velocity addition. Basic

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quantum theory, Planck's hypothesis, wave nature of matter, quantum mechanical view of atoms. Nuclear physics, radiation, half-life, nuclear reactions.

300464.2 Physics and Materials

Credit Points 10 **Level** 1

Assumed Knowledge

HSC physics and HSC mathematics

Equivalent Units

14227 - Engineering Physics

....

This unit serves as an introduction to the fundamentals of physics and materials with appropriate applications in a wide range of engineering and industrial design systems.

700117.1 Physics and Materials (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC physics and HSC mathematics

Equivalent Units

300464 - Physics and Materials, 700020 - Physics and Materials (UWSC)

Special Requirements

Students must be enrolled in the 7022 Associate Degree in Engineering

....

This unit serves as an introduction to the fundamentals of physics and materials with appropriate applications in a wide range of engineering and industrial design systems.

700020.1 Physics and Materials (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC physics and HSC mathematics

Equivalent Units

300464 - Physics and Materials, 700117 - Physics and Materials (UWSC Assoc Deg)

Special Requirements

Only UWSCollege students can take this unit unless specific permission has been granted by UWS.

....

This unit serves as an introduction to the fundamentals of physics and materials with appropriate applications in a wide range of engineering and industrial design systems.

401048.1 Physiotherapy for Chronic Illness and Disease

Credit Points 10 **Level** 7

Prerequisite

400997.1 Exercise Rehabilitation

Corequisite

401051.1 Clinical Education B (Rehabilitation) OR
401052.1 Clinical Education C (Ambulatory Care) OR
401053.1 Clinical Education D (Paediatrics) OR **401054.1**
Clinical Education E (Advanced Care)

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4667 Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy.

....

This unit focuses on the role of physiotherapy in chronic disease management. A problem based learning approach will be undertaken to provide students with the theory, research and practice which underpins the assessment and treatment of people with chronic disease. The role of lifestyle factors in the development of chronic disease will be explored, along with health promotion and preventative strategies. The importance of client-centred care, which respects culture and diversity, and the multidisciplinary team approach will also be investigated in the context of frequently occurring chronic conditions.

101752.1 Pigments of the Imagination

Credit Points 10 **Level** 2

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit is available to all Undergraduate students who have open electives. Pigments of the Imagination challenges the accepted view that there is such a thing as 'race' based on skin colour and that identity is based on it. This unit will encourage students to consider their own definitions of race and explore the view that it is an imaginary concept. Students will examine the various ways race as an imaginary concept permeates our education practices and cultural representations influencing the construction of racially classified positions for Indigenous Australians as well as all Australians. Students will be encouraged, by critically analysing a range of cultural texts to re-imagine Indigenous and Non-Indigenous relations.

200148.2 Planning and Design of Hospitality Facilities

Credit Points 10 **Level** 3

Assumed Knowledge

This is an advanced unit, which assumes basic knowledge of hospitality management.

....

An understanding of planning and design is critical to the effective long-term sustainability and performance of hospitality businesses. Planning and Design of Hospitality Facilities provides a unique opportunity for students to learn about contemporary planning a design issues including: an examination of design processes; the role of government and building authorities; design principles for hospitality facilities; sustainability; and managerial aspects related to commissioning and evaluating hospitality facilities.

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101593.2 Planning the City: Development, Community and Systems

Credit Points 10 **Level** 3

Equivalent Units

101299 Planning and Environmental Regulation

Special Requirements

Successful completion of 80 credit points

....

This unit aims to provide students with a fundamental understanding of the role of government and the political processes, focusing on the role and nature of planning across all levels of government from a variety of theoretical frameworks. It presents a critical examination of the urban development and planning processes, with particular attention given to the environmental and political issues associated with planning at the local government level. It looks at the changes and challenges confronting local government in view of the demands made on them by the changing social and economic conditions and societal values such as those relating to requirements for public participation, transparency and accountability. The unit also exams the role of private sector in planning and assessment processes.

300921.1 Plant Health and Biosecurity

Credit Points 10 **Level** 3

Assumed Knowledge

Foundation in chemical and biological sciences, quantitative thinking

Equivalent Units

300787 - Plant Microbiology and Protection

Incompatible Units

300336 - Plant Microbiology Interactions, 300643 - Plant Protection

....

This unit explores the positive and negative aspects of interactions between plants, arthropods and microorganisms in the environment. Students learn to recognise the significance of plant pests, their impact on human society and food security, and methods of reducing their damage to plants and plant products. Major areas of study include: groups of organisms causing plant losses: arthropods, weeds and pathogens (viruses, bacteria, fungi), their modes of action, life cycles, symptomatology, natural plant defence mechanisms; strategies for reducing pest damage (including legislative, physical, biological, genetic and chemical) - their benefits and limitations; recognition of pests and field damage assessment.

300865.1 Plant Physiology

Credit Points 10 **Level** 2

Assumed Knowledge

Sound knowledge of biology and chemistry equivalent to undergraduate Level 1 units.

Equivalent Units

300333 - Introductory Plant Physiology, 300609 - Plant Physiology

....

Plants are the primary producers of terrestrial ecosystems and the key moderators of climate change. Hence, it is vital for students to appreciate how plants produce sugars and interact with their environment. This unit will introduce students to how plants fix and allocate carbon and energy, acquire water and mineral nutrients, and conduct water and organic compounds, the key determinants of plant growth. Students will also learn about how plants interact with their biotic and abiotic environments. This knowledge is crucial for understanding how crop productivity and ecosystem function will be affected by the unfolding global climate change.

400928.2 Podiatric Clinical Block

Credit Points 20 **Level** 7

Assumed Knowledge

Human Anatomy , Podiatry Pre-clinical, Podiatric Techniques 1A, 1B, 2B, 3A, 3B

Prerequisite

400930.2 Podiatric Practice 2 AND **400931.2** Podiatric Practice 3 AND **400937.2** Podiatric Techniques 2A AND **400941.1** Podiatric Techniques 3C

Special Requirements

Podiatry specific - students will be participating in patient assessment and management. It is essential that they have been able to demonstrate competencies in patient assessment, documentation, treatment programs and communication within allied health / community settings. The podiatric practice units in combination with the clinical block placement have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Hold a Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover accredited educational body 4) NSW Health Department Category A Vaccinations

....

This unit will further develop students assessment skills encouraging the student to make the appropriate selection of assessment techniques to diagnose, treat and provide long term health outcomes especially in the public / community based patients. In this clinical unit, students will continue to participate in clinical activities under supervision in public sector placements to manage foot pathologies with increased scope of treating special populations (the high risk foot). Supporting workshop activities will be divided into two areas: Lecture / tutorial format to prepare the student for the block placement and a final feedback session at the end of the placement.

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400943.2 Podiatric Clinical Block for Honours Students

Credit Points 10 **Level** 7

Assumed Knowledge

Anatomy, Podiatry Pre-clinical, Podiatric Techniques 1A, 1B, 2B, 3A, 3B.

Prerequisite

400930.3 Podiatric Practice 2 AND **400931.2** Podiatric Practice 3 AND **400937.3** Podiatric Techniques 2A AND **400941.2** Podiatric Techniques 3C

Special Requirements

Podiatry specific - students will be participating in patient assessment and management. It is essential that they have been able to demonstrate competencies in patient assessment, documentation, treatment programs and communication within allied health / community settings. The podiatric practice units in combination with the clinical block placement have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Students must hold a: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover accredited educational body 4) NSW Health Department Category A Vaccinations

....

This unit will introduce students to the principles of professional development and appropriate requirements to function as a registered podiatrist. As podiatrists may work as a primary provider, as part of a multidisciplinary team, in the public or private health care setting, they require extensive knowledge of many aspects of the management of a practice or business. Students will then undertake a clinicalplacement to further develop the assessment skills to diagnose, treat and provide long term health outcomes with public / community based patients. Students will participate in clinical activities under supervision in public sector placements to manage foot pathologies with increased scope of treating special populations (the high risk foot). Supporting workshop activities will provide an opportunity to discuss complex cases and professional issues.

400929.2 Podiatric Practice 1

Credit Points 10 **Level** 3

Assumed Knowledge

Functional Anatomy

Prerequisite

400933.2 Podiatry Pre-Clinical

Corequisite

400942.3 Introduction to Podiatry and Clinical Education

Equivalent Units

400141 - Podiatry Practice 1

Special Requirements

Podiatry specific - students will be participating in patient assessment and management. It is essential that they have been able to demonstrate baseline competencies in patient assessment and infection control procedures. The podiatric practice units have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Hold a Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover accredited educational body 4) NSW Health Department Category A Vaccinations

....

This unit will introduce students to the first clinical unit in the series of 4 where students will demonstrate basic competencies in patient assessment, communication and management skills. The student will also be introduced to basic skills in mechanical therapy as part of the clinical therapies unit. In this unit students will participate in clinics as informed and guided observers, and will commence elementary assessment and diagnostic skills. The activities will be divided into four areas: new patient clinics, clinical tutorials, clinical therapies and a one-week external clinical placement at the end of semester.

400930.3 Podiatric Practice 2

Credit Points 10 **Level** 3

Assumed Knowledge

Functional Anatomy, Podiatry Pre-clinical, Podiatric Techniques 1A, 1B

Prerequisite

400929.2 Podiatric Practice 1

Equivalent Units

400145 - Podiatric Practice 2

Special Requirements

Podiatry specific - students will be participating in patient assessment and management. It is essential that they have been able to demonstrate baseline competencies in patient assessment and infection control procedures. The podiatric practice units have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Hold a Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover accredited educational body 4) NSW Health Department Category A Vaccinations

Units

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....

This unit will further develop students assessment skills encouraging the student to make the appropriate selection of techniques (biomechanical assessments) and to introduce the student to the diagnosis and management of a variety of simple foot pathologies. In this unit, the second of the four clinical practice units, students will participate in assessments of patients under supervision and continue with the management of foot pathologies. Clincial activities will be divided into five areas: General Medicine Clinic, Biomechanical Assessment Clinical, Tutorial, Clinical Therapies and External Clinical Placement.

400931.2   Podiatric Practice 3

Credit Points 10 **Level** 7

Assumed Knowledge

Functional Anatomy, Podiatry Pre-clinical, Podiatric Techniques 1A, 1B, 2B

Prerequisite

400930.3 Podiatric Practice 2 AND **400937.3** Podiatric Techniques 2A

Equivalent Units

400152 - Podiatric Practice 4

Special Requirements

Podiatry specific - students will be participating in patient assessment and management. It is essential that they have been able to demonstrate baseline competencies in patient assessment and infection control procedures. The podiatric practice units have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Hold a Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover accredited educational body 4) NSW Health Department Category A Vaccinations

....

This unit will further develop students assessment skills encouraging the student to make the appropriate selection of assessment techniques to diagnose, treat and provide long term health outcomes. In this unit, the third of the four clinical practice units, students will continue to participate in clinical activities under supervision to manage foot pathologies with increased scope of treating special population groups. Clincial activities will be divided into four areas: Clinic-general, biomechanical and surgical assessments, Tutorial, Clinical Therapies and External Clinical Placement.

400932.2   Podiatric Practice 4

Credit Points 10 **Level** 7

Assumed Knowledge

Functional Anatomy, Podiatry Pre-clinical, Podiatric Techniques 1A, 1B, 2B, 3A

Prerequisite

400931.2 Podiatric Practice 3 AND **400937.2** Podiatric Techniques 2A AND **400941.1** Podiatric Techniques 3C

Equivalent Units

400158 - Podiatric Practice 6

Special Requirements

Students must be enrolled in 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4665 Master of Podiatric Medicine or 4666 Bachelor of Health Science (Honours)/Master of Podiatric Medicine. Students will be participating in patient assessment and management. It is essential that they have been able to demonstrate baseline competencies in patient assessment and infection control procedures. The podiatric practice units have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Hold a Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover accredited educational body 4) NSW Health Department Category A Vaccinations

....

This unit will further develop students assessment skills encouraging the student to make the appropriate selection of assessment techniques to diagnose, treat and provide long term health outcomes. In this final clinical unit, students will continue to participate in clinical activities under supervision in both the Uniclinic and public sector placements to manage foot pathologies with increased scope of treating special population groups. Clincial activities will be divided into four areas: Clinic-general, biomechanical and surgical assessments, Tutorial, Clinical Therapies and External Clinical Placement.

400934.2   Podiatric Professional Practice Studies

Credit Points 10 **Level** 7

Special Requirements

Students must be enrolled in 4661 Bachelor of Health Science/Master of Podiatric Medicine or 4665 Master of Podiatric Medicine.

....

This unit will introduce students to the principles of professional development and appropriate requirements to function as a registered podiatrist. As podiatrists may work as a primary provider, as part of a multidisciplinary team, in the public or private health care setting, they require extensive knowledge of many aspects of the management of a practice or business. During a one week conference, students will be introduced to a gumut of principles specific to professional, ethical and legal issues associated with working as a podiatrist and practice and workplace administrative policies and procedures.

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400935.3   Podiatric Techniques 1A

Credit Points 10 **Level** 3

Assumed Knowledge

Anatomy – structure and function of the lower extremity is important as the focus of this unit is on abnormalities of the lower limb and subsequent assessment and management of conditions of the foot and leg

Prerequisite

400881.3 Functional Anatomy AND **400933.2** Podiatry Pre-Clinical

Incompatible Units

400142 - Pathomechanics of Human Locomotion, 400144 - Podiatric Medicine

....

This unit will introduce students to clinical (practical hands on) and theoretical foundations of human biomechanics of the foot and lower extremity and the mechanics, diagnosis and treatment of pathological conditions. The unit consists of coordinated lectures and practical components to cover the introductory theory of gait analysis, relevant physical examinations (joint, muscle testing to therapeutic options), diagnosing conditions such as shin pain, foot pain (plantar fasciitis, heel spur syndrome or digital deformities) and related treatment options.

400936.3   Podiatric Techniques 1B

Credit Points 10 **Level** 3

Prerequisite

400933.2 Podiatry Pre-Clinical AND **400881.3** Functional Anatomy

Incompatible Units

400140 - Introduction to Radiology, 400143 - Musculoskeletal Disorders of the Lower Extremity

Special Requirements

Students must be enrolled in 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4665 Master of Podiatric Medicine or 4666 Bachelor of Health Science (Honours)/Master of Podiatric Medicine.

....

This unit will introduce students to clinical and theoretical foundations of the musculoskeletal system conditions that will impact on the function of the lower extremity. Disease processes that affect the joint structure such as osteoarthritis, rheumatoid arthritis, arthropathies, gout, osteoporosis, osteomyelitis, systematic disorders and tumours will be covered. Advanced assessment evaluation will be taught that will include diagnostic techniques, eg. x-rays, ultrasound, magnetic resonance imaging and computer tomography. This will assist in the application and clinical interpretation of presenting disease processes in podiatric settings.

400937.3   Podiatric Techniques 2A

Credit Points 10 **Level** 3

Assumed Knowledge

Regional anatomy of the lower extremity is essential as students will be injecting local anaesthesia into the foot. Infection control and manual dexterity skills are essential which will be covered in Podiatric Practice 1 and Podiatry Pre-Clinical.

Prerequisite

400869.2 Human Anatomy and Physiology 2 AND **400881.3** Functional Anatomy AND **400933.2** Podiatry Pre-Clinical AND **400981.2** Clinical Pharmacology

Equivalent Units

400150 - Surgery for Podiatrists

Special Requirements

Students must hold a Senior First Aid Certificate and must have completed the OxyViva Resuscitation and EpiPen components as administered by a Work Cover accredited educational body.

....

This unit will introduce students to local anaesthesia, the theory of surgical procedures and the practice of skin and nail surgical techniques. As such, this unit allows students to assess patients suitability for administration of local anaesthesia; understand procedures involved in obtaining voluntary consent, appreciate, reasonably predict and describe the possible adverse effects of administering local anaesthesia. Surgery will focus the medico-legal requirements, principles of theatre protocol, peri-operative and post surgical management of the patient and nail and skin surgery, in preparation for student undertaking surgery during Podiatric Practice 3 and 4.

400938.3   Podiatric Techniques 2B

Credit Points 10 **Level** 3

Assumed Knowledge

400135 - Clinical Pharmacology and Microbiology. As this unit builds on the concepts presented in Clinical Pharmacology and Microbiology, an understanding of the pharmacokinetics and dynamics of drugs is recommended.

Prerequisite

400981.2 Clinical Pharmacology

Incompatible Units

400146 - Pharmacology and Dermatology

....

This unit will introduce students to the principles of pharmacology in podiatry and further develop the understanding of drug prescription issues, with particular focus on drugs of importance to podiatry patients, drug interactions and poly pharmacological issues.

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400939.2 Podiatric Techniques 3A

Credit Points 10 **Level** 7

Assumed Knowledge

Anatomy and Physiology taught in core units covering the structure and function of the human body coupled with the content about the mechanics and abnormalities in podiatric specific units with particular focus on assessment, treatment and management of the foot and leg taught in Year 3.

Incompatible Units

400147 - Paediatrics and Sports Medicine for Podiatry, 400153 - Gerontology and Neurology

Special Requirements

Students must be enrolled in 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4665 Master of Podiatric Medicine or 4666 Bachelor of Health Science (Honours)/Master of Podiatric Medicine.

....

This unit will introduce students to clinical and theoretical foundations of biomechanical alignment, trauma, psychological and behavioural factors leading to pain and restricted function of the foot and lower extremity affecting daily living activities. Particular focus will be placed on the mechanics, diagnosis and treatment options of problems experienced in special populations or different age groups in normal daily activities or the sporting arena. Furthermore, this integration will enhance the previously taught assessment and diagnostic techniques in the development of appropriate management and treatment programs of the lower extremity in different populations.

400940.2 Podiatric Techniques 3B

Credit Points 10 **Level** 7

Assumed Knowledge

As this unit builds on the concepts presented in Clinical Pharmacology, an understanding of the pharmacokinetics and dynamics of drugs is recommended.

Incompatible Units

400146 - Pharmacology and Dermatology

Special Requirements

Students must be enrolled in 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4665 Master of Podiatric Medicine or 4666 Bachelor of Health Science (Honours)/Master of Podiatric Medicine.

....

This unit will introduce students to clinical and theoretical foundations of dermatology including the function and structure of the skin, assessment, diagnosis, aetiological factors and the management of disorders of the skin, with particular emphasis on common foot conditions.

400941.1 Podiatric Techniques 3C

Credit Points 10 **Level** 7

Assumed Knowledge

Podiatric Techniques 1B, Pathophysiology 1, Human Anatomy and Physiology 1 and 2 and Appendicular Skeleton.

Incompatible Units

400151 - The High Risk Foot, 400153 - Gerontology and Neurology

Special Requirements

Podiatry specific.

....

This unit will introduce students to clinical (practical hands on) and theoretical foundations of the management of the high risk foot. The unit consists of coordinated lectures and practical components to cover the overview of systemic conditions covered in pathophysiology and will explore the management of the foot and lower extremity manifestations associated with vascular, endocrine, neurological and immunosuppression. Particular emphasis will be placed on the foot at risk and podiatry assessment, diagnosis and management in context of a health profession team management approach. Diagnostic assessment techniques, both clinical and laboratory based will be covered. Infection control, wound classification and wound care management will be discussed in detail.

400941.2 Podiatric Techniques 3C

Credit Points 10 **Level** 7

Assumed Knowledge

Anatomy and Physiology taught in core units covering the structure and function of the human body coupled with the content about the mechanics and abnormalities in podiatric specific units. There will be a particular focus on pharmacological aspects in podiatric settings involving assessments, treatment and management of the foot and leg taught in Year 3.

Incompatible Units

400151 - The High Risk Foot, 400153 - Gerontology and Neurology

Special Requirements

Students must be enrolled in 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4665 Master of Podiatric Medicine or 4666 Bachelor of Health Science (Honours)/Master of Podiatric Medicine.

....

This unit will introduce students to clinical (practical hands on) and theoretical foundations of the management of the high risk foot. The unit consists of coordinated lectures and practical components to cover the overview of systemic conditions covered in pathophysiology and will explore the management of the foot and lower extremity manifestations associated with vascular, endocrine, neurological and immunosuppression. Particular emphasis will be placed on the foot at risk and podiatry assessment, diagnosis and management in context of a health profession team management approach. Diagnostic assessment

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techniques, both clinical and laboratory based will be covered. Infection control, wound classification and wound care management will be discussed in detail.

400933.2 Podiatry Pre-Clinical

Credit Points 10 **Level** 2

Assumed Knowledge

Introduction to Podiatry, Anatomy, Communication skills and Biomechanics.

Prerequisite

400905.1 Introduction to Podiatry AND **400881.1** Functional Anatomy AND **400871.1** Professional Health Competencies AND **400732.1** Communication in Health AND **400882.1** Introduction to Biomechanics

Incompatible Units

400133 - Podiatry Pre-clinical Studies

Special Requirements

Podiatry specific - students will be participating in patient assessment and management. It is essential that they have been able to demonstrate baseline competencies in patient assessment and infection control procedures. The podiatric practice units have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Hold a Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover accredited educational body 4) NSW Health Department Category A Vaccinations

....

This unit will build on the skills introduced in Year One with an emphasis on clinical competencies in patient communication and management. The clinical component will cover an introduction to basic treatment skills of skin conditions and the evaluation of functional anatomy, gait, cursory examinations and communication. Introduction to general clinical treatment skills such as chair side devices and strapping and removable pads to more complex skills such as the manufacture of non-cast orthotic devices will be covered.

101797.2 Political Terror

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1

....

Since the terrorist attacks of 11 September, 2001, threats of terrorism have been entrenched in both headlines and the collective psyche. Across the globe, terrorism, anti-terrorism and the politics of fear are influential factors in the formulation of domestic and foreign policies. The current wave of terror and counter-terror raises important questions. What do we mean by terror? Is the war on terror really a war like no other? Is the current terrorist threat unprecedented? This unit will examine historical precedents and theories of terrorism.

100904.2 Politics and Business in Asia

Credit Points 10 **Level** 2

Equivalent Units

63158 - Politics and Business in Asia

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit examines the interaction between politics and business in the contemporary East Asian and Southeast Asian contexts. Particular attention will be paid to the business-government relationship in a number of key countries and comparisons drawn. The unit examines the issue of the so-called "Asian Way" with respect to business, governing and achieving economic development. It also looks at the so-called "Asian economic miracle" and the "Asian economic crisis" and considers contemporary reform programs aimed at the business-politics nexus in Asia.

101665.3 Politics and Religion

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points at Level 1

....

In 2013, this unit replaced by 101913 - Theories of Authority. In the West, it is assumed that the authorities of the state and of the church are separate. The state looks afters the public or political affairs, while religion takes care of one's private beliefs and moral values. In practice, however, such a separation has always been precarious. From American politics to the conflicts in the Middle East, the two have remained intermeshed. The unit will trace the idea of the separation of state and church back to its genesis and track its development in modern thought. The aim is to demonstrate the variegated relation between politics and theology by closely examining a wide array of texts in a variety of disciplinary fields, including literature.

100277.4 Politics of Australia and Asia Relations

Credit Points 10 **Level** 2

Equivalent Units

63036 - Themes in Asian History

Special Requirements

Successful completion of 40 credit points.

....

This unit provides an introduction to the history of Australian foreign policy relations with Asia. It seeks to acquaint students with Australia's historic and contemporary relations with countries in East and Southeast Asia and to identity the factors that have contributed to their development.

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100278.2 Politics of Post-War Japan

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit studies the history of the post-war Japanese political experience. In particular, examining the interaction between domestic political developments, and security and foreign policy matters.

100882.3 Politics of Sex and Gender

Credit Points 10 **Level** 2

Equivalent Units

63196 - Sex, Gender and Social Relations

Special Requirements

Successful completion of 40 credit points

....

This unit introduces students to the contemporary analysis of sex, gender, and sexualities. Students study key concepts and learn to apply these concepts in the analysis of contemporary issues. Concepts covered include the meanings of sex, gender and sexuality; gender as 'doing'; equality and difference; gendered bodies; biology and social constructionism; and intersectionality (how gender intersects with other differences such as ethnicity, sexuality and class). Students develop a research project in one of the following broad areas: gender and work; gender and politics; gender and sport; sexual politics; and young people and the politics of sex and gender.

400870.2 Population Health and Society

Credit Points 10 **Level** 1

Equivalent Units

400781 - Dynamics of Health, 400270 - Meanings of Health and Models of Care

....

This unit deals with foundational concepts and factors relating to population health in our society. Issues that determine both social and environmental aspects of disease, health and wellbeing will be examined. Contemporary problems impacting on states of health will be explored, including current day trends in communicable and non-communicable disease.

700066.1 Population Health and Society (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

400870 - Population Health and Society

Special Requirements

Students must be enrolled at UWS College.

....

This unit deals with foundational concepts and factors relating to population health in our society. Issues that determine both social and environmental aspects of disease, health and wellbeing will be examined. Contemporary problems impacting on states of health will be explored, including current day trends in communicable and non-communicable disease.

200078.2 Portfolio Management

Credit Points 10 **Level** 3

Assumed Knowledge

200057 - Investment Management

....

This unit covers the contemporary theory of portfolio analysis and management. Topics include: risk and diversification; the two and n security case; the Markowitz efficient frontier; investor indifference curves and optimal portfolios; CML and optimal portfolios; beta, SML and the discount rate re-visited; Sharpe single index model and APT asset allocation; investments to the portfolio and portfolio strategies; measuring portfolio performance and security selection decisions; active portfolio management; international diversification; process of portfolio management; and risk management and hedging.

300869.1 Postharvest

Credit Points 10 **Level** 3

Assumed Knowledge

This unit assumes that students have a basic knowledge of biology, plant morphology and anatomy, chemistry and mathematics. Students are also assumed to be familiar with the World Wide Web and the tools for database searching and basic computer packages such as WORD and EXCEL.

Equivalent Units

300452 - Postharvest

Special Requirements

Successful completion of 40 credit points

....

This unit explores the factors affecting the retention of quality of fresh fruit, vegetables and cut flowers from grower to consumer. Topics include: the role of fresh produce for the health and happiness of people; the growth and maturation and physiology of fresh produce; the importance of managing temperature and relative humidity of the storage environment; the responses of fresh produce to changes in temperature and water loss; the role of ethylene in fruit ripening and senescence; the practical issues of assessing harvest maturity; packaging; distribution and the control of postharvest diseases and pest and the concepts of market access.

300052.2 Power and Machines

Credit Points 10 **Level** 2

Prerequisite

300005.2 Circuit Theory

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Equivalent Units

84239 - Introduction to Power and Machines

....

This unit introduces basic concepts of power and machines, including an introduction to modern power systems and transformers, and fundamentals of electromechanical energy conversion. It also covers magnetic circuits, modern permanent magnet materials and their characteristics, and balanced and unbalanced three-phase power systems.

300772.1   Power Electronics

Credit Points 10 **Level** 4

Assumed Knowledge

Basic knowledge of power frequency devices and systems

Prerequisite

300052.2 Power and Machines AND **300025.3** Electronics

....

The unit covers various types of power electronics systems, their applications and use in Electrical Drive Systems. It also covers application considerations and modern developments in electronic systems. This course provides the fundamentals of Power Electronics and Industrial Electronics.

300771.1   Power Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Basic knowledge of power frequency devices and systems

Prerequisite

300052.2 Power and Machines

....

This unit introduces a global picture of electrical energy systems. This unit deals with the basic processes of generation and distribution, power system analysis and planning.

200752.2   Power, Politics and Knowledge

Credit Points 10 **Level** 3

Equivalent Units

H3743 - Power Politics and Knowledge, 200583 - Power, Politics and Knowledge

....

The core aim of this unit is to provide students with a thorough grasp of the complex relationships between power, politics and knowledge in organisational settings. It also highlights the need for managers to use power ethically and equitable. These aims are addressed through an examination of a range of theories of power and topics such as: distribution and exercise of power in organisational settings, organisational politics, gender and power, language and power, resistance to power, and others. Innovative class activities and assessment methods (e.g., reflective brainstorming; storytelling; film analysis) are used

in this unit to ensure that students are able to effectively apply theoretical concepts to real life situations.

400156.2   Practice Management for Health Professionals

Credit Points 10 **Level** 3

....

This unit is aimed to introduce the student to the management issues in establishing and working in a clinical practice. While the unit will cover issues related to health professionals and public sector management, the focus of the unit will be on issues in private practice. The aim of the unit is to introduce the student to a wide range of topics, including an over view of health care funding in Australia, private and public health system, developing a business plan, different business structures, financial management, managing staff and occupational health and safety issues.

401001.1   Primary Health Care in Action

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 4691 Bachelor or Nursing, 4693 Bachelor of Nursing (Advanced) or 4684 Bachelor of Midwifery. Unitrack students may study this unit as a miscellaneous unit.

....

This unit introduces nursing and midwifery students to Primary Health Care (PHC) as a social model of health and a World Health Organization (WHO) strategy for achieving just and humane health care. The unit explores the impact and relevance of PHC as a framework for organising an Australian health care system that decreases health inequities and optimises the health of all people. Students will examine the dimensions of PHC that assist in establishing collaborative partnerships in which people are supported to take responsibility for their health, with a specific focus on Aboriginal and Torres Strait Islander peoples.

300671.2   Principles and Practice of Decision Making

Credit Points 10 **Level** 3

Assumed Knowledge

200192 Statistics for Science or 200032 Statistics for Business or 200263 Biometry and 200189 Concepts of Mathematics and 300606 Foundations of Statistical Modelling and Decision Making

Equivalent Units

200043 - Stochastic Decision Theory, 200035 - Decision Analysis and Statistical Process Control

....

This Level 3 unit investigates models for making optimal decisions under conditions of uncertainty and presents a number of relevant quantitative techniques. Topics covered include probabilistic and non probabilistic decision making criteria, decision trees, sensitivity analysis, using utility for decision making and risk analysis, inventory management, queuing analysis, and introduction to simulation.

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University of Western Sydney

200525.2 Principles of Economics

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics

Equivalent Units

200076 - Introductory Economics, 200046 - Microeconomics, EC102A - Principles of Economics

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major.

....

This unit is an introduction to economic concepts and contemporary economic issues. It introduces students to basic concepts such as markets and their operation, the behaviour of firms, the efficiency and potential failings of free markets, the role of government, key macroeconomic variables and problems such as unemployment. It illuminates these concepts via application to contemporary economic issues and debates over different theoretical perspectives. This unit also exposes students to recent developments in economics via presentations by specialist guest lecturers.

100483.2 Principles of Professional Communication 1

Credit Points 10 **Level** 1

Equivalent Units

63901 - Written and Oral Presentation 2, H1745 - Business Skills for Professionals, J1751- Professional Skills for Science and Technology

....

The unit provides students with an introductory understanding of a range of communication theories and practices necessary for academic work and professional success.

700040.2 Principles of Professional Communication 1 (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

63901 - Written and Oral Presentation 2, H1745 - Business Skills for Professionals, J1751 - Professional Skills for Science and Technology

Special Requirements

Students must be enrolled at UWS College.

....

This unit provides students with an introductory understanding of a range of communication theories and practices necessary for academic work and professional success.

200575.3 Processes and Evaluation in Employment Relations

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Equivalent Units

200381 - Human Resources Development Seminar

....

This unit applies theory and skills developed throughout the key program in HRM/IR to real-world organisational and policy challenges and opportunities. Students will develop and use employment relations concepts and 'metrics' to design implementation plans and to evaluate policies, practices and change initiatives. Evaluation of non-employment relations policies and procedures in terms of their potential impact on employment relations performance will also be assessed. Sustainable and competitive employment relations will be evaluated at organisational, local, regional, national and industry levels.

401003.1 Professional Communication

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced).

....

This unit develops the written and interpersonal skills of students in preparation for professional practice. Students are introduced to the concepts of language, literacy and learning styles that are required for both academic and professional life. Cultural sensitivity, safety and competence that facilitate appropriate intercultural communication are explored within the context of contemporary healthcare.

300578.3 Professional Development

Credit Points 10 **Level** 3

Assumed Knowledge

Understanding of systems analysis and design.

Equivalent Units

300372 - Professional Preparation and Project Management

Special Requirements

Successful completion of 140 credit points. For students enrolled in 3663 Graduate Certificate in Health Informatics, 3645 Graduate Diploma in IT and 3646 Graduate Certificate in ICT this pre-requisite is not applicable.

....

This is a final year unit that builds on foundation and intermediate computing units to prepare students for professional experience. The unit covers the content in three modules as 1) Ethics and Professional Code of Conduct, 2) Project Management, and 3) Legal, Social, Environmental issues, Quality Assurance and IT Compliance. The content covered in these three modules are carefully designed to fill in the gaps in knowledge that is not so far covered previous units in preparing students for

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the challenging projects units and professional working life ahead. This unit is a pre-requisite to the capstone project, covered in Professional Experience Project unit.

400903.2 Professional Development and Work Experience

Credit Points 10 **Level** 2

Assumed Knowledge

It is expected that students have the knowledge and skills associated with the prerequisite units.

Prerequisite

400880.2 Fundamentals of Exercise Science

Corequisite

400326.4 Exercise Prescription for General Populations

Equivalent Units

400650 - Professional Practice in Sport & Exercise Science 2

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science). Special Requirements are those stipulated by NSW Health and UWS. At present these include:Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3)Adult Health Immunisation 4) Workcover accredited Senior First Aid Certificate

....

Experience in the field of study is an essential ingredient in marketing an individual for employment and often for professional memberships. Professional Practice provides students with an opportunity to observe and assist Sport & Exercise Science practitioners in action and to learn in a practical hands on setting. Students will have the opportunity to see how knowledge and skills acquired in lectures and tutorials/laboratories can be applied and also relate theoretical concepts and skills to situations in exercise-related settings. This unit is the first of two units which require a work placement which is usually off campus.

300579.3 Professional Experience

Credit Points 10 **Level** 3

Prerequisite

300578.3 Professional Development

Equivalent Units

300097 - Computing Project 1

Incompatible Units

14951 - SAD Project, 14958 - SAD Project, 300136 - IT Support Practicum, 48528 - SAD Project, 61235 - Software Engineering Project 1, J3664 - Computer Project 3, 54919 - Computing Project A, 54920 - Computing Project B

Special Requirements

This is a final year capstone unit. Therefore in addition to the successful completion of pre-requisite unit 300578 - Professional Development, students should have successfully completed at least 140 credit points, out of which at least 30 credit points are level 2 units owned by School of Computing, Engineering & Mathematics. Due to the capstone nature, this unit can be undertaken only by students enrolled in 3506 - Bachelor of Computer Science, 3633 - Bachelor of Computer Science , 3639 - Bachelor of Information and Communication Technology, 3661 - Bachelor of Information and Communication Technology (Enhanced Pathway), 3654 - Bachelor of Information and Communications Technology/Bachelor of Arts, 3655 - Bachelor of Information and Communications Technology/ Bachelor of Business and Commerce, 3656 - Bachelor of Information and Communications Technology/Bachelor of Business and Commerce (Accounting) or 3657 - Bachelor of Medical Science/Bachelor of Information and Communications Technology.

....

Professional Experience is a final year capstone project unit. This unit provides opportunities for students to gain hands-on experience in software systems requirements definition, analysis, design and implementation, in a real-world setting. Students work in groups, guided by an academic supervisor or an industry mentor, in achieving the goals set by the client that provides the project. Suitable projects are sourced from external organisations or within UWS by way of giving the students professional experience in independent learning and reflective practice.

300900.1 Professional Experience (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Software development methodologies, software analysis and design modelling tools and techniques, programming languages, iImplementing databases management systems, software construction and testing, system documentation and Project Management

Prerequisite

300578.3 Professional Development

....

Professional Experience (Advanced) is a final year 'capstone' work-placement unit. This advanced unit provides the opportunity for students to gain hands-on experience in software systems requirements definition, analysis, design, implementation and project management, in an external organisation under the supervision of industry experts. During the work placement students work in a real-life project applying the theories and technical skills learned in previous units in an industry setting. Students are allowed to propose a work-placement of their choice within an external organisation. School will assess the suggested work-placement for its suitability in meeting the set unit outcomes, prior to approval.

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University of Western Sydney

400871.2 Professional Health Competencies

Credit Points 10 **Level** 1

....

This unit introduces skills for studying and working in health science. Students will gain an understanding of the interdisciplinary and multi-disciplinary nature of health science practice in the 21st century, and how this interacts with the specialty health professions, client and community expectations of health care and employment opportunities in health science. Students will learn foundation competencies that will underpin their academic development and their safe, responsible and ethical practice in health science service environments.

700067.1 Professional Health Competencies (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

400871 - Professional Health Competencies

Special Requirements

Students must be enrolled at UWS College.

....

This unit introduces skills for studying and working in health science. Students will gain an understanding of the interdisciplinary and multi-disciplinary nature of health science practice in the 21st century, and how this interacts with the specialty health professions, client and community expectations of health care and employment opportunities in health science. Students will learn foundation competencies that will underpin their academic development and their safe, responsible and ethical practice in health science service environments.

400783.2 Professional Pathways in Health Science

Credit Points 10 **Level** 1

Equivalent Units

400769 - Foundations of Health Sciences 400242 - Foundation of Therapeutic Recreation

....

The unit introduces students to professional issues, history and the philosophy in health sciences: health promotion, health service management and therapeutic recreation. Theories and key concepts of health promotion, health service management, social health and therapeutic recreation are introduced. Students will be introduced to an understanding of human development and the health science processes. Students will examine how human growth and development influences development of socio-economic, cultural, gender, environmental, health science issues. Students will begin an electronic portfolio to help them take more control over their education and assist students to make connections with their learning experiences while building critical and reflective skills. Therapeutic Recreation students will complete a 35 hour workplace learning placement. Health Promotion and

Health Service Management students will complete a community project.

700075.1 Professional Pathways in Health Science (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

400783 - Professional Pathways in Health Science, 400769 - Foundations of Health Science, 400242 - Foundations of Therapeutic Recreation.

Special Requirements

Students must be enrolled at UWS College unless permission has been granted by the School Science and Health

....

This unit introduces students to professional issues, history and the philosophy in health sciences: health promotion, health service management and therapeutic recreation. Theories and key concepts of health promotion, health service management, social health and therapeutic recreation are introduced. Students will be introduced to an understanding of human development and the health science processes. Students will examine how human growth and development influences development of socio-economic, cultural, gender, environmental, health science issues. Students will begin an electronic portfolio to help them take more control over their education and assist students to make connections with their learning experiences while building critical and reflective skills.

300053.3 Professional Practice

Credit Points 10 **Level** 3

Prerequisite

300461.1 Engineering and Industrial Design Practice OR **300674.2** Engineering, Design and Construction Practice

Equivalent Units

85013 - Civil and Environmental Engineering Practice 2

Special Requirements

Successful completion of 160 credit points.

....

This unit focuses on an integrated project of various sub-disciplines in key programs. The unit describes engineering and construction as professions. Theories related to contract and project management will also form a part of this unit. Throughout the semester, the focus will be on an integrated project and the development of research skills of students enrolled in this unit. This will be achieved through employment of appropriate research skills and completion of professional/technical reports.

401000.1 Professional Practice Experience 1

Credit Points 10 **Level** 1

Equivalent Units

400745 - Nursing, Health and Wellbeing

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Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced).

....

This unit introduces beginning students of nursing to the principles, concepts and skills used to identify, promote, maintain and support health and well-being across the lifespan.

401004.1   Professional Practice Experience 2

Credit Points 10 **Level** 1

Prerequisite

401000.1 Professional Practice Experience 1

Corequisite

401006.1 Bioscience 2

Equivalent Units

400749 - Nursing and Health Breakdown

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced). Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit focuses on the role and skills of nursing in promoting, maintaining and supporting health across the lifespan. Principles and practices of nursing care will be applied in simulated, service learning and practice environments, particularly in the health priority areas of Injury prevention and control and obesity. Theoretical underpinnings specifically related to this unit are found in Human Relationships and Life Transitions, Bioscience 2 and Approaches to Professional Practice.

401008.1   Professional Practice Experience 3

Credit Points 10 **Level** 2

Assumed Knowledge

Foundational knowledge of primary health care, professional communication, roles and responsibilities of registered nurse and human biological and behavioural sciences.

Corequisite

401010.1 Health Variations 1

Special Requirements

Pre-requisites for courses 4691 and 4693: 401000 Professional Practice Experience 1 and 401004 Professional Practice Experience 2. Pre-requisites for course 4692: 401029 Foundations for Nursing Practice. Students must be enrolled in 4691 Bachelor of Nursing,

4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry.

....

This unit extends on the concepts and skills introduced in Year 1 nursing studies. The unit is theoretically aligned with Health Variation 1 and focuses on the role and skills of the nurse in assessing and caring for people across the lifespan who are experiencing acute but usually resolvable conditions which includes the perioperative experience. The unit integrates the perioperative experience with the National Health Priority areas relating to Arthritis and Musculoskeletal conditions; Cancer Control and Injury Management.

401012.1   Professional Practice Experience 4

Credit Points 10 **Level** 2

Assumed Knowledge

Year 1 and Autumn Session Year 2 Nursing Studies.

Special Requirements

Pre-requisites for courses 4691 and 4693: 401000 - Professional Practice Experience 1 and 401004 - Professional Practice Experience 2. Pre-requisites for course 4692: 401029 - Foundations for Nursing Practice. Co-requisite units for 4691 and 4693: 401008 - Professional Practice Experience 3 and 401010 - Health Variations 1 and 401015 - Health Variations 3. Co-requisites for 4692: 401008 - Professional Practice Experience 3, 401010 - Health Variations 1, 401015 - Health Variations 3 and 401024 - Health Variations 2 (Advanced). Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

Professional Practice Experience 4 focuses on the care of people experiencing an acute exacerbation of a chronic condition. Principles and practices of nursing care will be undertaken in simulated and practice environments, particularly in the National Health Priority areas of cardiovascular disease, asthma, diabetes mellitus, arthritis, and mental health. Theoretical underpinnings specifically related to this unit are found in Promoting Mental Health and Wellbeing 1, Health Variations 2, and Health Variations 3.

401016.1   Professional Practice Experience 5

Credit Points 10 **Level** 3

Special Requirements

Pre-requisites for 4691 and 4693: 401000 - Professional Practice Experience 1, 401004 - Professional Practice Experience 2, 401008 - Professional Practice Experience 3 and 401012 - Professional Practice Experience 4. Pre-

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requisites for 4692: 401029 - Foundations for Nursing Practice, 401008 - Professional Practice Experience 3 and 401012 - Professional Practice Experience 4. Co-requisites for 4691 and 4692: 401018 - Health Variations 4 and 401019 - Health Variations 5. Co-requisites for 4693: 401026 - Health Variations 4 (Advanced) and 401019 - Health Variations 5. Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit extends the concepts and skills previously covered in years one and two. The focus of this unit is to help equip nursing students with the skills required in assessing and caring for people across the lifespan who are experiencing acute life-threatening illness and end-of-life conditions. Through a Primary Health Care approach, the unit will use national health priorities of Cardiovascular Disease, Injury Prevention and Control, Cancer control and Mental Health to exemplify the inter-relationship between acute and chronic conditions and the palliative approach to life threatening illness.

401020.1   Professional Practice Experience 6

Credit Points 10 **Level** 3

Assumed Knowledge

Year 1, Year 2 and Autumn Year 3 Nursing Studies.

Special Requirements

Pre-requisites for 4691 and 4693: 401000 - Professional Practice Experience 1, 401004 - Professional Practice Experience 2, 401008 - Professional Practice Experience 3, 401012 - Professional Practice Experience 4 and 401013 - Promoting Mental Health and Wellbeing 1. Pre-requisites for 4692: 401029 - Foundations for Nursing Practice, 401008 - Professional Practice Experience 3, 401012 - Professional Practice Experience 4 and 401013 - Promoting Mental Health and Wellbeing 1. Co-requisites for 4691 and 4692: 401016 - Professional Practice 5 and 401017 - Promoting Mental Health and Wellbeing 2. Co-requisites for 4693: 401016 - Professional Practice 5 and 401025 - Promoting Mental Health and Wellbeing 2 (Advanced). Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit provides a unique opportunity to consolidate and extend their skill base in preparation for graduate practice. Additional theoretical underpinnings specifically related to this unit are found in the units: Being a Registered Nurse/Midwife and Leadership in Nursing and Midwifery.

700118.1   Professional Practice for Engineer Associates (UWSC Assoc Deg)

Credit Points 10 **Level** 2

Prerequisite

700109.1 Engineering Management for Engineer Associates (UWSC Assoc Deg)

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit will provide the knowledge and skills to enable students to support the achievement of organisational goals through applying knowledge of environment and internal culture. The unit evaluates planning processes and goal setting to achieve superior performance and compares alternative approaches to motivation of work team members. Students will consider types of managerial communications and their associated communications channels in achieving best professional practice.

400968.2   Professional Practice in Aged Care and Disability

Credit Points 10 **Level** 3

Equivalent Units

400248 - Professional Practice in Aged Care, 400790 - Professional Practice in Aged Care and Disability

....

This unit provides the student with an understanding of current trends underlying policies and services in the aged care and disability industry, which will help them to understand the dynamics of the changing aged care and disability service sector. Students will examine the strategic environments of aged care and disability to develop global and national perspectives, identify drivers of change and development, and the major players in aged care and disability policies. Students will develop an understanding of the aged care and disability competencies and determinants of well-being for aged and disabled persons, which can be used in their future roles in the health industry. Through reflections on practice in aged care and disability , students will develop an individual approach to aged care and disability service issues which they can use in the future as health care professionals.

400925.1   Professional Reasoning

Credit Points 10 **Level** 7

Special Requirements

Students must be enrolled in courses 4663 - Bachelor of Health Science/Masters of Occupational Therapy and 4664 - Master of Occupational Therapy. To undertake this unit,

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students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) successfully completed an approved Child Protection Workshop 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) possess a current WorkCover Authority approved First Aid Certificate.

....

This final year unit focuses on the transition from student to practitioner. The aim of this unit is to provide students with learning opportunities that will consolidate and enhance their competence in professional practice throughout their career. Professional competencies of central concern include advanced clinical reasoning skills, evidence based-practice, reflective practice, personal and career management strategies, self-directed and life long learning. These competencies contribute positively to the effective management of graduates clinical practice in various work contexts, and their future career paths. Acquisition of such skills will allow the graduate to direct and adapt to change in these areas.

400786.2 Professional Transition Project

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in the final semester of a Bachelor of Health Science course.

....

This unit is designed to assist students to make the transition from undergraduate student life to professional life. The student centred learning approach used in this unit enables students to focus their own learning styles and personal capabilities. Students will explore the strengths and weaknesses of their own learning styles and develop strategies to strengthen their personal learning and teaching capabilities for use as professionals. A structure for developing professional performance will be introduced that includes: management skills, interpersonal skills, problem solving skills, project and procedure skills, personal growth, development and socialisation and education roles. Students will participate in hands-on instructor led sessions, through the E-portfolio project to reflect on and connect academic experiences with their life to anticipated graduate capability

700047.2 Programming Design (UWSCFS)

Credit Points 5 **Level** Z

Assumed Knowledge

The ability to create a mathematical expression for a given problem scenario. This would require knowledge of basic arithmetic, percentages and simple statistical measures.

Equivalent Units

900009 - Programming Design (UWSC)

Special Requirements

Students must be enrolled at UWS College.

....

Programming Design introduces students to the principles required for the effective design of solutions to computer program related problems. The course has been developed to enhance a student's practical ability as well as build a solid theoretical foundation for further study.

300580.2 Programming Fundamentals

Credit Points 10 **Level** 1

Equivalent Units

300405 - Fundamentals of Programming, 300155 - Programming Principles 1, 200122 - Business Application Development 1

....

As a first unit in computer programming, Programming Fundamentals covers the basics of developing software with an emphasis on procedural programming. Students will learn about basic data structures, the concept of algorithms, fundamental programming constructs, common programming language features and functions, program design and good programming style. A high level programming language is combined with a highly visual framework to teach problem solving using software.

700008.1 Programming Fundamentals (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300405 - Fundamentals of Programming, 300155 - Programming Principles 1, 200122 - Business Application Development 1, 300580 - Programming Fundamentals

Special Requirements

Students must be enrolled at UWS College.

....

As a first unit in computer programming, Programming Fundamentals covers the basics of developing software with an emphasis on procedural programming. Students will learn about basic data structures, the concept of algorithms, fundamental programming constructs, common programming language features and functions, program design and good programming style. A high level programming language is combined with a highly visual framework to teach problem solving using software.

300581.3 Programming Techniques

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals

Equivalent Units

300156 - Programming Principles 2

....

This unit is intended as a second unit of study in programming. It builds on a basic understanding of procedural programming as would be developed in a first unit. This unit continues the development of programming skills and methodologies required for professional programming and for further study in later computing units.

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Topics covered include multi-dimensional arrays, file I/O, searching and sorting, and an introduction to object-oriented programming involving classes and inheritance.

300903.1   Programming Techniques (Advanced)

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals

Incompatible Units

300581 - Programming Techniques

Special Requirements

Students must be enrolled in course 3685 - Bachelor of Computing (Information Systems) Advanced or 3684 - Bachelor of Information and Communication Technology (Advanced)

....

This unit is intended as a second unit of study in programming. It builds on a basic understanding of procedural programming as would be developed in a first unit. This unit continues the development of programming skills and methodologies required for professional programming and for further study in later computing units. Topics covered include multi-dimensional arrays, file I/O, searching and sorting, and an introduction to object-oriented programming involving classes and inheritance. Students in this advanced unit will also investigate and apply advanced concepts such as function overloading and recursion.

MG313A.1   Project Management

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of construction planning and planning techniques (such as critical path method)

Equivalent Units

300727 - Project Management.

....

In 2010 this unit replaced by 300727 - Project Management. This unit is intended to give students an understanding of appropriate methods of managing projects and to develop skills in using these methods on the type of projects the students expect to undertake in their professional careers. Content: Management of time, management of cost, quality, resources and communications.

300727.2   Project Management

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of basic knowledge in building and construction.

Equivalent Units

MG313A - Project Management

....

This unit is to give students an understanding of appropriate methods of managing construction projects and to develop skills in using these methods on the type of projects the students expect to undertake in their professional careers. Content: Major knowledge areas of project management.

401013.1   Promoting Mental Health and Wellbeing 1

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, professional communication, foundational concepts in human behavioural science and their application to nursing or midwifery practice, roles and responsibilities of registered nurse or midwife.

Equivalent Units

400759 - Mental Health Nursing 1

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced), 4692 Bachelor of Nursing Graduate Entry or 4684 Bachelor of Midwifery.

....

This unit will introduce students to the care of individuals with mental health and wellbeing problems. The National Mental Health Policy 2008 provides the population framework to focus on a complex range of determinants and consequences of mental health and illness in Australia. The principles of recovery and the professional use of self in everyday collaborative practice will be introduced and explored. The focus will be on an introduction to altered mood, perception and thinking and their impact on caring for individuals with depression, anxiety and substance use problems. Students will be caused to extend their knowledge of stress vulnerability, risk management and their impact on promoting mental health and wellbeing across the lifespan.

401017.1   Promoting Mental Health and Wellbeing 2

Credit Points 10 **Level** 3

Assumed Knowledge

Year 1 and Year 2 Undergraduate Nursing Studies.

Equivalent Units

400762 - Mental Health Nursing

Special Requirements

Pre-requisites for 4691: 401000 - Professional Practice Experience 1, 401004 - Professional Practice Experience 2, 401008 - Professional Practice Experience 3, 401012 - Professional Practice Experience 4 and 401013 - Promoting Mental Health and Wellbeing 1. Pre-requisites for 4692: 401029 - Foundations for Nursing Practice, 401008 - Professional Practice Experience 3, 401012 - Professional Practice Experience 4 and 401013 - Promoting Mental Health and Wellbeing 1. Students must be enrolled in 4691 Bachelor of Nursing or 4692 Bachelor of Nursing Graduate Entry. Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1

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June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit builds on the foundations of mental health and wellbeing established in earlier units. The relationship between stress and vulnerability will be explored within the context of the psychotic disorders schizophrenia and bipolar affective disorder. Students will gain an understanding of how the principles of recovery, introduced in an earlier unit, are applied to caring for people with schizophrenia and bipolar affective disorder. Altered mood, perception, and thinking will be explored and evidence-based assessment tools and biological and psychosocial interventions introduced for facilitating recovery towards mental health and wellbeing.

401025.1   Promoting Mental Health and Wellbeing 2 (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Year 1 and Year 2 Bachelor of Nursing (Advanced) Studies.

Prerequisite

401013.1 Promoting Mental Health and Wellbeing 1 AND
401000.1 Professional Practice Experience 1 AND
401004.1 Professional Practice Experience 2 AND
401008.1 Professional Practice Experience 3 AND
401012.1 Professional Practice Experience 4

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced). Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

Bachelor of Nursing (Advanced) students will build on the foundations of mental health and wellbeing established in earlier units. The relationship between stress and vulnerability will be explored within the context of the psychotic disorders schizophrenia and bipolar affective disorder. Students will gain an understanding of how the principles of recovery, introduced in an earlier unit, are applied to caring for people with schizophrenia and bipolar affective disorder. Altered mood, perception, and thinking will be explored and evidence-based assessment tools and biological and psychosocial interventions introduced for facilitating recovery towards mental health and wellbeing.

200598.2   Property Development

Credit Points 10 **Level** 3

Assumed Knowledge

It is assumed that students will have a sound knowledge of valuation practices and principles; economic theory and town planning principles.

Equivalent Units

DN310A - Property Development

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major.

....

This unit critically evaluates the wide ranging nature of the property development process, from initial development concept through to the end use of completed development projects. The unit also considers the implications of the property development process and development decisions from the wide ranging points of view of developers, end users, financiers, public authorities and the community at large. Students will gain both a theoretical and an applied understanding of development appraisal techniques, including financial and feasibility aspects inherent in those techniques

200597.2   Property Finance and Tax

Credit Points 10 **Level** 3

Assumed Knowledge

It is assumed that students will have a sound knowledge of valuation and financial mathematics; concepts of discounted cash flow analysis and application; statutory valuation legislation and procedures and property portfolio analysis and property investment analysis and application.

Equivalent Units

CO308A - Property Finance and Tax

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major.

....

The aim of this unit is to provide an insight into the corporate financial operations of property development companies, to understand the alternatives available for financing them and methods of evaluating these alternatives. In addition, the taxation aspects of property transactions are examined.

200749.2   Property Investment

Credit Points 10 **Level** 3

Assumed Knowledge

Students undertaking this unit require the background knowledge achieved through prior study in the general principles of valuation.

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Equivalent Units

200437 - Property Investment

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major.

....

This unit is designed to provide students with the knowledge required for making property investment decisions. It teaches students how to systematically analyse potential property investments in the real world. The analysis is based on the discounted cashflow models, which utilizes techniques such as NPV, IRR and MIRR, etc.

200750.2   Property Portfolio Analysis (V2)

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge of commercial property.

Equivalent Units

200438 - Property Portfolio Analysis (V2)

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course, Key Program or Major.

....

This unit examines the role of property in an investment portfolio, with particular attention given to property portfolio performance analysis and property investment strategy. Indirect property investment vehicles in Australia and overseas are assessed, including Real Estate Investment Trusts, property syndicates, property securities funds and unlisted property funds. The performance analysis of both direct and indirect property is also examined to assess the strategic contribution of property to an investment portfolio.

101252.2   Psychoanalytic Criticism

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of 60 credit points at Level 1.

Equivalent Units

SS221A -The Origins of Sexuality

....

Psychoanalytic criticism introduces students to key developments in psychoanalytic theory after Freud including the work of Lacan, Kristeva, Klein, Benjamin, Mitchell and Zizek. The unit applies these theories to the analysis and critique of cultural formations (institutions etc), the media (film and television) and everyday practices (such as shopping, sport etc).

101614.2   Psychology and Health

Credit Points 10 **Level** 1

Equivalent Units

400136.1 Introduction to the Psychology of Health

....

This unit provides an introduction to the psychology of health and behaviour as relevant to the health sciences. Students will be introduced to the principles and applications of psychology and health behaviour using a developmental framework. This will be followed by an examination of the psychological aspects of injury and illness and an introduction to psychological interventions for health concerns. Emphasis is upon to understanding health status and behaviour in light of relevant theory and research.

700060.1   Psychology and Health (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

101614 - Psychology and Health

Special Requirements

Students must be enrolled at UWS College.

....

This unit provides an introduction to the psychology of health and behaviour as relevant to the health sciences. Students will be introduced to the principles and applications of psychology and health behaviour using a developmental framework. This will be followed by an examination of the psychological aspects of injury and illness and an introduction to psychological interventions for health concerns. Emphasis is on understanding health status and behaviour in light of relevant theory and research.

101183.2   Psychology: Behavioural Science

Credit Points 10 **Level** 1

Equivalent Units

B1910 - Psychology 1B, 100930 - Psychology 1B

....

Psychology is a field of scientific inquiry that uses a set of scientific techniques and methods to explain and understand the causes of behaviour. As a profession, psychology applies its knowledge to practical problems in human behaviour. This unit covers a range of topics in psychology at an introductory level including memory, perception, learning, and the workings of the brain.

101184.2   Psychology: Human Behaviour

Credit Points 10 **Level** 1

Equivalent Units

B1909 - Psychology 1A, 100929 - Psychology 1A

....

Psychology is a field of scientific inquiry that uses a set of scientific techniques and methods to explain and understand the causes of behaviour. As a profession, psychology applies its knowledge to practical problems in human behaviour. This unit covers a range of topics in psychology at an introductory level including: the history of psychology, intelligence, social psychology, developmental psychology, indigenous and cultural psychology, personality, and abnormal psychology.

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400285.2 Public Health

Credit Points 10 **Level** 2

....

This is a flexible learning unit that deals with foundational concepts and issues relating to public health. The philosophical and historical development and the roles of public health in Australia are examined, as are the theories, policies, politics and principles that govern and inform practice. Emphasis is placed on understanding health issues and concerns in Greater Western Sydney Region as well as on national and international contexts of population health. The unit draws on current and emerging practical situations to highlight the dynamic yet continuing legacy of public health.

101253.3 Public Memory and Commemoration

Credit Points 10 **Level** 3

Equivalent Units

100508 - Dangerous Visions, 100995 - Dangerous Visions

Special Requirements

Successful completion of 60 credit points

....

Throughout history various forms of material culture (such as art, architecture, sculpture, objects and photographs) have been used to memorialize individuals as well as to commemorate events, both personal and national. As such, an examination of commemorative works offer valuable insights into the production of public memory and history. This unit explores the particular contexts of such memorials; their meaning, design and, politics. The diverse expressions of commemoration in Australia and the consequent production of public memory provides the arena for such considerations.

300748.2 Quality and Value Management

Credit Points 10 **Level** 3

Equivalent Units

200469 - Quality and Value Management

....

Introduces students to the concepts of quality systems value management techniques and their application to the built environment. Students will gain knowledge of quality assurance and value management theories, techniques and principles so that they can apply as they enter into their professional careers.

300922.1 Quality Assurance and Food Analysis

Credit Points 10 **Level** 3

Prerequisite

300842.1 Food Science 2

Equivalent Units

300785 - Quality Assurance and Food Analysis

Incompatible Units

300636 - Food Processing and Analysis, 300701 - Food Quality Assurance, 300500 - Quality Assurance and Food Safety, FS326A - Food Science and Technology Practicum 3.2, FS322A - Food Evaluation

....

This unit covers the knowledge and tools required to maintain food quality. Students are introduced to the standard methods of analysis of foods as used for nutritional and quality assessment of foods. Practicals include determination of major and minor food components; functionality tests and sensory analysis of foods. Students will develop an awareness of food laws, regulations and codes at the state, national and international levels, plus develop a working knowledge food labelling legislation. Students will be introduced to elementary toxicology and risk analysis as it applies to the regulation of food additives. The unit also integrates previous studies in HACCP (Hazard Analysis Critical Control Point) to develop deeper understanding of food quality assurance and quality management systems as they are applied to the control and management of the food supply.

300831.1 Quantitative Thinking

Credit Points 10 **Level** 1

Assumed Knowledge

Basic competence in algebraic manipulation and some familiarity with elementary probability and statistical concepts.

Equivalent Units

200191 - Fundamentals of Mathematics

Special Requirements

Students must have a Scientific calculator and access to a computer with the appropriate mathematics software. Students may complete the 3 units Quantitative Thinking, Analysis of Change and Maths 1A in the following order: 300831 Quantitative Thinking, 300830 Analysis of Change, 300672 Mathematics 1A. This means that students may complete 300831 before attempting 300830, but not after. 300830 and 300831 may be attempted before 300672, but not after. Students may not enrol in 300831 and 300830 or 300831 and 300672 or 300831 and 300672 in the same teaching session. Students enrolled in the 3621 Bachelor of Engineering or 3664 Bachelor of Engineering Science may not enrol in any of the units 300830, 300831 or 300672.

....

This level 1 unit develops the quantitative skills that underpin many fields of study in the sciences. The content covered includes basic algebra, functions, graphs, equations, linear and quadratic, introductory probability and descriptive statistics. These mathematical/statistical concepts will be revised and developed using scientific concepts such as molarity and dilution, optical density, population growth, and predator-prey models. In all aspects of this unit, students will be developing and using critical thinking skills to solve mathematical/statistical problems set in a scientific context.

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700123.1   Quantitative Thinking (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic competence in algebraic manipulation and some familiarity with elementary probability and statistical concepts.

Equivalent Units

200191 - Fundamentals of Mathematics, 300831 - Quantitative Thinking

Special Requirements

Students must be enrolled at UWSCollege in either 7003 Diploma in Science or 7009 Diploma in Science Fast Track. Students may complete 700123 Quantitative Thinking before 700108 Analysis of Change. This means that students may complete Quantitative Thinking before attempting Analysis of Change, but not after. Students may not enrol in Quantitative Thinking and Analysis of Change in the same teaching session.

....

This level 1 unit develops the quantitative skills that underpin many fields of study in the sciences. The content covered includes basic algebra, functions, graphs, equations – linear and quadratic, introductory probability and descriptive statistics. These mathematical/statistical concepts will be revised and developed using scientific concepts such as molarity and dilution, optical density, population growth, and predator-prey models. In all aspects of this unit, students will be developing and using critical thinking skills to solve mathematical/statistical problems set in a scientific context.

200486.2   Quantity Surveying 1

Credit Points 10 **Level** 2

Assumed Knowledge

300706 - Building 1 and 300707 - Building 2 OR BG101A - Building 1 and BG103A - Building 2: Specfically building construction including residential, light industrial and small commercial.

....

This unit is designed to develop the techniques required to measure, quantify and prepare bills of quantities for residential construction. It will help students to develop an understanding of the factors that affect the cost of building and introduces costing techniques for work on new and existing buildings.

200487.3   Quantity Surveying 2

Credit Points 10 **Level** 2

Assumed Knowledge

Building construction including residential, light industrial and small commercial as covered in the subjects Building 1, Building 2 and Quantity Surveying 1.

Prerequisite

200486.2 Quantity Surveying 1

....

This subject is designed to provide students with an advanced understanding of the various roles of a quantity surveyor. Students will develop an ability to apply the skills necessary to deliver both pre-contract and post-contract quantity surveying services.

300923.1   Quantum Physics

Credit Points 10 **Level** 3

Assumed Knowledge

Mathematics 1A, Mathematics 1B, Physics 1 and Physics 2

Prerequisite

300828.1 Physics 1 AND **300829.1** Physics 2

Equivalent Units

300419 - Quantum Properties of Chemical Systems

....

The unit builds on quantum concepts that have been introduced in earlier units such Physics 1,2, Nanotechnology and Chemistry. It aims at developing the student's understanding of quantum principles as they apply to hard and soft matter systems, including atoms , molecules and extended arrays such as metal and semiconductors as well as biological tissue

101406.2   Queering Text

Credit Points 10 **Level** 3

Equivalent Units

100279 - Queering Text

Special Requirements

Successful completion of 60 credit points.

....

This unit explores the idea of queering texts - texts that queer or texts that are queered by particular readings. The exploration will be propelled by a consideration of gender, sexuality and/or desire and the process of 'making strange'. This unit explores theories of estrangement, alienation, and dis/placement ranging from Formalist ideas of defamiliarisation and foregrounding in relation to language and other semiotic systems, Brecht's politics of alienation, Bakhtin's work on the body and carnival to contemporary notions of performativity and homographesis. Throughout, the unit will be oriented to the use of language in the literary process of queering.

101650.3   Race in Literature

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit explores a selection of modern literary works that focus on the question of "race." Readings will allow students to learn how notions of race have shifted over time, giving particular attention to how mixed-race people challenge dyadic conceptions of racial difference. Readings may include one or more national literatures, such as American or Australian literature.

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100908.2 Race Politics

Credit Points 10 **Level** 3

Equivalent Units
B3894 - Race Politics

Special Requirements
Successful completion of 60 credit points at Level 1.

....

This unit offers a general overview of race in politics as it exists in Europe, Asia, the Americans and Australasia. It will focus on theories of race, racist policies and practices and the political economy of race.

101666.2 Race, Identity and Globalisation

Credit Points 10 **Level** 3

....

This unit looks at the emergence of 'hybridity' as a category of cultural and social thought by tracing its historical and philosophical genealogies in a wider global context. It looks at the contested ways in which racial mixing or métissage have been articulated in the Western imagination, from 'contamination' to 'cosmopolitanism'. Through charting the changing meanings of 'miscegenation' over time, and in imperial contexts, new insights are offered on the ways in which we might situate current debates on cultural and social identity.

300489.2 Radio and Satellite Communication

Credit Points 10 **Level** 4

Assumed Knowledge
Physics and Materials, Mathematics for Engineers 1 and 2, Astrophysics

Prerequisite
300007.2 Communication Systems OR **300010.3** Data Networks

Equivalent Units
14297 - Satellite Communication

....

This unit is offered in alternate years. This unit will develop an understanding of the theory and practice of radio and satellite communication techniques and measurements and provide an introduction to space communication systems. It will complement the general communication engineering units, addressing advanced topics important and specific to radio and satellite communications.

400201.3 Readings and Methodology

Credit Points 10 **Level** 5

Assumed Knowledge
A basic knowledge of research methods at undergraduate level or equivalent is required.

Special Requirements
Students must be enrolled in the Bachelor of Nursing (Honours).

....

This unit will broaden and deepen students understanding of research methodologies and develop research skills in order to apply these to a specific B Nursing (Honours) research project.

200037.4 Regression Analysis & Experimental Design

Credit Points 10 **Level** 3

Prerequisite
200033.4 Applied Statistics OR **200052.4** Introduction to Economic Methods

....

This unit covers regression analysis and experimental design. The regression section of the unit develops the theory and application of one of the most commonly used statistical tools: regression analysis. Topics covered include simple linear regression, multiple regression, and model diagnostics and selection. The experimental design section deals with completely randomized design, randomized block design, Latin square design, and factorial experiment models. Such design models are useful for applications in engineering and physical sciences and in the business and behavioural disciplines. The integration of the theory and practice of the two sections will be enhanced by using the statistical computing package MINITAB.

101003.2 Religion and Culture

Credit Points 10 **Level** 3

Equivalent Units
100883 - Religion and Culture, 63141 - Culture, Religion and Spirituality

Special Requirements
Successful completion of 60 credit points at Level 1.

....

This unit focuses on the relationship between religion and culture and considers the role of religion as elemental to forces of cultural change. Various religions are studied with a view to investigating how culture shapes religion and in turn how religion shapes and moulds culture. Topics include the rise of fundamentalism, the relationship between gender and religion, religion and violence, religion and ethics, the relationship between science and religion, the rise of new forms of spirituality including New Age, and the role of religion in popular culture.

101005.4 Representing Crime

Credit Points 10 **Level** 3

Equivalent Units
SS233A - Representing Crime.

Special Requirements
Successful completion of 60 credit points

....

This unit deals with the evolution of the figure of the detective and of the criminal; the development of an aesthetics of crime from the later 18th Century; the dynamic

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nature of fiction, film and television genres of detection. Literatures of sensation, detective fictions, true crime writing and the non-fiction novel will all be examined to allow an in-depth analysis of the changing ethical and psychological character of the detective, and of his nemeses. The crime story in film, television and in other new media may also be addressed to facilitate an analysis of changing cultural contexts for the crime story.

400803.2   Research in Nursing Practice

Credit Points 10 **Level** 5

Assumed Knowledge

A basic knowledge of research methods at undergraduate level.

Incompatible Units

400200 - Applied Nursing Research

Special Requirements

Students must be enrolled in Bachelor of Nursing (Honours).

....

Research is a necessary undertaking toward the continued development of nursing science and practice. The aim of this unit is to both broaden and deepen students' understanding of research methods and to extend their ability to discuss, appraise the work of others and participate in their own research.

400864.3   Research Methods (Quantitative and Qualitative)

Credit Points 10 **Level** 2

Prerequisite

400863.2 Foundations of Research and Evidence-Based Practice

....

This unit further explores research methods used to acquire knowledge in healthcare. This includes research designs, international standards, key statistics, and interpretation of results. The range of health research methods will be presented, and studies about treatment effectiveness (clinical trials and systematic reviews), diagnostic effectiveness and qualitative approaches will be explored in detail. The pathways and resources for conducting beginner research will also be introduced in this unit.

401023.1   Research Principles for Nursing (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

Professional communication and the roles and responsibilities of registered nurse or midwife.

Equivalent Units

400824 - Evidence-Based Nursing (Advanced)

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit introduces Bachelor of Nursing Advanced students to the major paradigms, research principles and concepts that inform critical analysis of literature and the basis of evidence based practice.

401011.1   Research Principles for Nursing and Midwifery

Credit Points 10 **Level** 2

Assumed Knowledge

Professional communication and the roles and responsibilities of registered nurse or midwife.

Equivalent Units

400755 - Evidence-Based Nursing

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4692 Bachelor of Nursing Graduate Entry or 4864 Bachelor of Midwifery.

....

This unit introduces nursing and midwifery students to the major paradigms, research principles and concepts that inform critical analysis of literature and the basis of evidence based practice.

200412.5   Research Proposal and Seminar

Credit Points 10 **Level** 5

Assumed Knowledge

Students to have the basic disciplinary knowledge and skills necessary to design and undertake their honours level research project.

....

The aim of this unit is to identify a suitable honours thesis topic, conduct a preliminary review of the relevant literature, identify research methods applicable to the study, consider any relevant ethical issues applicable to the study, devise a resource management plan and schedule of study and to seek feedback and input from academics with appropriate skills and experience in the research area. This unit gives honours students access and exposure to research communities via attendance and participation at school research seminars. Students will publicly present and defend their thesis proposal to peers and the academic community.

400890.1   Resistance Training and Physiology

Credit Points 10 **Level** 3

Prerequisite

400883.1 Exercise Bioenergetics AND **400885.1** Sport and Exercise Physiology AND **400888.1** Advanced Sports Physiology

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science). To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1

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June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) possess a current WorkCover Authority approved First Aid Certificate.

....

Resistance Training and Physiology presents the growing body of research evidence supporting specific methods of resistance exercise and training, as well as the role of resistance exercise in disease prevention and health promotion. Students gain an increased understanding of the energetics and physiology of resistance exercise by also completing laboratories focussed on the research of important applied concepts in resistance exercise and training. Students also experience resistance training.

300810.1   Resource Sustainability

Credit Points 10 **Level** 1

Assumed Knowledge

Understanding of ecological terminology and referencing.

Equivalent Units

300663 - Resource Sustainability, 700099 - Resource Sustainability (UWSC)

Special Requirements

Students require enclosed footwear

....

Resource sustainability deals with the local, national, and global sustainability issues concerning human interactions with the environment. The unit uses current resource issues and scientific concepts to provide the practical and theoretical information needed for students to think critically about environmental issues and to contribute to the sustainable management of natural and built environments. Students will also learn how science and society interact in the management of resources. Using the concept of ecologically sustainable development as a foundation, students will use critical thinking skills to research a resource issue of their choice at the local, national and/or international level. Students will communicate their research using new mediaexploring the issue and make recommendations for improving sustainability.

300663.2   Resource Sustainability

Credit Points 10 **Level** 1

Assumed Knowledge

Basic biological sciences and an understanding of writing & referencing.

Equivalent Units

EY101A - Terrestrial Environmental Management

....

In 2012 this unit replaced by 300810 - Resource Sustainability. Students enrolled in Resources Sustainability will learn about local, national, and global issues concerning human interactions with the environment. The course is designed to provide the practical and theoretical information required for students to think critically about environmental issues and to contribute to the sustainable

management of natural and built environments. The course is underpinned by the scientific method and the concept of ecologically sustainable development. Students will undertake a series of exercises to assess sustainability at local and/or personal levels and will analyse and present their data in both audio/visual and written forms, along with suggestions for increasing sustainable resource use.

700099.1   Resource Sustainability (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic biological science and an understanding of referencing

Equivalent Units

300663 - Resource Sustainability, 300810 - Resource Sustainability

Special Requirements

Students must be enrolled at UWSCollege in 7003 Diploma in Science or 7009 Diploma in Science Fast Track

....

Resource sustainability deals with the local, national, and global sustainability issues concerning human interactions with the environment. The unit uses current resource issues and scientific concepts to provide the practical and theoretical information needed for students to think critically about environmental issues and to contribute to the sustainable management of natural and built environments. Students will also learn how science and society interact in the management of resources. Using the concept of ecologically sustainable development as a foundation, students will use critical thinking skills to research a resource issue of their choice at the local, national and/or international level. Students will communicate their research using new mediaexploring the issue and make recommendations for improving sustainability.

101759.1   Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Credit Points 10 **Level** 3

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

Special Requirements

Successful completion of 60 credit points

....

This unit will provide students with an exciting opportunity to undertake an Independent Study Project that will engage them in a dialogue and partnership with Indigenous Australians. Students will gain greater knowledge of Indigenous people and develop effective communication skills as well as a level of cultural competency. The Independent Study Project will expose students to the complexities of the cultural inter-relationships and the politics of undertaking research with Indigenous people. It will also provide students with skills and ideas for future research projects that will add to Indigenous knowledge and provide a sound foundation for ethical research.

Units

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101753.2   Revaluing Indigenous Economics (Day Mode)

Credit Points 10 **Level** 2

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

Revaluing Indigenous Economics will examine Australia's Indigenous economy and its dynamics. It will challenge students to reflect on the significant contribution Indigenous Australians have made and continue to make to our growing economy. It will also challenge students to rethink the politics of the welfare economy as it relates to Indigenous Australians. Students will be introduced to a number of enterprise development case studies for example, The Arts, Mining and Land Development, Tourism and the Environment, Sports and Small Business.

200739.2   Reward and Performance Management

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Incompatible Units

200611 - Management of Employee Performance, 200612 - Remuneration Theory and Practice

....

The unit introduces students to critical perspectives in reward management. The structure of the course is initially thematic and considers in turn: the wider context in which reward strategies are devised; the strategic decisions that arise in the organisational context if reward is to meet regulatory requirements, the organisation's objectives and the expectations of the workforce, and the component parts (base pay, variable play, transactional rewards, relational rewards of contemporary reward). This unit examines the relationship between performance and reward, performance management systems and the alignment of employer performance with achievement of organisational objectives. Various models of performance management and performance appraisal techniques are critically assessed.

300056.3   Robotics

Credit Points 10 **Level** 4

Prerequisite

300463.2 Fundamentals of Mechanics

....

To develop an understanding of the basic concepts involved in Robotics. The kinematics, dynamics, control and sensing aspects in robotics will be introduced. In addition, the concepts of artificial intelligence (AI) and their applications in robotics will also be introduced. There will be considerable use of MATLAB in the unit.

700059.2   Science for Health Science (UWSCFS)

Credit Points 10 **Level** Z

Equivalent Units

900049 - Science for Health Science (UWSC), 900068 - Science for Nursing (UWSC)

Special Requirements

Students must be enrolled at UWSCollege.

....

This unit replaces 700059.1 Science for Health Science (UWSCFS) from Term 1 2011. The depth of knowledge and practical skills required by health professionals in the 21st century are very different to that which were required in the past. Medical treatment of illness and disease has become increasingly technical and health professionals are expected to work in partnership in determining patient care. In order to achieve this, today's health professional must have a basic understanding of the fundamental scientific principles behind both the diseases and their treatments. Increasingly, modern health science is concerned with maintaining health as a way of preventing disease and this is achieved through a holistic approach to the human state. This course is an introduction to the basic concepts in physics, chemistry and biology that will be required in order to commence any tertiary health science course.

300924.1   Science Research Project

Credit Points 10 **Level** 3

Assumed Knowledge

This unit is aimed at undergraduates in their final year of undergraduate study who have a good grounding in the Level 2 units for the discipline area of their individual project.

Equivalent Units

300788 - Science Research Project

Incompatible Units

300645 - Science Research Project 2, 300299 - Chemistry Project 3, J3659 - Biological Science Project 3, 14117 - Chemistry Project, 300542 - Biomolecular Science Project

Special Requirements

Students must have completed at least two Level 3 units and have a GPA of 5.5 or above. This is an undergraduate project unit; the restrictions above are purposely designed to limit enrolments to a small number of high-performing third year students. Handling large enrolments is not possible in this style of unit.

....

Science Research Project is a final-year capstone unit that gives students an introduction to scientific research, while extending their knowledge and practical skills. Each student undertakes a research project supervised by an academic staff member. With the assistance of their supervisor, students will research the literature and define the problem to be studied, carry out a risk assessment, develop the appropriate experimental methods, carry out research on their project, and present a final written report and a poster or oral presentation. This unit offers a challenge to final-

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year students, and allows innovation by the student with respect to both method and research direction.

300412.3 Science, Technology and Environment Honours Project

Credit Points 60 **Level** 5

Assumed Knowledge

Successful completion of a Bachelors degree in a science discipline. Normally the student will have achieved a grade point average of greater than 5.0 in Level 2 and 3 units.

Special Requirements

Students must be enrolled in a postgraduate or honours course.

....

The aim of this unit is to further develop the student's research and problem solving skills. The student is required to implement a research plan, complete a substantive piece of research in a relevant field within Science, Technology and the Environment and to communicate the results of that work to an interested and technically literate audience. Students will present their research as a thesis with a substantial chapter detailing research objectives, methodology and research outcomes. The thesis topic and structure will vary according to the area of interest of the student and the expertise of the supervisor. The project is meant to be a significant undertaking and to incorporate some element of innovation. Throughout this unit regular planned consultations between the student and supervisor (s) will occur and students will be required to attend seminar series or regular research meetings; these may be formal components of other units within the Bachelor (Honours) course. Students are expected to work to a schedule devised in consultation with their supervisor. The schedule will include dates set for progress reports and the presentation of draft chapters for review by the supervisor. The unit builds upon the skills developed in the undergraduate course, extending students' competencies in a range of practical techniques and processes of critical thinking. Students who successfully complete the Honours program will have achieved the appropriate background to enable them to pursue further postgraduate research and/ or coursework in the sciences or pursue a career in industry or profession.

300811.1 Scientific Literacy

Credit Points 10 **Level** 1

Assumed Knowledge

Basic literacy and numeracy.

Equivalent Units

300497 - Professional Skills for Science

....

This unit is designed to provide students with scientific literacy and generic skills required to successfully undertake science-related undergraduate studies. Students learn, develop and utilise academic and interpersonal methodologies within the context of applied scientific principles in society and take responsibility for their own learning. Students are introduced to the contestable and uncertain nature of science and the scientific method.

Activities encourage development of self-confidence, self-efficacy, creative thinking through problem solving, group process, communication and peer support. Academic skills include scientific reading and report writing, researching scientific information and library skills, oral presentation, taking tests and exams, effective personal and group based learning strategies, peer assessment, and online learning.

700124.1 Scientific Literacy (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic literacy & numeracy

Equivalent Units

300497 - Professional Skills for Science, 700042 - Professional Skills for Science (UWSC), 300811 - Scientific Literacy

Special Requirements

Students must be enrolled at UWSCollege in either 7003 Diploma in Science or 7009 Diploma in Science Fast Track

....

This unit is designed to provide students with scientific literacy and generic skills required to successfully undertake science-related undergraduate studies. Students learn, develop and utilise academic and interpersonal methodologies within the context of applied scientific principles in society and take responsibility for their own learning. Students are introduced to the contestable and uncertain nature of science and the scientific method. Activities encourage development of self-confidence, self-efficacy, creative thinking through problem solving, group process, communication and peer support. Academic skills include scientific reading and report writing, researching scientific information and library skills, oral presentation, taking tests and exams, effective personal and group based learning strategies, peer assessment, and online learning.

101451.2 Second Language Acquisition

Credit Points 10 **Level** 3

Equivalent Units

A1081 - Second Language Acquisition

....

This unit is designed for students who are interested in understanding how a second language is learned. It examines learning in both natural or classroom contexts as well as language development in child and adult learners. Students are introduced to current theories of Second Language Acquisition, as well as current research and its applications to the classroom or the translation process. Students will conduct a small research project to become familiar with the process of learning a second language and some basic research notions and techniques.

101721.2 Second Language Learning and Teaching

Credit Points 10 **Level** 3

Equivalent Units

100200 - L2 Learning and Teaching Methodology, 101456 - Second Language Learning and Teaching

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Units

Special Requirements

Successful completion of 60 credit points at Levels 1/2.

....

This unit provides students with knowledge of second language learning processes, an understanding of how research-based teaching may effectively help that process in learners as well as reflections and experiences on teaching practices.

200707.2   Service Industry Studies

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of the service and experience economies is assumed.

Equivalent Units

200581 - Sport Management Research Methods, 200559 - Hospitality Business Research Methods, 200681 - Services Research Methods

....

Service Industry Studies is designed to allow students to develop skills of research planning, execution, interpretation and results dissemination from service industry research projects. Students will learn about and have an opportunity to prepare a literature review, conduct research on a 'problem', collect, analyse and present data on a hypothetical or case based service business issue. Strategies and recommendations in the form of a report will be the outcome of the unit.

300568.2   Services Computing in Healthcare

Credit Points 10 **Level** 3

Assumed Knowledge

Some ability in design and implementation of Web Applications is desirable but not essential. Students who have worked in the Health sector, or who have gained a broad understanding of Health system and uses of ICT therein may be exempted from the prerequisite unit.

Prerequisite

300566.2 Introduction to Health Informatics

....

In this unit students will learn the concepts underpinning the services computing paradigm of 'bridging the gap between Business Services and IT Services'. Services Computing technology includes Web services and service-oriented architecture (SOA), business consulting methodology and utilities, business process modelling, transformation and integration. Students will learn, through the development of practical examples, how to utilise these technologies within a healthcare context.

100281.3   Sexual Culture/s

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit examines cultural forms and practices as they relate to sex and sexual activity. Its primary focus is sociological and ethnographic. The unit introduces students to methods and approaches in the researching of sex's role in cultural formation. We look at the way in which sex, sexual practice and sexual identity are experienced as social and cultural practices. The unit looks closely at particular sexual cultures, and moves from research regarding these sexual cultures to understandings of sex as culture. Each topic takes a trajectory from empirical, qualitative or other sociological studies of sites and practices, drawing on a range of theoretical approaches to develop understandings of sex as culture.

101791.2   Short Fiction in the Americas

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit surveys short fiction written in the Americas in English, French, Spanish and Portuguese during the twentieth century. It examines the history of short fictional genres, theories of their functioning, and the ways in which they register and transmit the various national and regional cultures of the Americas. The unit allows students majoring in Spanish to undertake language-specific assessment tasks (reading original texts in Spanish and writing their essay in Spanish) while other students read the texts and complete their assessment tasks in English.

300057.3   Signals and Systems

Credit Points 10 **Level** 2

Assumed Knowledge

300005 - Circuit Theory: this unit requires the knowledge in Laplace transforms, Calculus, Trigonometry and Complex number theory, since understanding of System theory and Fourier series and transform requires a strong background in those areas. Most of the examples and applications in this unit are based on Circuit Theory material.

Prerequisite

200238.2 Mathematics for Engineers 2

....

This unit aims to develop students' understanding of continuous-time and discrete-time concepts and methods. It covers various signals and their analysis, as encountered in the fields of electrical, computer and telecommunication engineering.

200044.1   Simulation Techniques

Credit Points 10 **Level** 3

....

This unit covers a general introduction to simulation modelling, with a special focus on systems that change only at discrete points in time. It begins with Monte-Carlo methods for evaluating integrals, and moves into the simulation of simple queuing and inventory systems with the use of Pascal. It then introduces special simulation languages, with special reference to SEESIM. The purpose

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is to be able to set up and solve simple practical problems. In doing so we emphasise the need to analyse outputs statistically, and to offer advice on the basis of the analysis. Although requiring computer programming, the emphasis of the unit is mathematical and statistical. It deals with an introduction to random number generation by computers; it also deals with the computer generation of independent random variables with a common probability distribution.

63178.2 Social and Political Developments in Contemporary China

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

This unit is concerned with developments in China since the establishment of the People's Republic in 1949. It will focus on the post-1976 period, which saw the adoption and implementation of an "open-door" policy and the launch of the "Four Modernisations". Due attention, however, will also be paid to the history and politics of the 1950s and 1960s as backgrounds. The unit will be issue-oriented, exploring a whole range of social and political issues that will have a bearing on China's future as a potential world power in the twenty-first century.

100884.2 Social Inequalities

Credit Points 10 **Level** 2

Equivalent Units

100283 - Social Inequalities

Special Requirements

Successful completion of 60 credit points at Level 1.

....

Social inequality arising from the operations of power creates patterns of unequal participation and unequal access of people to economic, social and political resources, in different ways in different societies and cultures. These processes raise fundamental theoretical issues, as well as matters of serious practical concern. This unit will critically examine theoretical analyses of different kinds of inequalities, including class, race, ethnicity, gender, and sexuality.

101006.2 Social Semiotics

Credit Points 10 **Level** 3

Equivalent Units

VP201A - Social Semiotics, 100885 - Social Semiotics

Special Requirements

Successful completion of 60 credit points at Level 1.

....

Students doing social semiotics will learn a variety of skills in social and textual analysis. These skills are vital to an understanding of communication, society, and culture. The unit will offer insights into the history of the rise of semiotics, especially from the work of Roland Barthes onwards. The unit combines theory with practice in analysing and producing text in a variety of media. It also looks at the contexts of textual production, ranging from general examples to issues of multicultural and postcolonial social analysis.

101450.2 Sociolinguistics

Credit Points 10 **Level** 3

Equivalent Units

A1080 - Sociolinguistics

....

This unit is designed to develop students' interest in language and society and give them an understanding and appreciation of variation in language (accents, dialects) and language change, language planning, as well as the interdependent relationship between language learning, communicative competence and cultural practices, both in the Australian context and also in a more global context. It also aims to show students how this unit fits in with other language and linguistics-related disciplines, e.g. Linguistics, Bilingualism and Biculturalism, Second Language Acquisition.

101359.5 Sociology of Religion

Credit Points 10 **Level** 3

Equivalent Units

Unit B3967 - Sociology of Religion

Special Requirements

Successful completion of 40 credit points of study OR 101336 - Introduction to Sociology OR 101551 - Understanding Society OR 100960 - Contemporary Society.

....

In this unit some of the main sociological approaches to the study of religion will be considered. The unit will be orientated particularly to the tension between religion and social theory in the evolution of sociological thought. It addresses the impact of religion and religious bodies on Australian society and politics. The unit will focus on the relation of theory and practice, on the research of contemporary religious practice, and on the contemporary relevance of major theorists in the sociology of religion. It will address issues such as Buddhism, Fundamentalism(s), gender in religion, globalisation, Islam, modernity/post modernity, neo-paganism, networks in spiritualities, New Age, popular culture, and new religious movements.

300731.2 Soil Engineering

Credit Points 10 **Level** 2

Prerequisite

200237.3 Mathematics for Engineers 1

Equivalent Units

85012 - Soil Engineering

Special Requirements

Restriction on size of lab class.

....

This unit is an introductory course covering the use of soil, and the water in it, as an engineering material. It will provide students with a basic understanding of the physical

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and mechanical properties of soils, simple soil testing methods to characterise soil strength and deformation behaviour and how to apply basic techniques to assess the hydro-mechanical response of soils subjected to loading.

700119.1 Soil Engineering (UWSC Assoc Deg)

Credit Points 10 **Level** 2

Prerequisite

700101.1 Mathematics for Engineers 1 (UWSC Assoc Deg)

Equivalent Units

300731 - Soil Engineering

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit is an introductory unit covering the use of soil, and the water in it, as an engineering material. It will provide students with a basic understanding of the physical and mechanical properties of soils, simple soil testing methods to characterise soil strength and deformation behaviour and how to apply basic techniques to assess the hydro-mechanical response of soils subjected to loading.

300823.1 Soils

Credit Points 10 **Level** 1

Equivalent Units

300625 - Noise Assessment, 300362 - Environment and Health

....

This unit provides students with a basic understanding of soil formation and erosion processes, soil physical, chemical and biological properties, and the diversity and classification of soils in the Australian landscape. These basic principles are explored in relation to the sustainable management of soils for horticultural and agricultural production and for environmental management, other land uses and in relation to forensic investigation and studies. The practical sessions are designed to reinforce the lecture material and include field description and analysis of soil profiles and properties, soil sampling principles and practice, laboratory measurement of soil physical and chemical properties essential/important for plant growth, soil biology and human and animal remains.

100145.2 Spanish 101

Credit Points 10 **Level** 1

....

This is an introductory unit in Spanish language studies for students with little or no previous knowledge of the language. It aims to introduce students to the four skills of listening, speaking, reading and writing in elementary Spanish. The unit includes a study of elements of the contemporary Spanish-speaking world and its culture, and their relevance to Australia, with a particular emphasis on the Spanish-speaking community in Australia.

100146.2 Spanish 102

Credit Points 10 **Level** 1

....

The aim of this unit is to build on the basic knowledge of Spanish language and cultural background acquired in Spanish 101, keeping the same emphasis in aural comprehension and oral performance, as well as on the reading and writing necessary to communicate effectively in Spanish. It also enables students to begin to study the Spanish language as used in the Australian context by gradually introducing them to lexical differences between the Spanish spoken in different parts of the Spanish-speaking world. In addition it will examine the main cultural attractions of the Spanish-speaking world.

100153.2 Spanish 303: Advanced Writing Skills

Credit Points 10 **Level** 3

....

This unit aims to develop the writing skills to prepare them to make professional use of the language. It is particularly recommended for those who wish to involve themselves in areas such as language teaching and translation. Students will be introduced to a full range of text types and language purposes. They will be guided to analyse, interpret and evaluate passages provided, and will be encouraged to extend their ability by experimenting with a variety of writing styles.

100154.2 Spanish 304: Advanced Speaking Skills

Credit Points 10 **Level** 3

....

As a companion unit to Spanish 303: Advanced Writing Skills, this unit aims to prepare students to make professional use of the language, in this case by placing particular emphasis on oral skills. It is also specially recommended for those wishing to pursue careers in areas such as language teaching and translation. Students will be introduced to a full range of oral text types and language purposes. They will be guided to analyse, interpret and evaluate examples of oral discourse, and encouraged to develop effective public speaking skills.

100155.2 Spanish 305: Contemporary Literature

Credit Points 10 **Level** 3

....

This is a compulsory unit for students of the BA (Interpreting and Translation) (Spanish), and one of the optional units for students with advanced language skills in Spanish enrolled in the BA. It aims to introduce students to the study of contemporary Hispanic literary works so that they may acquire an appreciation of contemporary Latin American and Spanish literature and an understanding of the historical, political and social contexts in which that literature developed. Emphasis will be placed on the writer's role as an interpreter and critic of society.

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100156.2   Spanish 306: Contemporary History

Credit Points 10 **Level** 3

....

This unit aims to introduce students to the history of Spain and Latin America in the Twentieth century to enable them to understand the historical background to present-day events, and to identify the major contemporary policy issues in these regions of the world.

100157.2   Spanish 307: Classical Literature

Credit Points 10 **Level** 3

....

This unit provides an introduction to the social and cultural history of Spain of the Sixteenth and Seventeenth centuries, and to the principal literary monuments of this period. The unit is based on the study of selected representative texts and appropriate background readings.

100158.2   Spanish 308: Spanish Sociolinguistics

Credit Points 10 **Level** 3

....

This unit aims to give students an understanding of the phonological, morpho-syntactic, semantic and pragmatic changes in the Spanish language as spoken and written at the start of its second millennium. Particular attention will be paid to the dialectal geography of the Hispanic world, and to the problems faced by the language today, with particular reference to its 'Spanglish' version in emigre communities in the United States and Australia, and to information technology.

100201.2   Special Study in Languages and Linguistics

Credit Points 10 **Level** 3

Equivalent Units

A3470 - Special Study in Languages and Linguistics 1

....

This is primarily a self-study unit designed to cater for a special area of interest in languages and/or linguistics not otherwise covered in the units on offer in the languages Key Program and where the student may otherwise find it difficult to complete his or her program of study. Once the student is approved by the Head of Program to undertake such study a supervisor is nominated and an individually-tailored learning contract, which will include appropriate language-specific readings and tasks, is drawn up in collaboration with the supervisor and is submitted to the Head of Program for approval.

63111.3   Special Topics in Asian and International Studies

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1

....

This unit focuses on current issues in Asian Studies and International Relations, and may include study of international relations among nations in Asia and Europe.

100886.2   Special Topics in Cultural and Social Analysis

Credit Points 10 **Level** 2

Equivalent Units

63115 - Special Topics in Cultural Studies

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This is a "shell" unit, in which new unit content and critical approaches in Cultural and Social Analysis can be trialled. Content will depend on student requirements in conjunction with staff research and teaching expertise. The unit may also be used to provide students with the opportunity to undertake primary research or a project in the area of Cultural and Social Analysis.

100505.2   Special Topics in English, Text and Writing

Credit Points 10 **Level** 2

Equivalent Units

63258 - Special Topics in Text and Writing

Special Requirements

Successful completion of 60 credit points.

....

This is a "shell" unit, in which new unit content and critical approaches in English, Text & Writing can be trialled. Content will depend on student requirements in conjunction with staff research and teaching interests. The unit might also be used to provide students with the opportunity to undertake primary research or a project in the area of English, Text & Writing.

400919.1   Specialities in Traditional Chinese Medicine 1 (PG)

Credit Points 10 **Level** 7

Corequisite

400918.1 Chinese Internal Medicine 1 (PG)

Incompatible Units

400358 - Specialities in Traditional Chinese Medicine

....

This unit provides learning experiences that enable the health professional to analyse, diagnose and treat common gynaecological diseases and musculoskeletal conditions using a TCM approach with acupuncture and Chinese herbal medicine. Students will develop a good understanding of the causes and pathophysiological mechanisms of common gynaecological diseases and musculoskeletal conditions.

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400923.1   Specialities in Traditional Chinese Medicine 2 (PG)

Credit Points 10 **Level** 7

Prerequisite

400918.1 Chinese Internal Medicine 1 (PG)

Incompatible Units

400364 - Specialities in Traditional Chinese Medicine 2

....

The specialties of pediatrics, dermatology, ear, nose, throat (ENT) and eye diseases, are important divisions of TCM activity. This unit enables students to develop an understanding of the aetiology and pathophysiology of common paediatric, dermatological, ENT and eye disorders, and to analyze, diagnose and treat these conditions using acupuncture and Chinese herbal medicine.

400885.2   Sport and Exercise Physiology

Credit Points 10 **Level** 2

Prerequisite

400869.2 Human Anatomy and Physiology 2 AND **400880.2** Fundamentals of Exercise Science AND **400868.2** Human Anatomy and Physiology 1

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

Sport and Exercise Physiology introduces students to the essential physiological knowledge required to understand how human beings move and exercise. Students will explore how the nervous system controls muscle force and movement during exercise, how the cardiovascular and respiratory systems adjust to exercise and support the increased muscular work, and how body temperature is regulated during exercise. Students will need to apply this knowledge in an attempt to understand signs and symptoms of heat stress during exercise. Students will also learn how to record analyse and interpret physiological data recorded during exercise, and to collate and organise this information in a clear and useful manner.

401055.1   Sport and Exercise Psychology

Credit Points 10 **Level** 3

Prerequisite

101614.2 Psychology and Health AND **400880.2** Fundamentals of Exercise Science

Equivalent Units

101615 - Sport and Exercise Psychology

Incompatible Units

100678 - Introduction to Sport Psychology, 100680 - Exercise Psychology, 400322 - Sociological Aspects

Special Requirements

Students must be enrolled in course 4659 - Bachelor of Health Science (PDHPE) or 4658 - Bachelor of Health Science - Sport and Exercise Science.

....

Sport and Exercise Psychology is a topic of particular relevance to those working in the sport, health and fitness, and performance industry. The field of Sport and Exercise Psychology is primarily concerned with the study of the psychosocial factors which influence participation and performance in physical activity and sport, as well as the psychological impact that these activities has on participants. This unit examines pertinent theory, research, and application in the field of Sport and Exercise Psychology.

200742.2   Sport and Hospitality Event Management

Credit Points 10 **Level** 3

Assumed Knowledge

This is an advanced unit which assumes basic knowledge of sport/hospitality management.

Incompatible Units

200579 - Sport Event and Facility Management; 200682 - Convention and Special Event Management

....

An essential part of many sport and hospitality businesses involves the organisation and management of special events and the facilities which host them. Sport and Hospitality Event Management provides knowledge and understanding by giving students the opportunity to practically apply skills and knowledge through development and execution of their own special event. The unit calls for students to apply previously learned management strategies, leadership theories, communication skills, and staff management to facilitate their event projects.

200751.2   Sport Management Applied Project

Credit Points 10 **Level** 3

Assumed Knowledge

An introductory level of knowledge in sport management.

Prerequisite

200707.2 Service Industry Studies

Equivalent Units

200580 - Sport Management Applied Project

Incompatible Units

200561 - Hospitality Management Applied Project

....

Students studying Sport Management Applied Project may have the opportunity to undertake an international field trip to experience the sport environment from an international perspective. This unit provides students a unique opportunity to integrate knowledge gained from operational and theoretical perspectives of sport studies into application in an engaged research project in sport management. Students will engage in comprehensive projects which bring together real world industry problems and sport theory.

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200664.2 Sport Management Internship

Credit Points 10 **Level** 3

Assumed Knowledge

An introductory level of knowledge in sport management.

Equivalent Units

400649 - Professional Practice in Sport Management 3,
400648 - Professional Practice in Sport Management 2,
200576 - Professional Practice in Sport Management

Special Requirements

Some placement agencies require completion of a
Prohibited Persons Declaration; Criminal Record Check
Clearance and Immunisation.

....

Sport Management Internship provides students with an
opportunity to engage with the sport industry through a 120
hour industry placement. This unit provides the opportunity
to observe practitioners in action and to learn in a practical
"hands-on" setting. Experience in the field of study is an
essential ingredient in preparing an individual for
employment either during the period of study or after
graduation. Students have the opportunity to see how
knowledge and skills acquired in lectures and tutorials/
laboratories can be applied and also relate theoretical
concepts and skills to situations in sport or exercise -related
settings.

200754.2 Sports Management - Planning and Development

Credit Points 10 **Level** 3

Assumed Knowledge

An introductory level of knowledge in sport management.

Equivalent Units

200244 - Sports Management - Planning and Development

....

With sport professionalism, globalisation, population
change and consumer pressure there is a need for
government, not for profit and private enterprise to better
plan for and provide sport and leisure facilities and
services. Sport Management - Planning and Development
provides an in-depth study of the planning and
development of sport in the Australian context. Throughout
this unit there is a focus on managing change to
appropriately planning for future sport and leisure needs
within a context of public policy. An introductory framework
will be provided emphasizing the historical perspectives of
sport and leisure and its history and role within
contemporary Australian society.

300700.5 Statistical Decision Making

Credit Points 10 **Level** 1

Equivalent Units

200192 - Statistics for Science, 200263 - Biometry, 200032
- Statistics for Business, 200052 - Introduction to Economic
Methods

Incompatible Units

200182 - Quantitative Techniques

....

Statistical Decision Making introduces students to various
statistical techniques supporting the study of computing and
science. Presentation of the content will emphasize the
correct principles and procedures for collecting and
analysing scientific data, using information and
communication technologies. Topics include describing
different sets of data, probability distributions, statistical
inference, and simple linear regression and correlation.

700041.3 Statistical Decision Making (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

200192 - Statistics for Science, 200263 - Biometry, 200032
- Statistics for Business, 200052 - Introduction to Economic
Methods, 300700 - Statistical Decision Making, 700007 -
Statistics for Business (UWSC), 700033 - Biometry (UWSC)

Incompatible Units

200182 - Quantitative Techniques

Special Requirements

Students must be enrolled at UWS College

....

Statistical Decision Making introduces students to various
statistical techniques supporting the study of computing and
science. Presentation of the content will emphasise the
correct principles and procedures for collecting and
analysing scientific data, using information and
communication technologies. Topics include describing
different sets of data, probability distributions, statistical
inference and simple linear regression and correlation.

700045.2 Statistics for Academic Purposes (UWSCFS)

Credit Points 5 **Level** Z

Assumed Knowledge

Year 10 Mathematics or equivalent

Equivalent Units

900011 - Statistics for Academic Purposes (UWSC)

Special Requirements

Students must be enrolled at UWS College.

....

Statistics for Academic Purposes is designed and written to
prepare students for study in Statistics at first year
university level. The unit develops those skills peculiar to
the statistical requirements of further study in the areas of
Arts, Business, Science and the Humanities.

200032.5 Statistics for Business

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics/Mathematics Extension 1 is desirable.

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Equivalent Units

200192 - Statistics for Science, 300700 - Statistical Decision Making, 200263 - Biometry, 200052 - Introduction to Economic Methods

Incompatible Units

200182 - Quantitative Techniques

....

Statistics for Business introduces the basic concepts and techniques of statistics that are particularly relevant to problem solving in business. It also provides a sound base for more advanced study in statistics and forecasting in subsequent sessions. Topics include: presentation of data; descriptive statistics; the role of uncertainty in business decision making; hypothesis testing; and basic forecasting.

700007.3   Statistics for Business (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics/Mathematics Extension 1 is desirable.

Equivalent Units

200032 - Statistics for Business

Incompatible Units

200192 - Statistics for Science, 200052 - Introduction to Economic Methods, 200182 - Quantitative Techniques, 200263 - Biometry

Special Requirements

Students must be enrolled at UWS College.

....

This unit introduces the basic concepts and techniques of statistics that are particularly relevant to problem solving in business. It also provides a sound base for more advanced study in statistics and forecasting in subsequent sessions. Topics include: presentation of data; descriptive statistics; the role of uncertainty in business decision making; hypothesis testing; and basic forecasting.

300730.2   Steel Structures

Credit Points 10 **Level** 3

Prerequisite

300733.2 Introduction to Structural Engineering

Corequisite

300732.2 Structural Analysis

Equivalent Units

85014 - Steel Structures

....

This unit covers the basic behaviour of steel members and structures, the appropriate methods to analyse them and the design criteria and methods used to proportion them.

200665.2   Strategic Communication in Sport

Credit Points 10 **Level** 2

Equivalent Units

400321 - Sport Management 2, 200556 - Communication in Sport

....

Strategic Communication in Sport offers students the opportunity to explore the management of the different types of communication available to sporting organisations. With the high profile of many sporting organisations, communication plays a key part of organisational strategy. Maximising communication through an understanding of the interconnect media relationships and the role of communication within these relationships is explored.

200587.2   Strategic Management

Credit Points 10 **Level** 3

Prerequisite

200571.2 Management Dynamics OR **MG102A.3** Management Foundations

Equivalent Units

MG302A - Strategic Management

....

The choice perspective of strategic management. External environmental assessment and choice. Analysis of international strategic capabilities. Strategy formulation: choice of mission, strategic goals, and a strategy. Implementing strategies through plans, functional strategies, and budgets. Implementing strategy through organisation structure. Implementing strategy through culture, leadership, and human resource management. Control of strategy. Special cases of strategic management: entrepreneurial and non-profit organisations. Strategic management in the international area. Social issues in strategic management. Strategic management in the future.

200087.3   Strategic Marketing Management

Credit Points 10 **Level** 3

Assumed Knowledge

This is a capstone unit in marketing. It is assumed that students have knowledge of basic marketing concepts, theories, and frameworks in consumer behaviour, marketing communications and marketing research.

Prerequisite

200083.2 Marketing Principles

....

This unit is about developing and managing innovative competitive marketing strategies. It crosses the traditional boundaries of marketing and is therefore influenced by concepts and tools from a range of disciplines including strategic management, entrepreneurship and marketing. The central focus is on how marketing strategy and its management can create superior and sustainable value for both customers and shareholders.

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300732.2 Structural Analysis

Credit Points 10 **Level** 3

Prerequisite

300733.2 Introduction to Structural Engineering

Equivalent Units

85010 - Structural Analysis

....

This unit introduces students to the aspects of structural analysis of trusses, beams and frames. It covers the first-order elastic analysis of statically determinate and indeterminate structures. This course aims to teach students to master basic skills in structural analysis as well as skills in using computer software to analyse complex structures.

101869.1 Studies in Postcolonial Literature

Credit Points 10 **Level** 2

Assumed Knowledge

An idea of the genre of the English novel and a history of imperialismn.

Special Requirements

Successful completion of 40 credit points at level 1.

....

This unit focuses on Postcolonial Studies, which has been one of the most important literary and theoretical movements that makes meaning of colonial discourse theory and offers a stringent critique of it at the same time. The field offers ways of understanding literature, culture and society in modern postcolonial nations in Asia and Africa after the collapse of colonial rule. Simultaneously it also affords a re-visioning of the central tenets of Eurocentric thinking that were used to colonise third world nations and thus is a vital mode and methodology for understanding contemporary society. This particular unit will look at models and examples of African postcolonialism from early to late 20th century.

300738.3 Surveying for Engineers

Credit Points 10 **Level** 1

Assumed Knowledge

Students need a good knowledgeof Geometry and Trigonometry.

Prerequisite

200237.3 Mathematics for Engineers 1

Equivalent Units

85003 - Surveying for Engineering

....

This core unit provides students with a basic knowledge of Surveying as it relates to various Engineering projects. It provides material for units such as Water Engineering, Environmental Engineering, Infrastructure Engineering and Engineering Project.

700120.1 Surveying for Engineers (UWSC Assoc Deg)

Credit Points 10 **Level** 1

Assumed Knowledge

Knowledge of trigonometry

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit provides students with a basic knowledge of Surveying as it relates to various Engineering projects. It provides material for units such as Water Engineering, Environmental Engineering, Infrastructure Engineering & Engineering Project.

200039.2 Surveys and Multivariate Analysis

Credit Points 10 **Level** 3

Assumed Knowledge

200192 - Statistics for Business, 200032 - Statistics for Science

Equivalent Units

J3693 - Sample Survey Techniques, J3692 - Regression and Multivariate Analysis

....

In the first half of this unit students gain an appreciation of survey methodology, including questionnaire design, as well the application of sampling techniques. These include simple random sampling, stratification, supplementary information and cluster sampling. The second half of the unit covers the principal methods of multivariate data analysis, principal components, factor analysis, discriminant analysis, and cluster analysis.

300309.3 Sustainable Design: Life Cycle Analysis

Credit Points 10 **Level** 2

Equivalent Units

J2806 - Manufacturing Technology and Design, 10910 - Environmental Planning 1

....

Designers prescribe the use of our limited materials resources with every product that transpires from their work. With an informed approach to design, based on a sound knowledge of materials from their origins to their disposal as well how those materials are utilised in existing contexts of use, a designer can maximise the positive impact of their designing on local and global communities. In this unit students will develop an understanding of the central importance of design in developing a more sustainable world on both production and consumption sides. They will reflect critically on their role as both designers and end-users and will exercise their creative intuition to confidently generate and present designs for sustainability. The aim of the unit is to enhance students ecological literacy and perception of sustainability as a creative opportunity.

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300304.3 Sustainable Design: Materials Technology

Credit Points 10 **Level** 1

Equivalent Units

J1758 - Engineering Design, J2807 - Materials Technology, J2817 - Manufacturing Processes and Materials

....

In this unit we explore materials from a design perspective - their properties, qualities, typical applications, their cost and the environmental impact associated with their extraction, use and disposal. We also look at how they can be formed using contemporary and emerging processing techniques - from sand casting to rapid prototyping. Lectures are supplemented with live demonstrations of materials processing techniques and students undertake materials research and a design for manufacture project.

300306.3 Sustainable Design: Sustainable Futures

Credit Points 10 **Level** 2

Assumed Knowledge

300309 - Sustainable Design: Life Cycle Analysis

Equivalent Units

10913 - Environmental Planning 2

....

If science and planning march under the banner of 'everything is possible', design culture must know how to point out a path for these potential possibilities, a path that can be completely opposed to that which technological-scientific development has followed up to now. This unit explores the challenges facing design culture in which the designer must now provide scenarios that visualise some aspects of how the world could be and, at the same, time, present it with such characteristics that can be supported by complex ecological equilibria, which are acceptable socially and attractive culturally.

300165.3 Systems Administration Programming

Credit Points 10 **Level** 3

Assumed Knowledge

A good understanding of programming concepts, such as selection, iteration, modularization, and one dimensional arrays. Basic knowledge of Windows operation system.

Prerequisite

300167.3 Systems Programming 1

Incompatible Units

300577 - Script programming

....

This unit covers programming techniques and tools used to administer standalone and networked computer systems. The unit focuses on the use of high level interpretive scripting languages to automate everyday administrative tasks, and to monitor and control running systems. Techniques to extend scripting language capabilities by

dynamic linking to compiled code are examined, particularly in terms of access to operating system level functions. The unit also examines the use of administrative programs and tools to monitor and adjust system performance and capacity.

300585.2 Systems Analysis and Design

Credit Points 10 **Level** 1

Assumed Knowledge

Students should have knowledge of the fundamentals of information systems, computer systems, computer applications and information processing

Equivalent Units

300131 Introduction to Analysis and Design; 700013 Systems Analysis and Design (UWSC)

....

This unit introduces the concepts of System Analysis and Design. The study of methodologies and techniques for problem recognition, requirement analysis, process modelling and/or data modelling are essential elements of this unit. The Systems Development Life Cycle model is employed as the prime approach to teach the unit, providing students with the basic skills required for analysis and design of logical solutions to information systems problems. The use of Computer Aided System Engineering tools will be discussed in practical sessions.

700013.1 Systems Analysis and Design (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

Students should have knowledge of the fundamentals of information systems, computer systems, computer applications and information processing

Equivalent Units

300131 - Introduction to Analysis and Design, 300585 - System Analysis and Design

Special Requirements

Students must be enrolled at UWS College.

....

This unit introduces the concepts of System Analysis and Design. The study of methodologies and techniques for problem recognition, requirement analysis, process modelling and/or data modelling are essential elements of this unit. The Systems Development Life Cycle model is employed as the prime approach to teach the unit, providing students with the basic skills required for analysis and design of logical solutions to information systems problems. The use of Computer Aided System Engineering tools will be discussed in practical sessions.

300166.2 Systems and Network Management

Credit Points 10 **Level** 3

Assumed Knowledge

Students should be familiar with the fundamentals of computer networking and data communications.

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Prerequisite

300095.3 Computer Networks and Internets

....

The rapid progress in technology, the increasing demand for IT services, and the strong expansion of the Internet have resulted in heterogeneous interconnected networks with many distributed systems that run on them. To ensure access and efficient utilization of network resources, subject to organisational policy restrictions, networked systems must be managed properly. This unit addresses the issues relevant to such management. It covers the principles and current practices pertinent to integrated management of networks, systems, services, and applications. The unit helps the student to understand management functions and architectures as well as current standards and relevant protocols.

300167.3 Systems Programming 1

Credit Points 10 **Level** 2

Assumed Knowledge

This unit requires a knowledge base of at least the level of a completed first year in a professional Computing degree. Ability to apply fundamental concepts in data structures, algorithms, programming principles will be assumed.

Prerequisite

300580.2 Programming Fundamentals OR **300018.2** Digital Systems 1 AND **300027.2** Engineering Computing

Special Requirements

Students enrolled in 3621 Bachelor of Engineering must be enrolled in one of the Key Programs attached to the course.

....

This unit provides an introduction to the knowledge and skills required for the design, writing and support of technical software and other such functions normally falling within the role of the systems programmer. It provides for detailed study of a systems programming environment and its application to systems programming tasks.

300168.2 Systems Programming 2

Credit Points 10 **Level** 3

Prerequisite

300167.3 Systems Programming 1

Corequisite

300149.2 Operating Systems

Equivalent Units

14963 - Systems

....

This unit complements and extends the work already done in Systems Programming 1. It covers advanced topics in programming that are directly relevant to systems level application design and implementation. As such it addresses the main concepts, principles, and techniques for system level programs that utilise virtual memory, dynamic link libraries, asynchronous I/O, and multi-threading that can support high levels of concurrency. The unit also emphasises and builds a sound understanding of

kernel level objects, as well as error and exception handling techniques, and focuses primarily on using the low-level functionality exposed by the operating system's C/C++ language API.

101832.2 Talking Normal: Sociolinguistics and Modern Literature

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit studies the ways in which speech disorders like stuttering and mutism, along with other 'non-standard' forms of language (dialects, accents, slang, etc.) have been portrayed and oftentimes stigmatized in twentieth-century literary and visual culture. Students will engage with a range of genres and texts, all of which deal with the question of how we are defined based on the way we speak. Readings may include one or more national literatures such as American, British, European, and Australian literature.

100889.2 Technocultures

Credit Points 10 **Level** 2

Equivalent Units

63121 - Technology, Culture and Society, 63273 - Science as Culture, 100295 -Women, Technology and Information, 100493 - Imagined Futures

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit examines the social contexts and cultural meanings of technology and science in contemporary society, particularly in relation to questions of power. It begins with an overview of key analytical issues - does technology shape society or does society shape technology? What is the nature of the human-technology relation? How objective is science? It considers current debates around information technologies and the idea of the information society, and the representations of science and technology in popular culture, debates around biotechnology, etc. It develops a critical awareness of the relations between the state, the military, the market and social life in relation to issues around surveillance, work, and military technology.

300582.2 Technologies for Web Applications

Credit Points 10 **Level** 2

Assumed Knowledge

Basic programming principles and program control structures equivalent to that covered in Programming Fundamentals. Basic file management and PC operation including how to access and search the World Wide Web.

Prerequisite

300580.2 Programming Fundamentals

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Equivalent Units

300129 - Interactive Web Site Development, J2826 - Internet and Web Communications, D2826 - Internet and Web Communications

Incompatible Units

300101 - Creating and Managing Web Sites, CP108A - Principles of the Internet, 101180 - Web and Time Based Design

....

Building on material covered in Programming Fundamentals this unit introduces students to some of the key technologies for developing interactive and dynamic web applications from both the client and server perspective. The unit covers web site design, web site development, web page accessibility and usability, HTML, CSS, client side and server side scripting, database interaction, web site promotion (Search Engine Optimisation) and web security.

101008.2 Technologies of Racism

Credit Points 10 **Level** 3

Equivalent Units

100287 - Technologies of Racism

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit assesses the various social, political, scientific and electronic technologies that serve some cultures whilst discriminating against others. The lectures are broad in scope but will at times focus specifically on Indigenous Australia and the kinds of issues around race and racism that emerge within technological practices of management, filtering and representation. Globalisation, localization, ethnicity and identity will be explored along with many different kinds of technology, including those that generate the mass media, to analyse the ways in which technologies play a part in race and racism.

EY101A.1 Terrestrial Environment Management

Credit Points 10 **Level** 1

Equivalent Units

300663 - Resource Sustainability

....

This unit includes lectures, seminars, group discussions and field activities pertinent to catchment management, landuse and environmental impacts. Content covers mapping spatial data management, impact assessment, State of the Environment reporting, rapid appraisal techniques, Ecologically Sustainable Development, using science as a tool, teamwork, analysis and critical reflection. It also involves the integration of the biophysical environment with the investigation of the impacts of man and implications of the socio-political interface.

101453.2 Text and Discourse in English

Credit Points 10 **Level** 3

Equivalent Units

A4028 - Text and Discourse in English

....

In 2013, this unit replaced by 101946 - Discourse Analysis. This unit explores language at the text or discourse level, overviewing several linguistic approaches to the analysis of discourse and focusing on the role of features such as context, social purpose, appropriateness, and textual cohesion and coherence in the production of texts.

101792.2 Texts in Contemporary Arab Society and Culture

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit provides students with a theoretical grounding in major issues and debates related to contemporary Arab society and culture. Students will be able to appreciate and critically examine social, political and cultural complexities of the modern Arab Middle East covering a range of topics from Arab political culture, gender and women's rights to education and civil society. This cross-disciplinary unit will cater for students who seek to advance their knowledge in specific aspects of the modern Arab world for purposes of using this knowledge in further research study and for occupational purposes. The unit will be useful for students majoring in Islamic studies, Arabic, international relations, history and social science.

200118.3 The Accountant as a Consultant

Credit Points 10 **Level** 3

Prerequisite

200108.2 Contemporary Management Accounting

Equivalent Units

H3328 - The Accountant as a Management Consultant

Special Requirements

The need to seek college approval relating to ethics risks and the need for university insurance to cover engaged learning.

....

This unit focuses on the role that accountants play in the effective management of businesses, using case studies covering a range of accounting areas.

101254.3 The Animated Image: Histories and Theories

Credit Points 10 **Level** 2

Equivalent Units

10898 - Design Issues 4B: Animating the Image

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Special Requirements

Successful completion of 40 credit points at level 1

....

This unit explores the histories and theories of animation, from its origins to its contemporary critical practice. The unit covers independent and experimental animation: digital animation and special effects; anime; and the subversive impulse in adult animation. The lectures involve viewing a broad range of works from these areas, followed by tutorial-based close readings of the works. These close readings will facilitate an understanding of the artform's aesthetic, socio-cultural and technological aspects, contextualising it within the history and theory of art and design—live action cinema, photography, painting, video, TV—and popular culture more generally.

300898.1 The Appendicular Skeleton

Credit Points 10 **Level** 2

Prerequisite

300825.1 Introduction to Anatomy

Equivalent Units

300755 - The Appendicular Skeleton, 300325 - The Appendicular Skeleton

Incompatible Units

400881 - Functional Anatomy

Special Requirements

Students must be enrolled in 3577 Bachelor of Medical Science, 3657 Bachelor of Medical Science (Advanced), 3673 - Bachelor of Medical Science or 3682 Bachelor of Medical Science (Advanced). Students must also have a laboratory coat in this unit.

....

This musculoskeletal unit builds on the basic anatomy taught during the first year, offering a regional study of the human upper and lower limbs, including their respective girdles. Emphasis is placed on the identification and description of the structures, including the correlation of structure and function. Cadaveric specimens are used to aid the learning of these regions and their three-dimensional aspect, including the anatomical variation found in these regions.

101738.2 The Art Game: Fraud, Forgery, Theft and Perfidy

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

The content of this elective will be taught on campus, utilizing field trips, major collections and occasional visiting lecturers. The focus of the content is both the history of art fraud, theft and forgery and the implications of current art crime. This unit reflects the interest in and ramifications of the growth in art crime both domestically (particularly in the realm of indigenous art) and internationally. It will provide students with a lively knowledge of this area of the art domain, an area that is contemporary in its relevance.

10371.3 The Art Museum - from the Prince to the Public

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at level 1

....

This unit studies the history and development of museums and issues related to the collection and display of art, and the role of the museum within contemporary culture. It surveys critical writings and discussions currently surrounding museums and their audiences.

100890.2 The Art of Landscape

Credit Points 10 **Level** 2

Equivalent Units

B1326 - Far Horizons and Open Spaces

Special Requirements

Successful completion of 60 credit points at Level 1.

....

Landscape as a subject has been one of the major pre-occupations of artists throughout time. This unit examines the Western artist's perception of the natural environment and humankind's changing relationship to it in both two and three dimensional forms. The various theoretical and pictorial constructs governing the ways in which this has been exposed are explored as well as the many ways landscape has been used metaphorically, politically and philosophically.

101266.2 The Art of Modern Life

Credit Points 10 **Level** 3

Equivalent Units

10274 - Art of Modern Life

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit studies the period 1850-1900 and examines the distinct art of the time in relation to changing notions of modernity. A major strand is analyzing the complexity of realism; questioning the so-called objectivity of vision and discussing realism as a social issue, as a threat to existing values and power structures resulting in the depoliticisation of artists. Another strand is feminine visual culture and women's experience of modernism in the 19th century. The unit also includes French architecture of the period and aims to acquaint students with a broad range of buildings and innovative construction techniques, as well as theoretical and philosphical debates and issues relating to 19th century architecture.

200549.2 The Australian Macroeconomy

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics

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Equivalent Units

200049 - Macroeconomics

....

This unit is an introduction to macroeconomic concepts, analysis and issues in the Australian context. Basic concepts introduced and applied include: national income accounting, economic structure, price indexes and inflation, the balance of payments, and labour market aggregates. These concepts are applied in describing and explaining the recent evolution of the Australian economy in terms of growth, structural change, price stability, and employment. This leads to a discussion of major policy issues such as the role of governments in managing economic fluctuations, and the implications of Australia's foreign liabilities. The course ends with a brief introduction to modelling income determination.

101009.3   The Body in Culture

Credit Points 10 **Level** 3

Equivalent Units

SS224A - Gender, Culture and the Body, 100286 - The Body in Culture

Special Requirements

Successful completion of 60 credit points

....

This unit introduces students to ways of thinking about the body in late modernity. Drawing on several theoretical approaches, including psychoanalysis, phenomenology and feminism, it examines the body as a site of cultural inscription and a symbol of the social order. Key concepts include: the mind/body split; disgust and taboos; the creation of borders, surfaces and depths; and the plasticity of bodies in culture. Tutorial work will vary according to student interest, but may include such things as: carnival, pregnancy, body modification, beauty practices, yoga, fashion, and the post-human, as well as the body politics of gender, race and class.

101591.2   The Economics of Cities and Regions

Credit Points 10 **Level** 2

Equivalent Units

101298 - Urban Development Resource Allocation

....

'Economics of cities and regions' introduces the major political-economic issues facing cities and regions. Class discussions investigate how political-economic forces (such as globalisation, structural change etc) shape the development of cities and regions. Class activities enable students to apply economic principles to urban and regional planning and policy decisions, and teach students to analyse the social and distributional impacts of policy and planning decisions.

101867.1   The Ethical Life

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1.

....

This unit introduces students to time-honoured ethical questions and controversies. The issues to be examined point to questions that students are likely to face at some stage during their lives: Is death always a bad thing? Is abortion immoral? Are we obligated to give to charity? Should we be vegetarian? Should you have sex outside of a committed relationship? Is ethics founded upon religion, reason or community standards? As well as examining specific issues, students will be introduced to the leading secular and theistic ethical theories.

101667.3   The External Relations of the European Union

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of international relations theory and (general) European history

Special Requirements

Successful completion of 60 credit points

....

Since the end of the Cold War, the European Union (EU) has become not only one of the central actors in world affairs, but its novel forms of governance and dynamics of integration have marked its uniqueness in the history of international life. This unit introduces students to the diverse international roles of the EU as well as the nature of its external relations. It also considers the recent assertions that the EU's foreign policy is 'in crisis.' The unit will evaluate, from different perspectives, the institutions involved in the international diplomacy of the EU and its development of foreign policy.

101673.2   The First Globalisation

Credit Points 10 **Level** 1

....

Often called the 'first globalisation', the dramatic changes that led to European expansion from 1450 to 1800 were part of broader historical shifts. In this unit, we also consider the initial dominance of Asian and Islamic worlds, and the factors that led Europeans to explore the oceans. We analyse the outcome of these ventures in the formation of a new world-system where the peoples of Europe, Asia, Africa and the Americas became intimately interconnected. By considering the impact of this economic and cultural exchange on indigenous peoples and settlers alike, we evaluate the costs of the rise of European domination.

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101782.2   The History and Politics of Contemporary Central Asia

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit will introduce students to the contemporary history and politics of Central Asia. With the collapse of the Soviet Union, the region of Central Asia (encompassing Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) has reclaimed its importance as a political, economic, and cultural region. Located in a key geo-strategic position between Russia, China, South Asia, and Iran, and with extensive natural resources (especially oil and gas), the region has attracted significant policy and popular attention. The aim of this unit is to introduce students to key domestic and regional issues affecting Central Asia. The unit will look at the historical legacy of Russian and Soviet regimes, the broad effects of post-Soviet independence, the politics and economics of state-building, and the roles played by international actors and organizations. The unit will also examine how government efforts to build states, nations, and economies historically and recently have influenced societal institutions, such as Islam, community groups, and gender relations.

101404.3   The History of Modern Indonesia

Credit Points 10 **Level** 2

Equivalent Units

B3283 - Modern Indonesia

Special Requirements

Successful completion of 40 credit points at Level 1

....

This unit surveys the history of Indonesia, Australia's nearest and most important Asian neighbour. Commencing with the coming of Islam to Indonesia in the twelfth century it concludes with the overthrow of Soeharto in 1998, but the focus is primarily on the C20th. The unit looks briefly at the Islamic and Hindu-Buddhist kingdoms, the colonial period, the nationalist struggle, the Japanese occupation and in more detail the first fifty years of independence. Indonesia's rich heritage of trade, culture, religions, and ethnicities are all dealt with. The unit also examines historiographical problems for the study of Indonesian history and seeks to identify historical patterns.

101783.2   The International Relations of the Middle East Since 1945

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

This unit offers a historical study of the international relations of the Middle East from 1945 to the present. It examines the relations of Middle Eastern states to global structures of power; the pattern of relations between regional states; the causes of regional wars and international co-operation; the impact of domestic factors on the foreign policy of states; the importance of oil to international politics and the global economy; and the role of ideologies and non-state forces in international relations and between states in the Middle East.

101717.2   The Italian Renaissance Unpacked

Credit Points 10 **Level** 3

....

A multidisciplinary approach to Italian Renaissance visual culture. Topics to be studied include Italian Renaissance art, architecture, as well as their transmission across cultures and nations through travel, heritage, tourism, religion, food and fashion.

101757.1   The Making of the `Aborigines'

Credit Points 10 **Level** 3

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit is available to all Undergraduate students who have open electives. The Making of the 'Aborigines' explores the complex human relations and historical forces that have constructed Australia's indigenous people as 'Aboriginal' and/or 'Torres Strait Islander'. It will involve a critical examination of a range of contemporary social and political issues impacting on and being engaged by Indigenous people. A more comprehensive understanding of the position of Indigenous people in contemporary Australian society will enable students to engage more effectively with Indigenous people.

200098.2   The Markets of Asia

Credit Points 10 **Level** 3

Equivalent Units

61751 - Regional Market Study (Asia)

....

Markets of Asia unit offers a balanced and practical introduction to the dynamic and robust Asian market place. Most of the students undertaking this unit will have exposure to countries other than Australia and would have travelled internationally or have an intention to do so. In the present context of globalisation, business is international business. In Australia today even a small locally based manufacturing company's operations are in some way influenced by the tentacles of Asian businesses. This is a journey that starts with a major Asian powerhouse, Peoples Republic of China and ends at the doorstep of another Asian powerhouse, India.

200099.3   The Markets of Europe

Credit Points 10 **Level** 3

Assumed Knowledge

A knowledge of the basic principles of marketing, consumer behaviour and international marketing

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Prerequisite

200083.2 Marketing Principles AND **200094.2** International Marketing

....

This unit will profile the member states of the European Union in terms of their marketing environment, with emphasis on those various features, similarities, differences and interactions deemed to be of commercial and marketing significance. A major focus of the course will be the impact of European integration and the relevance of the European Union. The European Union will be discussed in its global context, particularly its relationship with Central and Eastern Europe and the Asia-Pacific. The course therefore gives students the opportunity to undertake macro-environmental analysis and examine the effects of environmental influences on marketing, while also learning about other cultures.

101795.2   The Musical

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1.

....

The Musical will involve the examination of the history and development of the stage musical in its social and cultural context. The unit will also explore the structure of the musical as a 'text' and performance genre, looking closely at narrative structure, the structure of songs and the construction of character types and interaction. 'The Musical' will also involve students in the critical analysis of the representation of gender and race in the stage musical.

100893.4   The Novel

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

This unit explores the status and success of the novel as the dominant modern literary form. It examines aspects of the history and development of the novel from the seventeenth century up to the present, along with a range of novelistic texts from one or a number of literary traditions: from classic British and/or American texts to contemporary postcolonial fiction; from the search for the mythical "great Australian novel" to famous and not-so-famous works in languages other than English.

101405.2   The Politics of Contemporary Indonesia

Credit Points 10 **Level** 3

Equivalent Units

100263 - Indonesia: Revolution to Reform, 100881 - Politics of Contemporary Indonesia.

....

This unit investigates the far-reaching political and social changes underway in Indonesia, Australia's closest and

most important Asian neighbour. It studies in depth the turbulent period since the 1998 overthrow of Soeharto, paying particular attention to the dramatic struggle for political reform against efforts to preserve much of the status quo. The unit examines the far-reaching constitutional reforms implemented since 2000 and the accompanying new political structure that is emerging. Indonesia's status as an emerging democracy is a particular focus of the unit against the backdrop of challenges such as economic crisis, Islamist terror, separatist pressures, and endemic corruption.

101873.1   The Sound of Language

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1.

....

In 2013, this unit replaced by 102042 – The Sound of Language. The richness of information conveyed through spoken language owes its form to the combination and recombination of a small number of sounds. In this unit, students will learn the sounds of the world's languages (phonetics) and the ways in which they are combined to build words (phonology). Examples will draw from English, Australian Aboriginal languages, and a diverse range of languages spoken around the world.

101880.1   The Space of Literature

Credit Points 10 **Level** 3

Assumed Knowledge

An idea of the genre of the English novel and a history of imperialismn.

Special Requirements

Successful completion of 60 credit points

....

This unit considers philosophies of writing by 'drilling down' through the work of one philosopher or through a survey of philosophers. Philosophies of writing are found in the thinking of the Sophists, Classical Greek philosophy, Continental philosophy, as well as in the work of philosophers of new media. The focus upon philosophies of writing is to develop student's understanding of the pragmatic and performative nature of writing and with that the question of ethics in relation to creative writing. These are important concepts to advanced literary theory inquiry and will be tackled in this unit in depth.

101455.3   The Structure of English

Credit Points 10 **Level** 2

Equivalent Units

A2912 - The Structure of English

Special Requirements

Successful completion of 40 credit points at level 1

....

In 2013, this unit replaced by 101948 - The Structure of Language. This unit aims to give students skills to analyse and understand the structure of the English language, in

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both spoken and written form from the level of the smallest structural unit to the level of the sentence using techniques and terminology drawn from various schools of linguistics. Students will analyse the English sound system and the English word building system, English vocabulary and the relationships between words, and the grammar and syntax of English

200077.2   The Superannuation Industry

Credit Points 10 **Level** 3

Assumed Knowledge

200049 - Macroeconomics, 200076 - Introductory Economics, 200488 - Corporate Financial Management

....

This unit provides students with an understanding of the economics of retirement and retirement income provision, with particular emphasis on the Australian superannuation industry. On completion of this unit, students should have a comprehensive understanding of superannuation in Australia, as well as an appreciation of the economic issues associated with alternative models of retirement income provision.

101294.3   The Western Philosophical Tradition

Credit Points 10 **Level** 2

Equivalent Units

Unit 63286 - The Western Philosophical Tradition

Special Requirements

Successful completion of 40 credit points at level 1

....

In 2013, this unit replaced by 101912 - Western Political Philosophy. The major social and political philosophy of the West, from the 5th century BC Greece till the 18th century will be examined. The development of ideas of citizenship, subjectivity, freedom, equality and the democratic state will be explored. The influence of Christianity will also be a major theme. Authors will include: Plato, Aristotle, Augustine, Aquinas, More, Hobbes, Locke, Vico, Rousseau.

200705.2   The World of Sport Management

Credit Points 10 **Level** 1

Equivalent Units

400319 - Sport Management 1, 200564 - Introduction to Sport Management

....

The World of Sport Management offers a contemporary view of sport organisations which are uniquely situated within a broader social, cultural and political environment and requires a different managerial approach. Students will be exposed to key areas within the sport management field including developing goals, decision making, strategic planning, leadership styles, and human resource management.

100969.2   Theories of Conflict and Violence

Credit Points 10 **Level** 3

Equivalent Units

100288 - Theories of Violence and Conflict

Special Requirements

Successful completion of 60 credit points.

....

Why do humans kill? What is the nature of war? This course is a selection of different established theories offering explanations of human violence and social conflict. Both theories of individual violence and aggression, and collective conflict are studied to give students a perspective on the forces behind these phenomena. Theories from politics, philosophy, psychoanalysis, sociobiology, sociology, and cultural studies are introduced to exemplify the classic positions and lines of reasoning. These are used to question and explain current forms of violence and conflict, and to give students better understanding of the issues behind attempts to forestall, manage or end conflict.

400254.2   Therapeutic Recreation Professional Project

Credit Points 10 **Level** 3

Prerequisite

400863.1 Foundations of Research and Evidence-Based Practice OR **400252.1** Workplace Learning 2 (Community Placement)

....

The aim of this unit is for students to apply their knowledge of professional theory, practice, research and evaluation skills to the investigation of a therapeutic recreation professional issue. Emphasis in the unit is on the development of a research/evaluation proposal through literature review and research design outline of a program with a proposed method of evaluation suitable for use in a community setting.

300759.1   Thermal and Fluid Engineering

Credit Points 10 **Level** 3

Prerequisite

300762.1 Fluid Mechanics AND **300760.1** Thermodynamics and Heat Transfer

....

The unit provides an understanding of thermo-fluid principles and their engineering applications involving thermal processes and energy conversion. Laminar, , turbulent and compressible fluid flows are discussed. Fluid-structure interactions, buoyancy driven flows and other special thermal and fluid engineering topic are also covered. Basic computational techniques to solve thermodynamics and fluid flow problems are introduced. The theories learned in classes will be reinforced in laboratory sessions and through assignments and tutorials.

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300760.1   Thermodynamics and Heat Transfer

Credit Points 10 **Level** 3

Prerequisite

300464.1 Physics and Materials AND **200238.1** Mathematics for Engineers 2

....

This unit introduces students to the fundamentals of thermodynamics and heat transfer. The unit covers the properties of thermodynamic systems, laws of thermodynamics, energy, work and heat, entropy, reversible and irreversible processes, power and refrigeration cycles, heat conduction, natural and forced convection, radiation heat transfer, heat exchanger.

300739.2   Timber Structures (UG)

Credit Points 10 **Level** 4

Prerequisite

300733.2 Introduction to Structural Engineering

Corequisite

300732.2 Structural Analysis

Equivalent Units

85015 - Timber Structures (UG)

....

Students learn about the engineering properties of timber and assess it as a construction material. Design methods based on structural mechanics are covered including the design of members and connections.

200038.3   Time Series and Forecasting

Credit Points 10 **Level** 3

Prerequisite

200033.4 Applied Statistics

....

Time Series and Forecasting presents the basic techniques of time series analysis with emphasis on model identification, parameter estimation and diagnostic checking. The use of time series models for the process of forecasting future behaviour is discussed. In addition, alternative forecasting approaches, in particular econometric methods, are introduced and evaluated.

300893.1   Topics in Medical Science

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in course 3673 - Bachelor of Medical Science, 3674 - Bachelor of Medical Science (Nanotechnology) or 3682 - Bachelor of Medical Science (Advanced) in order to enroll in this unit. Succesful completion of 80 credit points at Level 2 or 3.

....

This unit builds on the content and concepts developed across multiple discipline areas during the Bachelor of Medical Science, integrating them together into the context of human health and disease. Students will work in groups to undertake an in depth exploration of an issue related to Medical Science. Topics addressed each year will vary, and will include issues currently at the forefront of Medical Science, issues for which there is currently significant scientific debate, and issues in which students have expressed a particular personal interest.

300819.1   Topics in Physiology

Credit Points 10 **Level** 3

Prerequisite

300818.1 Introduction to Physiology OR **300838.1** Comparative Physiology OR **300851.1** Advanced Physiology

Equivalent Units

300756 - Topics in Physiology

....

This unit builds on the physiological concepts of "Introduction to Physiology". It provides a greater depth and breadth of understanding of aspects of whole-body physiology which are explored in group work. Topics may include, but are not limited to, locomotion, physiology of reproductive technology, physiology of interaction between humans, physiology under extreme conditions (including pathophysiology), physiology of learning and memory, sleep physiology, animal physiology, nutritional physiology and others.

300877.1   Toxicology

Credit Points 10 **Level** 2

Equivalent Units

300627 - Toxicology

....

Toxicology is the study of toxicants or poisonous substances: their nature, effects on the human body, and on human, animal and plant populations. Poisonous substances have been used by humans from antiquity for both beneficial and malevolent purposes and today a vast array of toxic industrial chemicals are produced. Both accidental (workplace and environmental) and intentional (forensic) exposure are covered, in terms of group properties, chronic and acute, toxicity, exposure potential, health impact and intervention are presented through forensic case studies. Students carry out a toxicology audit of an operation or premises of their choice.

400346.2   Traditional Chinese Medicine 1

Credit Points 10 **Level** 1

....

This unit provides a comprehensive introduction to traditional Chinese medicine (TCM). Students are introduced to basic TCM theory, and the physiological principles of the diagnostic system that forms the basis of TCM practice. The history and philosophy of Chinese medicine is introduced and discussed in the light of contemporary clinical practice.

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400348.2   Traditional Chinese Medicine 2

Credit Points 10 **Level** 1

Assumed Knowledge

Prior knowledge equivalent to Traditional Chinese Medicine 1.

....

This unit provides learning experiences that enable students to expand upon their understanding of TCM philosophy and principles, with particular reference to developing diagnostic skills in TCM. Students acquire basic skills in case history taking, interpretation of relevant signs and symptoms, arriving at a TCM diagnosis, and devising suitable treatment strategies.

400352.2   Traditional Chinese Medicine 3

Credit Points 10 **Level** 2

....

This unit enables students to develop a sound understanding of causes of disease in TCM with a particular focus on disease pattern differentiation. This is complemented by the reinforcement of skills in case history taking and TCM diagnostics.

400354.2   Traditional Chinese Medicine Practice 1

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge equivalent to Traditional Chinese Medicine 3, and Acupuncture 2, and Chinese Herbal Medicine 2.

Special Requirements

Students must have completed a Work Cover approved First Aid Certificate.

....

This unit is focused on introductory clinical practice in a clinical setting. It enables the students to link theory with practice. It expands the students' knowledge base of acupuncture and Chinese herbal medicine, as well as Chinese language in practice of Chinese medicine. Students assist with clinical practice and perform basic acupuncture related techniques. Students will also learn basic skills in handling herbal preparation, processing and dispensing.

400356.2   Traditional Chinese Medicine Practice 2

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge and experience equivalent to Traditional Chinese Medicine Practice 1.

Special Requirements

To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form

after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 OR a Working with Children Check Student Declaration after 1 June 2010. Students must have completed a Work Cover approved First Aid Certificate.

....

This unit is focused on clinical practice in a clinical setting. It enables the student to link theory with practice. It expands the students knowledge base of acupuncture and Chinese herbal medicine, as well as TCM theory and diagnostics. Students facilitate clinical practice and perform a wide range of acupuncture and related techniques, in addition to basic herbal prescribing.

400920.1   Traditional Chinese Medicine Practice 3 (PG)

Credit Points 10 **Level** 7

Assumed Knowledge

Foundations of Research and Evidence-Based Practice, TCM Practice 2

Incompatible Units

400359 - Traditional Chinese Medicine Practice (Research Project)

....

This unit represents a continuation of the clinical practicum and development of clinical skills. Students will also be able to apply their knowledge of professional theory, practice, research and evaluation skills to the investigation of TCM problem. Students will be expected to demonstrate competence in handling patients in a clinical context, synthesise knowledge from their studies of specialities in TCM and critically examine the practical aspects of acupuncture and Chinese herbal medicine research.

400924.1   Traditional Chinese Medicine Practice 4 (PG)

Credit Points 10 **Level** 7

Assumed Knowledge

Traditional Chinese Medicine 3 (PG)

Incompatible Units

400362 - Traditional Chinese Medicine Practice 4

....

This unit represents a continuation of the clinical practicum and development of clinical skills. Students will be able to integrate their theoretical knowledge, practice skills and research base to the investigation, diagnosis and supervised treatment of patients in a clinical context. Students will be able to synthesise knowledge and competency in the practice of clinical areas of focus taught in Chinese Medicine I and II, and Specialties in TCM I and II. Students will be expected to demonstrate professional competence in handling patients in a clinical context, diagnosing more complex cases and devising and managing the integrated care of patients using TCM.

Units

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400764.3 Transition to Graduate Practice

Credit Points 10 **Level** 3

Corequisite

400762.1 Mental Health Nursing 2 AND **400761.1** Family Health Care: High Acuity Nursing

Equivalent Units

400064 - Nursing Context 7

Special Requirements

Students enrolled in course 4642 must have passed the following five units - 400745, 400749, 400753, 400757, 400759. Students enrolled in course 4643 must have passed the following three units - 400753, 400757, 400759. Students enrolled in course 4648 must have passed the following five units - 400745, 400749, 400753, 400759, 400825. Special Requirements are those stipulated by the NSW Health and UWS. At present these include - Prohibited Persons Employment Declaration (PPED) or Working with Children Check Student Declaration, Criminal Record Check (CRC), National Criminal History Record Check (NPC), Adult Vaccination Record, First Aid Certificate

....

This unit explores the transition to graduate practice from undergraduate nursing student to graduate professional registered nurse focusing on the role, responsibilities, accountabilities and options for the registered nurse.

101302.2 Translation Technologies

Credit Points 10 **Level** 2

Equivalent Units

100199 - Translation Skills

....

This unit aims to equip students with the theoretical and practical knowledge needed to effectively apply information and communication technologies to translation and other language related tasks. It focuses on translation memory and terminology management systems, and on the workflow involved in the handling of multilingual content. Emphasis is also put on uses of the Internet as a resource tool, and to the principles of controlled language for text to be processed by machine translation (MT). Tutorials will be conducted in a computer lab where students will familiarize themselves with leading computer-assisted translation (CAT) software applications.

101848.1 Transnationalism and Migration

Credit Points 10 **Level** 3

Equivalent Units

101687 - Transnational Migration

Special Requirements

Successful completion of 60 credit points

....

This unit discusses theories of migration, transnationalism, globalisation, diaspora and identity. We examine the experience of migration and settlement, and the transnational cultural forms that emerge in this process. We investigate the role of new means of communication such as the internet in connecting migrants and the homeland. We also analyse how religion supports migrants in the process of homebuilding. Finally, this unit also discusses the descendants of migrant who have 'returned' to the homeland after living abroad for generations. Do they become minorities in their ancestral homeland despite their presumed ethnic similarities with the host population?

101831.2 Transport and the Making of the Modern World

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

The impact of the industrial revolution was felt earliest and most profoundly in many parts of the world through changes in transport and communications. During the mid 19th century the telegraph, postal services, the steamship and the railway diminished distance in ways no innovations ever had before. This unit will examine their social, economic and political impact as well as later innovations such as civil aviation and road motor transport.

101645.2 Transport, Access and Equity

Credit Points 10 **Level** 3

Equivalent Units

400342 - Transport, Access and Equity

Special Requirements

Successful completion of 80 credit points

....

This unit examines the equity and efficiency issues in the provision of transport in cities and regions from a critical social science perspective. Issues of transport disadvantage and policy and planning responses to improve access to urban services are examined. The social and environmental impact of transport systems are considered in the context of urban management.

101798.2 Understanding Freedom

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

"Understanding Freedom" consists of a close analysis of major theories of freedom from ancient times to the contemporary world. It explores the relation between freedom and imprisonment, freedom and politics, freedom and the everyday, as well as the way that freedom informs the production of culture.

101462.2 Understanding Islam and Muslim Societies

Credit Points 10 **Level** 1

....

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University of Western Sydney

This is an introductory subject/unit that exposes students to the basic and fundamental beliefs and practices that constitute the fabric of the Islamic world. Students will be able to explore relationships and differences between the key teachings of Islam and the customary practices of Muslims. In doing so, students will study both unity and diversity in various regions of the Muslim world. Historical and anthropological approaches to studying a number of key institutions and discourses in Muslim societies will also be introduced.

300812.1 Understanding Landscape

Credit Points 10 **Level** 1

Equivalent Units

300642 - Understanding Landscape, HT103A - Understanding Landscape

....

This unit explores the historical and cultural perceptions and perspectives of the term 'landscape' and the sustainability and management of landscapes. Students become familiar with the terminology and concepts surrounding the natural landscape experientially through a series of field trips and develop an awareness and appreciation of both of the conceptual and actual landscape issues. Skills in mapping and spatial awareness skills and technologies will be developed through field trips and workshop sessions including GIS. Such skills will assist in developing a capacity to comprehensively describe and analyse the landscape.

101731.3 Understanding Power

Credit Points 10 **Level** 3

Equivalent Units

100970 - Understanding Power

Special Requirements

Successful completion of 60 credit points.

....

This unit aims to explore contemporary understandings of power and its various manifestations in the modern world. Numerous themes are considered including informal and formal mechanisms of power, the uses and abuses of power, resistance, plus various examples of "powered" sites. The unit examines the relation between power, violence and the state. The unit concentrates on a few, influential theorists of power. Particular attention is paid to how power has an impact on the production of culture.

101866.1 United States Government and Politics

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

This unit provides an overview of the major institutions and branches of the United States government. It draws attention to the interaction between the ideas that have been articulated by American social and political

movements, and the institutions and goals of the American government as they have unfolded over time.

300860.1 Urban Environment

Credit Points 10 **Level** 3

Equivalent Units

300789 - Urban Environment

Incompatible Units

LW212A - Environmental Health Law; 300471 - Urban Development Systems; 300704 - Healthy Built Environments

Special Requirements

Successful completion of 120 credit points

....

This unit explores the relationships between community, the natural environment and government within an urban context through considering how housing and urban development can influence population health. Concepts explored include "healthy housing", "active living" "safety by design" and "energy efficiency". Through a combination of case studies and practical field experience, students will develop the skills and knowledge appropriate to assessing the "healthiness" and sustainability of urban environments. The unit examines methods of construction and building regulation aimed at the preservation of health and amenity.

100291.5 Urban Life/Urban Culture

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points.

....

Big cities can be frantic, difficult, polluted and often dangerous places in which to live. Yet cities also contain possibilities for social and cultural stimulation not available elsewhere. This unit traces the origins and development of modern cities in all of their complexity. It looks at how industrial cities emerged in Europe and Australia, and at the threat that uncontrolled urban growth posed to social order. We examine the conditions of urban life that promote alienation and anonymity, and how people overcome social fragmentation. There is discussion of modern cities - from those that sprawl, like Sydney, to the relatively compact and dense centres of Europe, the north-eastern United States and Asia. We look at the gendered nature of public space, and how class and ethnic tensions are played out in cities. Students read a range of texts on urban culture and society. These include classic works by writers like Friedrich Engels, George Simmel and Walter Benjamin, to the contemporary work of David Harvey, Richard Sennet and Mike Davis.

300861.1 Vertebrate Biodiversity

Credit Points 10 **Level** 3

Prerequisite

300802.1 Biodiversity

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Equivalent Units

300217 - Animal Form & Function; 300470 - Vertebrate Biodiversity

Special Requirements

Successful completion of 80 credit points

....

Vertebrates are the most recognisable and likeable of all the animals. The unit will provide students with a theoretical and practical working knowledge of vertebrate species and their biodiversity, and the adaptation of their many biological functions. Identification of major groups of animals from several different environments will also be incorporated into the learning outcomes. Students will learn to conduct field surveys and assess the techniques used to survey vertebrates, as well as learn basic handling and husbandry techniques required for different vertebrate species.

300862.1   Video Games Development

Credit Points 10 **Level** 3

Assumed Knowledge

Understanding of programming concepts and details of programming. Good programming skills in C#, Java or C++. Knowledge of systems analysis methods including object orientated analysis and design. Basic knowledge of vector algebra, matrixes and fundamentals of mathematics.

Prerequisite

300580.2 Programming Fundamentals AND **300491.2** Games Technology

Equivalent Units

300492 - Games Theory and Design

....

This unit provides students with an in-depth understanding of the development and structure of game engines. It provides the student with a unifying overview of the many modules that are incorporated in a game engine as well as a detailed examination of game-play and engine programming.

101898.1   Violence in Everyday Life

Credit Points 10 **Level** 3

Assumed Knowledge

Must have completed 60 credit points.

Special Requirements

Successful completion of 60 credit points

....

The unit provides an overview of the 'dark side' of human society and culture - violence. It examines how violence shapes, threatens and informs aspects of everyday life at home, work, school, the sports field and the street. Through a series of structured learning activities students engage with a range of documents and images to explore practices and experiences of violence. The role of institutions like the state, churches and sporting bodies in regulating violence will be considered. Students will gain skills in understanding the cultural milieu of marginal groups, languages of power

and the emotions of excitement, fear and terror produced by acts of violence, skills useful for effective functioning in the workplace and family. The unit provides skills for honours level research in social and cultural analysis, law and legal studies, criminology, and history and political thought.

101871.1   War

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at Level 1.

....

The soldier might almost challenge the prostitute for the title of "world's oldest profession." This course will examine how statespeople have understood the purposes of war throughout history, and in a global perspective. It will evaluate the practices and norms associated with war in different eras as well as the experiences of soldiers/sailors/airmen in different wars. It will assess the role of professional armies and warrior classes throughout history, as well as the role of navies, air forces, nuclear weapons, terrorism, guerrilla warfare, just war theory, and the doctrine of pre-emption over the last century. This unit utilizes history and political science methodologies to address these vital questions.

101375.3   War and Peace

Credit Points 10 **Level** 3

Incompatible Units

63088 - War and Peace

Special Requirements

Successful completion of 60 credit points

....

This unit examines problems and issues in international politics. In particular the unit critically assesses the major theoretical paradigms associated with attempts to explain international behaviour of key individuals, nations and the international system. Major issues and key problems in world affairs since the end of World War Two (such as justice and equality, human rights and terrorism) are examined.

100293.3   War and Society: 20th Century Australia

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at level 1

....

In 2013, this unit replaced by 101993 - War and Society in the Twentieth Century. What has been the effect of war on Australian society? How has war influenced political, social and cultural structures and practices, and how has this changed over time? Beginning with the Boer War and ending with the present 'War on Terror', we will examine the context and consequences of Australia's involvement in the major conflicts of the twentieth century. We will also consider three key themes of the history of modern warfare: the mobilisation of the economy and the role of technology;

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the role of gender in structuring individual and communal experiences of war; and the politics of commemorating conflicts and mourning the war dead. Finally, we will explore some of the historiographical debates over the meaning of war in Australian society and the problems and challenges of thinking about war historically.

100294.3   Warlords, Artists and Emperors: Power and Authority in Premodern Japan

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

This unit will look at the historical heritage of Japan that is central to contemporary Japanese identity and culture. The historical heritage considered includes Zen, samurai culture, Japanese artistic achievement, the Emperor, who still pays respect to 'the Divine ancestors' on ceremonial occasions, "great" Buddhist temples, Shinto, Shogun, the court, religion, military lords and warlords. The unit explores Japan's historical heritage in relation to industries and institutions, such as the tourist industry and investigates how power, authority, and art are linked?

MG309A.2   Water and Waste Management

Credit Points 10 **Level** 3

Assumed Knowledge

This unit will build upon knowledge and skills gained in Year 1 and Year 2 Microbiology and Chemistry units

....

Water is arguably the most important natural resource in the world, since without it life cannot exist and industry cannot operate. Unfortunately, the liquid and solid wastes from anthropogenic activities continually jeopardise water quality and the environment. This unit will develop and integrate physical, chemical and biological process understanding of water pollution and waste management. The biotechnology of nutrient transformation in waste treatment, waste minimisation and value-added opportunities will be emphasised.

300740.1   Water Engineering

Credit Points 10 **Level** 2

Assumed Knowledge

200238: Mathematics for Engineers 2

Prerequisite

200237.1 Mathematics for Engineers 1 AND **300464.1** Physics and Materials

Equivalent Units

85009 - Water Engineering

....

The unit provides a working knowledge on the basic principles of fluid flow and covers the general principles of engineering hydraulics. The theories learned in classes will be reinforced in laboratory sessions

300870.1   Water in the Landscape

Credit Points 10 **Level** 3

Equivalent Units

300779 - Water in the Landscape

Special Requirements

Successful completion of 120 credit points.

....

Many land and water use activities in both urban and rural landscape result in hydrologic changes that have environmental, economic and social consequences. These activities require appropriate management strategies for sustainable water use in catchment. In this unit, the hydrologic cycle will be explored at varying spatial scales in urban and rural contexts. Hydrologic, environmental, economic and social perspectives will be used in the examination of the demand and the use of water.

300814.1   Water Quality Assessment and Management

Credit Points 10 **Level** 1

Equivalent Units

300635 - Water Quality Assessment and Management

....

Water is essential for all life on earth. This unit will equip students with skills in biological, chemical and physical water quality assessment for a sustainable water future. The unit introduces students to healthy natural waterways and contrasting degraded waters impacted by disturbance from human activities. A broad range of pollutants, their sources and the consequences for human health and the ecology of water ways will be investigated. Management strategies will also be examined based on the sound scientific assessment of water quality. Students in this unit will cover water quality legislation, regulation, policy, guidelines and develop competencies in water monitoring, regulation, treatment and management.

300734.1   Water Resources Engineering (UG)

Credit Points 10 **Level** 4

Assumed Knowledge

300479 - Drainage Engineering

Prerequisite

300740.1 Water Engineering

Equivalent Units

85020 - Water Resources Engineering (UG)

....

This unit introduces aspects of engineering that relate to water as a resource. It builds on the knowledge gained in Water Engineering and Drainage Engineering. This unit will enable students (a) to appreciate major water resource issues around the globe, (b) to understand the social, physical and economic issues involved in distribution, supply and use of water to industry, agriculture and private households; and (c) to understand the need for holistic approaches in planning of water resources projects

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101180.3   Web and Time Based Design

Credit Points 10 **Level** 1

Assumed Knowledge

Introductory level understanding of and skills in design principles particularly basic layout, colour and typographic knowledge. Digital basics including working in a networked environment on a Macintosh computer. Ability to manage, transport and store digital information.

Equivalent Units

100605 - Web and Time Based Production Technology

....

Students will develop fundamental computer software skills and design understandings appropriate to using the major web and time -based design software packages. They will develop a working understanding of production literacies for online design and time-based design. Students will engage in practical studies of web authoring using Adobe Dreamweaver, image optimisation using Adobe Photoshop and/or Adobe Illustrator and interactive and time-based design using Adobe Flash. Emphasis will be placed on understanding the roles, functions and features of each software package in the design production context of online delivery, integrated use, and a working understanding of the responsibilities inherent in the digital design and production process.

300583.2   Web Systems Development

Credit Points 10 **Level** 3

Assumed Knowledge

Principles of systems analysis and design including the specification of end-user requirements and a good knowledge of the SDLC and its application to solving computer system related problems (equivalent to successful completion of 300585 SAD or similar). Principles of data analysis, relational database design and development, practical skills in SQL (equivalent to successful completion of 300104 DDD or similar).

Prerequisite

300582.2 Technologies for Web Applications

Equivalent Units

300085 - Advanced Web Site Development

....

In this unit students further develop their theoretical and practical skills in designing and developing web based information systems using systems analysis, programming, database, human computer interaction and web technologies skills that they have learnt in previous units. Current web development technologies and/or frameworks will be utilised to build a complex web information system in a collaborative web development team. Techniques of porting web systems to mobile platforms will also be explored.

300902.1   Web Systems Development (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Principles of systems analysis and design including the specification of end-user requirements and a good knowledge of the SDLC and its application to solving computer system related problems (equivalent to successful completion of 300585 SAD or similar). Principles of data analysis, relational database design and development, practical skills in SQL (equivalent to successful completion of 300104 DDD or similar).

Prerequisite

300582.2 Technologies for Web Applications

Incompatible Units

300583 - Web Systems Development

Special Requirements

Students must be enrolled in course 3684 - Bachelor of Information and Communications Technology (Advanced) or 3685 - Bachelor of Computing (Information Systems) Advanced

....

Students will further develop their theoretical and practical skills in designing and developing web based information systems using systems analysis, programming, database, human computer interaction and web technologies skills that they have learnt in previous units. Current web development technologies and/or frameworks will be utilised to build a complex web information system in a collaborative web development team. Techniques of porting web systems to mobile platforms will also be explored. Students in this advanced unit will also investigate and apply advanced techniques such as creating custom controls and components, creating ASP. NET MVC applications, and working with the HTTP runtime within the .NET framework.

101010.3   What is the Human?

Credit Points 10 **Level** 3

Equivalent Units

SS216A - What is the Human?

Special Requirements

Successful completion of 60 credit points

....

This unit examines theories of human nature from a variety of historical and disciplinary perspectives. It engages with, and encourages the student to evaluate, conceptions of the human - some of which have had wide currency in the broader culture and some which have not. The unit also engages the idea of whether a unified conception of human nature is tenable at all.

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100971.2 Which New World Order?

Credit Points 10 **Level** 3

Equivalent Units

63089 - Which New World Order? Issues in Contemporary International Politics

Special Requirements

Successful completion of 60 credit points at Level 1.

....

This unit will examine a series of topical theoretical issues such as claims concerning the end of sovereignty, the emergence of a borderless world, the triumph of liberalism following the end of the Cold War and the so-called 'War on Terrorism' since the September 11, 2001 attacks on the United States. Finally it will examine the rise in prominence of so-called 'low politics' issues such as human rights, gender and the environment.

101762.1 Who do you think you are? (Day Mode)

Credit Points 10 **Level** 1

Corequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit is available to all Undergraduate students who have open electives. Who do you think you are? will provide students practice in the analysis of historical documents, family narratives, autobiography, political and social issues around a project that will give a context for their own personal story. Students will develop skills in oral history work, locating and retrieving archival documents and compiling their own 'family tree'. Students will also develop skills in practising speaking and writing genre appropriate to their own family history. An introduction to the theory of identity and identification will enable students to appreciate the complexities of becoming.

300813.1 Wildlife Studies

Credit Points 10 **Level** 1

Equivalent Units

300425 - Introduction to Wildlife Studies

Special Requirements

Students are required to wear closed in shoes, long pants and long-sleeved shirts in this unit.

....

This unit involves the study of basic biology, ecology, conservation and management of selected terrestrial wildlife (amphibian, reptiles, birds and mammals) grouped according to their taxonomic affiliations. It examines the various strategies used in the management of both wild roaming and captive reared animals including those produced for human use. Students will learn the different management systems and research methods used in wildlife research. The use of wildlife as a sustainable resource will also be analysed within the context of ecological sustainable development and animal ethics.

300065.4 Wireless Communications

Credit Points 10 **Level** 4

Assumed Knowledge

Students should have a good understanding of signals and systems, probability and random processes and fundamentals of communication systems.

Prerequisite

200242.3 Mathematics for Engineers 3 AND **300007.2** Communication Systems OR **300010.3** Data Networks

Equivalent Units

300017 - Digital Communication Engineering

....

The unit covers the analysis, design and operation of modern wireless communication systems. The primary focus is on the physical layer and hardware, emphasizing the fundamentals of coding and modulation, spread spectrum and multiple access techniques. Current wireless architectures and mobile communication systems are also covered.

101471.2 Women in Arabic and Islamic Literature

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points.

....

Beginning with Nisa — the chapter of the holy Quran dedicated to women— and a collection of pertinent aḥadīṯ, this unit focuses on the impact that Islam's philosophy has had on various Muslim and Arab cultures by examining literature from throughout the Arabo-Islamic civilization. Students are introduced to a variety of interpretations of the role of women in Islam and how these interpretations are reflected in literary and non-literary texts. Students learn to detect the tremendous influence that Islam has had on Arabic texts and cultures, even those which at first appear to be of a secular nature.

101879.1 Women with Muslim Identity

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points at level 1.

....

An exploration of perceptions of Muslim women, and of the meaning and significance of Muslim identity for women today. We will analyze ways in which Muslim women are perceived and perceive themselves in the context of the Islamic revival, focussing on differences and relationships among various 'outsider' and 'insider' perceptions. A central focus will be the resurgence of the veil in the context of the Islamic revival; we will explore the meanings of veiling in the context of discussions and debates on the role of women, equality and freedom, cultural diversity, religious values and secularity.

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400904.1 Work Experience in Sport and Exercise Science

Credit Points 10 **Level** 3

Prerequisite

400885.1 Sport and Exercise Physiology AND **400887.1** Clinical Exercise Physiology 1 AND **400902.1** Exercise in Musculo-Skeletal Rehabilitation AND **400903.1** Professional Development and Work Experience

Equivalent Units

400331 - Sport and Exercise Science in Practice

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science). To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) provide evidence of compliance with the occupational screening and immunisation policy of NSW Health 4) possess a current WorkCover Authority approved First Aid Certificate.

....

The unit Work Experience in Sport and Exercise Science focuses on observation and participation in Sport and Exercise Science activities in the industry setting. Students will develop professionally in Sport and Exercise Science by applying their knowledge and skills developed during previous Sport and Exercise Science course work and practical experiences through supervised practice placements. During these placements students are expected to develop and demonstrate an ability to design, implement and evaluate testing and training programs for a variety of clients in sports, community and clinical settings.

200616.3 Workplace Behaviour

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Equivalent Units

61441 - Workplace Behaviour

....

The primary concern of this unit is to equip students with an understanding of how to apply sociology and work psychology to effectively manage human resources. The unit analyses both the individual (psychological) and social (sociological) factors that influence workplace behaviour and relations in the workplace. The structure of the unit is thematic, drawing on the major theoretical frameworks of psychology and sociology, and applying them to the practice of human resource management and to contemporary issues within the workplace.

400246.3 Workplace Learning 1 (Therapeutic Recreation)

Credit Points 10 **Level** 2

Prerequisite

400783.2 Professional Pathways in Health Science

Special Requirements

Students must be enrolled in the Bachelor of Health Science course. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate.

....

This unit provides students with the opportunity to apply theoretical and practical knowledge and skills gained in the course to develop their practice and professional behaviours in a therapeutic recreation workplace setting.

400252.2 Workplace Learning 2 (Community Placement)

Credit Points 10 **Level** 3

Assumed Knowledge

Workplace Learning 1

Prerequisite

400246.3 Workplace Learning 1 (Therapeutic Recreation)

Special Requirements

This unit is only available to Therapeutic Recreation students.

....

This unit provides students with the opportunity to experience the practice of therapeutic recreation/ diversional therapy through supervised needs assessment, problem identification, program planning, implementation and evaluation in a range of distinct therapeutic service setting. Identify and provide services for people from special populations such as culturally and linguistically diverse (CALD), refugees and trauma victims, indigenous people, older people, people with learning problems and high risk populations. Students are to explore the advocacy and support needs of the clients receiving services. Students will explore issues related to quality supervision and their own learning styles as they develop learning contracts to be used in the workplace learning setting.

101668.2 World Cinema

Credit Points 10 **Level** 3

....

This unit surveys contemporary world cinema in a range of languages in order to address a range of linguistic and cultural issues, including the role of subtitling and dubbing in cross-cultural communication. The unit allows students majoring in a Language other than English to enrol in a language specific tutorial (Arabic, Chinese, Italian, Japanese or Spanish) and other students to enrol in a tutorial conducted in English.

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101669.2 World Literature in Translation

Credit Points 10 **Level** 3

....

This unit examines representative works of world literature written in languages other than English in order to address a range of literary and cultural issues, including the role of translation in cross-cultural communication. The unit allows students majoring in Italian or Japanese to enrol in a language specific tutorial, and other students to enrol in a tutorial conducted in English.

101737.2 World Politics: An Introduction

Credit Points 10 **Level** 1

....

Theoretical aspects of international relations and how they apply to the 'real world' of world politics involves understanding of key actors in world politics, from states to international organisations and institutions, to non-state actors, how the international system that regulates international order operates today (and how that system has evolved over recent centuries), and they can produce order and disorder.

101670.3 Writing and Society

Credit Points 10 **Level** 3

Special Requirements
Successful completion of 60 credit points

....

This unit explores the social dimensions of literature, both generally, by considering the role played by tradition, authorship, genre and style in the literary exploration of values, and in specific terms, through a close examination of works which have had an important social impact in their time, including those in translation, from a range of contemporary literatures. The lecturers are members of the Writing and Society Research Group, many of whom are practising authors.

100896.3 Writing Fiction

Credit Points 10 **Level** 2

Equivalent Units
CT207A - Creative Writing, B2652 - Writing Fiction

Special Requirements
Successful completion of 40 credit points at level 1

....

In this unit students explore, critically examine and write in a range of fictional forms. They critique a wide variety of published fiction in order to enhance their understanding of approaches, possibilities and techniques, thereby developing a greater capacity to write and critically evaluate their own work. Students create their own fiction in the form of written exercises and assignments, which they will have the opportunity to workshop in a supportive critical environment.

100895.4 Writing For Performance

Credit Points 10 **Level** 3

Equivalent Units
B3654 - Writing for Performance, 100297 - Writing for Screen and Stage

Special Requirements
Successful completion of 60 credit points.

....

In this unit students will consider the history and theory of a selection of performance traditions including Greek tragedy, Elizabethan and Jacobean and modern drama and post-modern performance and write scripts for one or a number of media, including screen (film and television), dramatic theatre, performance poetry and song lyrics and contemporary performance.

101011.3 Writing Poetry

Credit Points 10 **Level** 3

Equivalent Units
B2653 - Writing Poetry

Special Requirements
Successful completion of 60 credit points

....

In this unit students examine the various forms, ways and means of writing poetry and, where appropriate, song lyrics. Students are taught to analyse and write poetry from a writer's rather than a reader's point of view, and how there is graft in the craft of poetry, even if techniques and methods vary. The workshop format will give a greater understanding and motivation in the development of the field of writing poetry.

100582.2 Writing Portfolio

Credit Points 10 **Level** 3

....

This is a production unit enabling students to develop a professional portfolio of published writing in a variety of genres. Students are given the opportunity to work in both electronic and print modes, and in collaboration with visual designers.

10158.2 Writings on Art

Credit Points 10 **Level** 2

Special Requirements
Successful completion of 60 credit points at Level 1.

....

This unit examines selected historical, philosophical and critical writings that have influenced the writing of art history. The unit provides a relevant background to aesthetic and cultural theory, based on visual arts practices, texts, and models. While covering many of the issues and debates raised in literary theory, its emphasis is on the visual arts.

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101830.2   WWII in Asia and the Pacific

Credit Points 10 **Level** 3

Special Requirements
Successful completion of 60 credit points.

....

This unit provides inquiry into the origins, course, and aftermath of WWII in Asia and the Pacific. We will ask why Japan and China went to war with each other in the 1930s; we will also seek understanding of why and how that war came to include the United States, Britain, the Soviet Union, the Netherlands, Australia, New Zealand, and practically all of Asia. We will examine the atomic attacks against Hiroshima and Nagasaki: Was the bomb a necessary evil? Or could/should the US have avoided using the bomb? We will also look intensively at post-WWII Asia. How did two wartime allies - the US and the Soviet Union - become bitter enemies within months of the war's end? Why did China descend into civil war? What was the war in Korea all about? Were wars of independence throughout SE Asia unavoidable? How was it that Japan escaped much of this postwar misery?

101662.1   Young People, Their Futures and Education

Credit Points 10 **Level** 3

....

This unit provides an introduction to the youth studies field. It examines emerging ways of theorising the roles ascribed to 'youth' over the past 50 years and their relationships to the changing contexts in which young people are growing up. These changes include the impact of digital technologies, increases in high-school completion rates, mass tertiary education, increases in student employment, and the effects of labour market deregulation. The unit examines how socio-economic inequality and geographies of exclusion contribute to shaping young people's identities and their life chances. Social and educational challenges affecting immigrant and refugee youth are also examined.

100298.2   Youth Cultures and Moral Panics

Credit Points 10 **Level** 2

Special Requirements
Successful completion of 40 credit points at Level 1.

....

Young people have long been the focus of social fears. Public figures regularly express concern about the disorder created by unruly youths, or the effects of change on young people. This is the case in relation to popular music, 'youth gangs', new technologies and other areas. This unit will consider how young people became defined as a problem by politicians, policy, the media and others. Resulting 'moral panics' represent social anxieties around economic, social and technological change, producing calls for 'solutions' which often entail repressive laws or policing. Students will examine a range of case studies from Australia and elsewhere.

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