



# BACHELOR OF MATHEMATICS (3778)

Mathematics plays a crucial role in almost every sector of the economy. From finance to engineering, teaching, medicine and politics – mathematics is essential to model, analyse and solve problems.

The essence of mathematics is the use of abstraction and logic to discover, describe and completely and unambiguously understand systems.

Mathematics is essential for modelling phenomena in many fields, including science, engineering, economics, finance, medicine, and politics. The fact that mathematicians are able to model, analyse and solve practical problems makes them highly sought after by employers. The Bachelor of Mathematics will give you a solid basis in key areas of mathematics. You also have the option of completing majors in Financial Mathematics, Data Science, or Computational Mathematics, or you can use the degree as a pathway to secondary teaching.

**Entry via:** International students apply direct to Western Sydney University. [www.westernsydney.edu.au/international/apply](http://www.westernsydney.edu.au/international/apply)

## MATHEMATICS AT WESTERN

Develop your ability to discover, describe and analyse patterns with the Bachelor of Mathematics. You will learn from world-class academics with a research strength in mathematics, and have opportunities for industry engagement. With your logical mind and analytical skills, you'll enter the job market as a highly sought-after graduate.

For program advice, please email [CDMS@westernsydney.edu.au](mailto:CDMS@westernsydney.edu.au)

## PROGRAM STRUCTURE

### YEAR 1 SESSION 1 AUTUMN

SUBJECT CODE	SUBJECT TITLE
MATH 1006	Discrete Mathematics
MATH 1014	Mathematics 1A
COMP 1005	Programming Fundamentals
MATH 1028	Statistical Decision Making

### SESSION 2 SPRING

MATH 1015	Mathematics 1B
COMP 2023	Mathematical Programming
Two major or elective subjects	

### YEAR 2 SESSION 3 AUTUMN

MATH 2010	Linear Algebra
MATH 2001	Advanced Calculus
MATH 3012	Combinatorics
One major or elective subject	

### SESSION 4 SPRING

MATH 2003	Differential Equations
MATH 3007	Predictive Modelling
COMP 3032	Machine Learning
MATH 3015	Groups and Symmetry
One major or elective subject	

### YEAR 3 SESSION 5 AUTUMN

MATH 3003	Analysis
MATH 3013	Fields and Equations
Two major or elective subjects	

### SESSION 6 SPRING

MATH 3006	Mathematical Modelling
Students enrolled in T079 Data Science must complete:	
COMP 3035	Discovery Project
All students NOT enrolled in T079 must complete	
MATH 3016	Mathematics Project
Two major or elective subjects	

## MAJORS

T118	Computational Mathematics, Testamur Major
T079	Data Science, Testamur Major
T096	Financial Mathematics, Testamur Major
T119	Secondary Teaching, Testamur Major

PROGRAM	CRICOS CODE	WS CODE	INTAKE	LOCATION	DURATION
B Mathematics	103731H	3778	March	Campbelltown	3F
	103731H	3778	March	Parramatta	3F
	103731H	3778	March	Penrith	3F

**Key:** B = Bachelor of; F = Full-time.

CRICOS PROVIDER 00917K

For more information, please call the Course Information Centre on **1300 897 669** or email [study@westernsydney.edu.au](mailto:study@westernsydney.edu.au)