3621 – Bachelor of Engineering
The future presents significant challenges to those responsible for managing the environmental, infrastructure and technological developments. Effective solutions to these challenges will require innovative engineering, applied science and design strategies. At the University of Western Sydney, we prepare students to take on those challenges and succeed.

The UWS Engineering degree is all about the application of knowledge to achieve practical outcomes. It covers all major engineering domains, and you can experience many facets of engineering before deciding your area of specialisation at the end of your first year.

Study Mode
Four years full time, or part-time equivalent. Students are required to complete 12 weeks of Industrial Experience, usually between the third and fourth years of the program.

3621.7 – Bachelor of Engineering: Electrical
When specialising in Electrical Engineering, you will be working on electronic components, computers, power generation and distribution systems, as well as in communications and control.

Entry via: HSC, TAFE, UWSC, private colleges, prior study, International
CRICOS Code: 041037C
Accreditation: Engineers Australia at Professional Level

A Career in Electrical Engineering
The UWS Engineering Program gives you professional skills and knowledge in specialisations of great demand. As an Electrical Engineer you could work in communications, electro-magnetics, power and control, public utilities, telecommunications, manufacturing, and electrical systems areas. For example, you could be designing or improving electrical systems to conserve energy and improving productivity.

Student Testimonial
Francis entered UWS as a mature age student with a construction background. His passion for engineering knowledge grew exponentially under the excellent academic guidance provided at UWS, and a desire to pursue a career in water engineering unfolded. He currently works as an engineer for a western Sydney council.

‘The face to face availability of academic staff at UWS should not be taken for granted. I attended every lecture and tutorial possible over my four years of full-time study. The face to face impartation of knowledge worked for me. I have the academic results to prove it!’

Francis Lane

‘Since joining the workforce I have come to appreciate how valuable the skills I learned while studying at UWS actually are. I have found time and again that I am more capable and able to review and resolve the challenges that my professional career throws at me.’

Jonathan Barnes

Engineers’ Salaries

<table>
<thead>
<tr>
<th>Grade</th>
<th>Gross base salary, $pa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1 – Starting salary</td>
<td>70,287</td>
</tr>
<tr>
<td>Grade 2 – 2 to 3 years of experience</td>
<td>83,736</td>
</tr>
<tr>
<td>Grade 3 – 4 to 10 years of experience</td>
<td>99,843</td>
</tr>
<tr>
<td>Grade 4 – 10 to 15 years of experience</td>
<td>124,061</td>
</tr>
<tr>
<td>Grade 5 – over 15 years of experience</td>
<td>164,641</td>
</tr>
</tbody>
</table>

Source: Engineers Australia – Salaries and Benefits Survey (2012)
Bachelor of Engineering  
Key Program: Electrical

Course Structure

Year 1
Session 1 Autumn
- 200237 Mathematics for Engineers 1
- 300027 Engineering Computing
- 300963 Engineering Physics
- 300964 Introduction to Engineering Practice

Session 2 Spring
- 200238 Mathematics for Engineers 2
- 300021 Electrical Fundamentals
- 300463 Fundamentals of Mechanics
- 300965 Engineering Materials

Year 2
Session 3 Autumn
- 200242.3 Mathematics for Engineers 3
- 300018.2 Digital Systems 1
- 300005.2 Circuit Theory
- 300025.3 Electronics

Session 4 Spring
- 300076.3 Microprocessor Systems
- 300057.3 Signals and Systems
- 300481.2 Engineering Electromagnetics
- 300052.3 Power and Machines

Year 3
Session 5 Autumn
- 300007.2 Communication Systems
- 300071.2 Electrical Machines 1
- 300009.3 Control Systems
- And one elective

Session 6 Spring
- 300771.1 Power Systems
- 300053.3 Professional Practice
- 300069.3 Digital Signal Processing
- And one elective
- 300741.2 Industrial Experience (Engineering)

Year 4
Session 7 Autumn (Non-Honours stream)
- 300483.4 Engineering Project
- 300075.4 Instrumentation and Measurement
- 300010.3 Data Networks
- 300772.1 Power Electronics

Session 8 Spring (Non-Honours stream)
- 300483.4 Engineering Project
- 300070.4 Electrical Drives
- Two electives

Year 4
Session 7 Autumn (Honours stream – H3006)
- 300675.2 Honours Thesis
- 300772.1 Power Electronics
- And one elective

Session 8 Spring (Honours stream – H3006)
- 300675.2 Honours Thesis
- 300070.4 Electrical Drives
- And one elective

For more information please send your enquiry to Beng@uws.edu.au