Overview

This stream is an exit point for students from the Bachelor of Engineering (Honours) program 3707 in Electrical Engineering.

Stream Structure

Students will need to complete 96 UOC of engineering courses from the BE (Hons) stream in Electrical Engineering, with at least 24 UOC of these courses being from year 3 or above.

Please see handbook information on Electrical Engineering stream for full details on courses. Students should seek further information from their school.
Faculty
Faculty of Engineering

School
School of Electrical Engineering & Telecommunications

Study Level
Undergraduate

Minimum Units of Credit
96

Specialisation Type
Major
Learning Outcomes

1. In-depth understanding of specialist bodies of knowledge within the engineering discipline.
   - Scholars

2. Orderly management of self, and professional conduct.
   - Leaders
   - Scholars
   - Professionals

3. Discernment of knowledge development and research directions within the engineering discipline.
   - Scholars

4. Effective team membership and team leadership.
   - Professionals
   - Scholars
   - Global Citizens
   - Leaders

5. Knowledge of engineering design practice and contextual factors impacting the engineering discipline.
   - Professionals
   - Global Citizens
   - Scholars

6. Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline.
   - Global Citizens
   - Scholars
   - Professionals

7. Application of established engineering methods to complex engineering problem solving.
   - Global Citizens
   - Professionals
   - Scholars

8. Fluent application of engineering techniques, tools and resources.
   - Professionals
   - Scholars

   - Professionals
   - Scholars
   - Global Citizens

10. Ethical conduct and professional accountability.
    - Global Citizens
    - Professionals

11. Effective oral and written communication in professional and lay domains.
    - Scholars
    - Global Citizens
    - Leaders

12. Systematic, theory based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline.
    - Scholars

13. Creative, innovative and pro-active demeanour.
14. Conceptual understanding of the mathematics, numerical analysis, statistics, and computer and information sciences which underpin the engineering discipline.

15. Professional use and management of information.

Graduate Capabilities:

For more information on Graduate Capabilities, please click on this link.
### Available in Program(s)

Program(s) in which this major is available

<table>
<thead>
<tr>
<th>Bachelor of Engineering Science - BEngSc 3706 Engineering Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty: Faculty of Engineering</td>
</tr>
<tr>
<td>Campus: Kensington</td>
</tr>
<tr>
<td>Units of Credit: 144</td>
</tr>
<tr>
<td>Typical Duration: 3 Years</td>
</tr>
</tbody>
</table>
**Specialisation Structure**

Students must complete 96 UOC.

**Level 3 Minimum UOC**

Students must complete a minimum of 24 UOC of the following courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>UOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC2142</td>
<td>6</td>
</tr>
<tr>
<td>Embedded Systems Design</td>
<td></td>
</tr>
<tr>
<td>ELEC3104</td>
<td>6</td>
</tr>
<tr>
<td>Digital Signal Processing</td>
<td></td>
</tr>
<tr>
<td>ELEC3105</td>
<td>6</td>
</tr>
<tr>
<td>Electrical Energy</td>
<td></td>
</tr>
<tr>
<td>ELEC3106</td>
<td>6</td>
</tr>
<tr>
<td>Electronics</td>
<td></td>
</tr>
<tr>
<td>ELEC3114</td>
<td>6</td>
</tr>
<tr>
<td>Control Systems</td>
<td></td>
</tr>
<tr>
<td>ELEC3115</td>
<td>6</td>
</tr>
<tr>
<td>Electromagnetic Engineering</td>
<td></td>
</tr>
<tr>
<td>ELEC3117</td>
<td>6</td>
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<tr>
<td>Electrical Engineering Design</td>
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<tr>
<td>ELEC4614</td>
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<tr>
<td>Power Electronics</td>
<td></td>
</tr>
<tr>
<td>TELE3113</td>
<td>6</td>
</tr>
<tr>
<td>Analogue and Digital Communications</td>
<td></td>
</tr>
</tbody>
</table>
Specialisation Requirements

This stream is an exit point for students from the Bachelor of Engineering (Honours) program 3707 in Electrical Engineering. Students will need to complete 96 UOC of engineering courses from the BE (Hons) stream in Electrical Engineering (ELECAH), with at least 24 UOC of these courses being from year 3 or above.

Enrolment Disclaimer

Unless advised otherwise by your program authority, you should follow the rules for the handbook for the year you commenced your program. You are also responsible for ensuring you enrol in courses according to your program requirements. myUNSW enrolment checks that you have met enrolment requirements such as pre-requisites for individual courses but not that a course will count towards your program requirements.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179