Double Degree

Engineering (Honours) / Engineering Science

3773 | 240 Units of Credit

Overview

This dual award program gives students the chance to develop their skills and knowledge in two areas - the major area of interest leading to a Bachelor of Engineering (Honours) degree plus an additional area leading to a Bachelor of Engineering Science degree. Students have a pathway to enhance their professional opportunities through developing cross-disciplinary skills and knowledge within a five year program.

With this dual degree program, students take the 168 units of credit core of the Bachelor of Engineering (Honours) 3707 and the 96 units of credit core of the Bachelor of Engineering Science program 3706. Because of the overlap of 24 units of credit of engineering courses in both cores, the total units of credit required for completion is 240 UOC, rather than 264 UOC. The Faculty of Engineering administers the program, and delegates administration to the School which offers the Engineering discipline selected. Students should seek advice from the relevant School Office in the first instance or from the Faculty of Engineering Student Centre.
<table>
<thead>
<tr>
<th><strong>Faculty</strong></th>
<th>Faculty of Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campus</strong></td>
<td>Kensington</td>
</tr>
<tr>
<td><strong>Study Level</strong></td>
<td>Undergraduate</td>
</tr>
<tr>
<td><strong>Typical duration</strong></td>
<td>5 Years</td>
</tr>
<tr>
<td><strong>Intake Period</strong></td>
<td>Term 1, Term 3</td>
</tr>
<tr>
<td><strong>Academic Calendar</strong></td>
<td>3+ Calendar</td>
</tr>
<tr>
<td><strong>Minimum Units of Credit</strong></td>
<td>240</td>
</tr>
<tr>
<td><strong>Award(s)</strong></td>
<td>Bachelor of Engineering (Honours) -</td>
</tr>
<tr>
<td></td>
<td><strong>BE (Hons)</strong></td>
</tr>
<tr>
<td></td>
<td>Bachelor of Engineering Science -</td>
</tr>
<tr>
<td></td>
<td><strong>BEngSc</strong></td>
</tr>
<tr>
<td><strong>UAC Code</strong></td>
<td>425401</td>
</tr>
<tr>
<td><strong>CRICOS Code</strong></td>
<td>087947G</td>
</tr>
</tbody>
</table>
Learning Outcomes

3707 - Engineering (Honours)

1. Comprehensive, theory based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline.
   Scholars

2. Conceptual understanding of the mathematics, numerical analysis, statistics, and computer and information sciences which underpin the engineering discipline.
   Scholars

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

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

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

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

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

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

   Global Citizens Professionals Scholars

10. Application of systematic approaches to the conduct and management of engineering projects.
    Scholars Leaders Global Citizens Professionals

11. Ethical conduct and professional accountability.
<table>
<thead>
<tr>
<th>Graduate Capabilities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>For more information on Graduate Capabilities, please click on this <a href="#">link</a>.</td>
</tr>
</tbody>
</table>
Stand Alone Programs

Click on the link below to find out more about each individual program.

**Program 3707**
**Engineering (Honours)**

**Program 3706**
**Engineering Science**
Double Degree Structure

Students must complete 240 UOC.

Bachelor of Eng (Honours) - 168 UOC
Bachelor of Eng Sci program - 96 UOC
Eng courses double counted across both programs - 24 UOC

Students enrolled in program 3773 can only take the following specialisation combinations:

CVENAH Civil – CVENK1 Environmental*
CVENAH Civil – MINEC1 Mining*
CVENBH Environmental – CVENJ1 Civil*
CEICAH Chemical – PETRB1 Petroleum
ELECAH Electrical – MTRND1 Mechatronic

MINEAH Mining – CEICM1 Chemical
MINEAH Mining – CVENJ1 Civil Engineering*

MINEAH Mining – ELECF1 Electrical
MINEAH Mining – MECHD1 Mechanical
MINEAH Mining – PETRB1 Petroleum
MRTNAH Mechatronic – ELECF1 Electrical
PETRAH Petroleum – CEICM1 Chemical
PETRAH Petroleum – CVENJ1 Civil
PETRAH Petroleum – ELECF1 Electrical
PETRAH Petroleum – MECHD1 Mechanical
PETRAH Petroleum – MINEC1 Mining

* available for direct entry on admission. All other combinations are only available for transfer following 1 year of satisfactory performance in a UNSW Engineering program.

Majors

3707 - Engineering (Honours)

Students must complete at least one of the specialisations below.

HONOURS:

AEROAH | 168 UOC
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BINFAH</td>
<td>168</td>
<td>UOC Bioinformatics Engineering</td>
</tr>
<tr>
<td>Bioinformatics Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEICAH</td>
<td>168</td>
<td>UOC Chemical Engineering</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEICDH</td>
<td>168</td>
<td>UOC Chemical Product Engineering</td>
</tr>
<tr>
<td>Chemical Product Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPBH</td>
<td>168</td>
<td>UOC Computer Engineering</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVENAH</td>
<td>168</td>
<td>UOC Civil Engineering</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVENBH</td>
<td>168</td>
<td>UOC Environmental Engineering</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELECAH</td>
<td>168</td>
<td>UOC Electrical Engineering</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GMATDH</td>
<td>168</td>
<td>UOC Surveying</td>
</tr>
<tr>
<td>Surveying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GMATEH</td>
<td>168</td>
<td>UOC Geospatial Engineering</td>
</tr>
<tr>
<td>Geospatial Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANFBH</td>
<td>168</td>
<td>UOC Mechanical and Manufacturing</td>
</tr>
<tr>
<td>Mechanical and Manufacturing Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MECHAH</td>
<td>168</td>
<td>UOC Mechanical Engineering</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mining Engineering

Mechatronic Engineering

Petroleum Engineering

Software Engineering

Photovoltaics and Solar Energy

Renewable Energy Engineering

Telecommunications

**Specialisation Requirements**

3706 - Engineering Science

Students must complete at least one of the specialisations below.

Students enrolled in program 3773 can only take the following specialisation combinations:

CVENAH Civil – CVENK1 Environmental*
CVENAH Civil – MINEC1 Mining*
CVENBH Environmental – CVENJ1 Civil*
CEICAH Chemical – PETRB1 Petroleum
ELECAH Electrical – MTRND1 Mechatronic
MINEAH Mining – CEICM1 Chemical
MINEAH Mining – ELECF1 Electrical
MINEAH Mining – CVENJ1 Civil Engineering*
MINEAH Mining - MECHD1 Mechanical
MRTNAH Mechatronic Engineering - ELECF1 Electrical
PETRAH Petroleum - CEICM1 Chemical
PETRAH Petroleum - CVENJ1 Civil
PETRAH Petroleum - ELECF1 Electrical
PETRAH Petroleum - MECHD1 Mechanical
PETRAH Petroleum - MINEC1 Mining

Combinations starred are available for direct entry on admission. All other combinations are only available for transfer following 1 year of satisfactory performance in a UNSW Engineering program.

**MAJOR:**

CEICM1 | 96 UOC
Chemical Engineering

CVENJ1 | 96 UOC
Civil Engineering

CVENK1 | 96 UOC
Environmental Engineering

ELECF1 | 96 UOC
Electrical Engineering

MECHD1 | 96 UOC
Mechanical Engineering

MINEC1 | 96 UOC
Mining Engineering

MTRND1 | 96 UOC
Mechatronic Engineering

PETRB1 | 96 UOC
Petroleum Engineering
General Education

3707 - Engineering (Honours)

Students must take 6 UOC of the following courses.

Note: Students completing the dual award Bachelor of Engineering (Honours)/Bachelor of Science in Computer Science complete 12 UOC of General Education courses in place of 12 UOC free electives from the Bachelor of Science in Computer Science.

any General Education course

General Education

3706 - Engineering Science

Students must take at least 6 UOC of the following courses.

any General Education course

Level 3 Maturity Requirements

3707 - Engineering (Honours)

Students must have completed 42 UOC before taking any of the following courses.

any level 3 course

Level 4 Maturity Requirements

3707 - Engineering (Honours)

Students must have completed 102 UOC before taking any of the following courses.

any level 4 course

Available discipline combinations

3773 - Engineering (Honours) / Engineering Science

Dual Program Combinations

- BE(Hons) Civil Engineering/BEngSc Environmental Engineering
- BE (Hons) Civil Engineering(Hons)/BEngSc Mining Engineering
- BE (Hons) Environmental Engineering/BEngSc Civil Engineering
- BE (Hons) Mining Engineering/BEngSc Civil Engineering

Dual Program Combinations for CURRENT students only
- BE (Hons) Petroleum Engineering/BEngSc Chemical Engineering
- BE (Hons) Chemical Engineering/BEngSc Petroleum Engineering
- BE (Hons) Petroleum Engineering/BEngSc Mining Engineering
- BE (Hons) Mining Engineering/BEngSc Chemical Engineering
- BE (Hons) Mining Engineering/BEngSc Electrical Engineering
- BE (Hons) Mining Engineering/BEngSc Mechanical Engineering
- BE (Hons) Mining Engineering/BEngSc Petroleum Engineering
- BE (Hons) Petroleum Engineering/BEngSc Civil Engineering
- BE (Hons) Petroleum Engineering/BEngSc Electrical Engineering
- BE (Hons) Petroleum Engineering/BEng Sc Mechanical Engineering

Double Counting

3773 - Engineering (Honours) / Engineering Science

Within program 3773 Engineering (Honours)/Engineering Science, 24 UOC are common and therefore count towards both awards.

Industrial Experience Requirement

3707 - Engineering (Honours)

Students must each complete at least 60 days approved industrial training concurrent with enrolment in the program.

Sample Double Degree(s)

To access sample program(s), please visit:

3773 Engineering (Honours) / Engineering Science Sample Program

Please read the Double Degree Program rules as some specific rules apply to particular Double Degree combinations.

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.
Program Fees

At UNSW fees are generally charged at course level and therefore dependent upon individual enrolment and other factors such as student's residency status. For generic information on fees and additional expenses of UNSW programs, click on one of the following:

Domestic Students
Commonwealth Supported Students
International Students
Additional Information

Accreditation:

This Engineering component of this dual degree has the same accreditation status as the Bachelor of Engineering (Hons). For details please see Program 3707
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
© UNSW Sydney (CRICOS Provider No.: 00098G), 2019. The information contained in this Handbook is indicative only. While every effort is made to keep this information up-to-date, the University reserves the right to discontinue or vary arrangements, programs and courses at any time without notice and at its discretion. While the University will try to avoid or minimise any inconvenience, changes may also be made to programs, courses and staff after enrolment. The University may also set limits on the number of students in a course.

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