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.
Faculty
Faculty of Engineering

Campus
Kensington

Study Level
Undergraduate

Typical duration
5 Years

Intake Period
Term 1, Term 3

Academic Calendar
3+ Calendar

Minimum Units of Credit
240

Award(s)
Bachelor of Engineering (Honours) -
BE (Hons)
Bachelor of Engineering Science -
BEngSc

UAC Code
425401

CRICOS Code
087947G
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.
12. Effective oral and written communication in professional and lay domains.

13. Creative, innovative and pro-active demeanour.

14. Professional use and management of information.

15. Orderly management of self, and professional conduct.

16. Effective team membership and team leadership.

Graduate Capabilities:

For more information on Graduate Capabilities, please click on this link.
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>Aerospace Engineering</th>
<th>168 UOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>BINFAH Bioinformatics Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>CEICAH Chemical Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>CEICDH Chemical Product Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>COMPBH Computer Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>CVENAH Civil Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>CVENBH Environmental Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>ELECAH Electrical Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>GMATDH Surveying</td>
<td>168 UOC</td>
</tr>
<tr>
<td>GMATEH Geospatial Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>MANFBH Mechanical and Manufacturing Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>MECHAH Mechanical Engineering</td>
<td>168 UOC</td>
</tr>
<tr>
<td>Code</td>
<td>UOC</td>
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<td>--------</td>
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</tr>
<tr>
<td>MINEAH</td>
<td>168</td>
</tr>
<tr>
<td>MTRNAH</td>
<td>168</td>
</tr>
<tr>
<td>PETRAH</td>
<td>168</td>
</tr>
<tr>
<td>SENGAH</td>
<td>168</td>
</tr>
<tr>
<td>SOLAAH</td>
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<tr>
<td>SOLABH</td>
<td>168</td>
</tr>
<tr>
<td>TELEAH</td>
<td>168</td>
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</tbody>
</table>

**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:**

<table>
<thead>
<tr>
<th>Code</th>
<th>UOC</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEICM1</td>
<td>96</td>
<td>Chemical Engineering</td>
</tr>
<tr>
<td>CVENJ1</td>
<td>96</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>CVENK1</td>
<td>96</td>
<td>Environmental Engineering</td>
</tr>
<tr>
<td>ELECF1</td>
<td>96</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>MECHD1</td>
<td>96</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>MINEC1</td>
<td>96</td>
<td>Mining Engineering</td>
</tr>
<tr>
<td>MTRND1</td>
<td>96</td>
<td>Mechatronic Engineering</td>
</tr>
<tr>
<td>PETRB1</td>
<td>96</td>
<td>Petroleum Engineering</td>
</tr>
</tbody>
</table>
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
Dual Program Combinations for CURRENT students only
- BE (Hons) Environmental Engineering/BEngSc Civil Engineering
- BE (Hons) Mining Engineering/BEngSc Civil Engineering
- 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)
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179