# Bachelor of Engineering (Honours) in Civil Engineering (Domestic students)

| **Program code** | **Commencing in** |
|---|---|
| 1411 | For Continuing Students Only |

**Available at**

**Duration**

4 years full-time

8 years part-time

**Credit points**

320

## Degree requirements: Students who started Semester 2 - 2015

**For Domestic and those International students not required to complete the English Language Enhancement course**

To be eligible for the award of *Bachelor of Engineering (Honours) in Civil Engineering [BEng(Hons)]*, a student must acquire 320 credit points as prescribed below:

- gain 300 credit points as prescribed
- gain 20 credit points for Undergraduate free-choice elective/s
- complete no more than 120 credit points at first year level
- complete a minimum of 80 credit points of courses at final year level
- complete a minimum of 12 weeks (60 days) of approved experience in an engineering practice environment (or a satisfactory alternative) during their degree studies.

**Exit point**

To be eligible to exit the Bachelor of Engineering (Honours) in Civil Engineering program with the Bachelor of Engineering Science award, a student must acquire 240 credit points as prescribed below:

- at least 210 credit points from the Bachelor of Engineering (Honours) in Civil Engineering course list including all first year level and second year level core courses
- no more than 30 credit points of Undergraduate free-choice elective/s
- at least 60 credit points of courses at third year level or higher
- no more than 100 credit points of courses at first year level.

Note: Students undertaking the Bachelor of Engineering (Honours) in Electronic and Biomedical Engineering (1424) or Bachelor of Engineering (Honours) in Software Engineering (1478) will need to have completed some Year 4 courses to meet the above requirements.

To exit, a student should apply for a program transfer.

**Honours**

**Classification of Honours**

**Bachelor of Engineering (Honours) in Civil Engineering**

Honours in this program is awarded on the basis of sustained performance in the final two years of the program and in accordance with the Honours Weighted Average (HWA). The Honours Weighted Average is calculated using specified courses (third and fourth year level including the research component) which are referred to as the **Honours Calculable Courses (HCC)** and these courses are identified in the course lists within the program structure.

The Honours Weighted Average is calculated by multiplying the 120 credit points of Honours Calculable Courses by the percentage mark and the relevant weighting assigned for each course, divided by 120 credit points multiplied by the relevant weighting factor.

**Cut-offs for Honours Classification**

- **Class I Honours:**
  - Overall HWA Range: 80 - 100%
  - Minimum Thesis Mark - 80%
- **Class IIA Honours:**
  - Overall HWA Range: 70 -79%
  - Minimum Thesis Mark - 70%
- **Class IIB Honours:**
  - Overall HWA Range: 55 - 69.9%
  - Minimum Thesis Mark - 60%
- **Class III Honours:**
  - Overall HWA Range: < 54.9%
  - Minimum Thesis Mark - 50%

**Australian Qualifications Framework (AQF) Level and Type**

The Australian Qualifications Framework (AQF) is the national policy for regulated qualifications in Australian education and training. This qualification is accredited as an AQF Level 8 - Bachelor Honours Degree.

**English Language Enhancement**

Domestic students enrolled in this program whose first language is not English may complete the following **English Language Enhancement Course** as an elective.

- 5903LHS Language and Communication for Sciences

**Students whose first language is English are not permitted to undertake this course.**

## Program learning outcomes
**Program learning outcomes**

Program Learning Outcomes communicate to the community the value of the Griffith educational experience as benchmarked against national qualification standards.

Program Learning Outcomes for this award describe the knowledge, skills and the application of knowledge and skills you will acquire through studying the Griffith program of your choice.

## Course list: Students starting Semester 2 - 2015
**Course offering information in program structures is a guide only. Please check the actual offering information in the Course Catalogue.**

**Note: Students must check the prerequisite and incompatible requirements before selecting any course within this program.**

**Course selection for students required to complete the English Language Enhancement course**

Students entering the program in **Trimester 2** will:

- complete 5903LHS Language and Communication for Sciences in their first trimester of study in place of 1006ENG Design and Professional Skills (not offered from 2017) or 1022ENG Engineering Design Practice (offered from 2017) and complete 1006ENG Design and Professional Skills (not offered from 2017) or 1022ENG Engineering Design Practice (offered from 2017) in either Year 2 and
- complete 10 credit points less of Undergraduate free-choice elective/s.

**Year 1**

Students must complete the following courses:

| Semester | Course code | Requirement | Course title | CP |
|---|---|---|---|---|
| Tri 2 | 1501ENG | | Engineering Mechanics | 10 |
| Tri 2 | 1005ENG | | Electronics for Engineers   (not offered from 2017) | 10 |
| | | | **OR** | |
| Tri 2,3 | 1301ENG | | Electric Circuits | 10 |
| | | | **OR** | |
| Tri 2 | 1704ENG | | Electrics and Electronics for Designers | 10 |
| Tri 2 | 1011SCG | | Mathematics 1A   (not offered from 2017) | 10 |
| | | | **OR** | |
| Tri 1,3 | 1010ENG | | Engineering Mathematics 1 | 10 |
| Tri 2 | 1006ENG | | Design and Professional Skills   (see Note 1) (not offered from 2017) | 10 |
| | | | **OR** | |
| Tri 1 | 1022ENG | | Engineering Design Practice | 10 |
| | | | **OR** | |
| Tri 2 | 5903LHS | | Language and Communication for Sciences | 10 |

Note 1: Students not undertaking 1006ENG (not offered from 2017) or 1022ENG (offered from 2017) in Year 1 must complete this course in Year 2.

**Year 2**

Students must complete the following courses:

| Semester | Course code | Requirement | Course title | CP |
|---|---|---|---|---|
| Tri 1 | 1007ENG | | Engineering Fundamentals   (not offered from 2017) | 10 |
| | | | **OR** | |
| Tri 1,3 | 1701ENG | | Creative Engineering   (Withdrawn from 2022) | 10 |
| | | | **OR** | |
| Tri 1,3 | 1108ENG | | Digital and Data Skills | 10 |
| Tri 1 | 1502ENG | | Engineering Materials   (not offered from 2017) | 10 |
| | | | **OR** | |
| Tri 1,3 | 1017ENG | | Engineering Materials | 10 |
| Tri 1 | 1012SCG | | Mathematics 1B   (offered for the last time in Tri 1 2017) | 10 |
| | | | **OR** | |
| Tri 2 | 1020ENG | | Engineering Mathematics 2 | 10 |
| Tri 1 | 1004ENG | | Computing and Programming with MATLAB   (not offered from Tri 2 2017) | 10 |
| | | | **OR** | |
| Tri 2 | 1105ENG | | Numerical and Computing Skills   (withdrawn from 2022) | 10 |
| | | | **OR** | |
| Tri 2 | 1108ENG | | Digital and Data Skills   (for Civil or Environmental Engineering majors) | 10 |
| Tri 2 | | | Undergraduate free-choice elective/s   (see Note 1) | 10 |
| | | | **OR** | |
| Tri 2 | 1006ENG | | Design and Professional Skills   (see Note 2) (not offered from 2017) | 10 |
| | | | **OR** | |
| Tri 1 | 1022ENG | | Engineering Design Practice | 10 |
| Tri 2 | 3004ENG | | Project Management Principles | 10 |
| Tri 2 | 2102ENG | | Soil Mechanics | 10 |
| Tri 2 | 2103ENG | | Structural Design | 10 |

Note 1: Students may choose Undergraduate free-choice elective/s from across the university or choose Engineering electives from the list below.
Note 2: Students not undertaking 1006ENG (not offered from 2017) or 1022ENG (offered from 2017) in Year 1 must undertake this course in Year 2.

**Year 3**

Students must complete the following courses:

| Semester | Type | Course code | Requirement | Course title | CP |
|---|---|---|---|---|---|
| Tri 1 | | 2002ENG | | Fluid Mechanics and Hydraulics | 10 |
| Tri 1 | | 2101ENG | | Mechanics of Materials I | 10 |
| Tri 1 | | 2104ENG | | Construction Methods and Practices | 10 |
| Tri 1 | | 2203NSC | | Mathematics 2A   (not offered from 2018) | 10 |
| | | | | **OR** | |
| Tri 1 | | 2205NSC | | Calculus II | 10 |
| Tri 2 | | 2105ENG | | Mechanics of Materials 2 | 10 |
| Tri 2 | HCC-A | 2106ENG | | Design for Civil Engineers   (not offered from 2019) | 10 |
| | | | | **OR** | |
| Tri 2 | HCC-A | 3113ENG | | Civil Engineering Design Project | 10 |
| Tri 2 | HCC-A | 3103ENG | | Concrete Structures | 10 |
| Tri 2 | | 2004ENG | | Hydrology | 10 |

Type:
HCC-A = Honours Calculable Courses with a weighting factor of 1
HCC-B = Honours Calculable Courses with a weighting factor of 2

**Exit point**: Bachelor of Engineering Science (1573). To exit (after completing the 240 credit point requirements of Years 1, 2 and 3), a student should apply for a program transfer.

**Year 4**

Students must complete the following courses:

| Semester | Type | Course code | Requirement | Course title | CP |
|---|---|---|---|---|---|
| Tri 1 | HCC-A | 4000ENG | | Research Methods and Statistics | 10 |
| Tri 1 | | 3101ENG | | Structural Analysis | 10 |
| Tri 1 | HCC-A | 3102ENG | | Geotechnical Engineering | 10 |
| Tri 1 | | | | Undergraduate free-choice elective/s  (see Note 1) | 10 |
| Tri 2 | HCC-B | 6007ENG | | IAP - Thesis   (capstone course) (not offered from 2021) (see Note 2) | 30 |
| | | | | **AND** | |
| Tri 2 | | 6008ENG | | IAP - Professional Practice   (not offered from 2021) (see Note 2) | 10 |
| | | | | **OR** | |
| Tri 2 | HCC-B | 6002ENG | | IAP   (offered from 2020) (see Note 2) | 40 |

Note 1: Students may choose Undergraduate free-choice elective/s from across the university or choose Engineering electives from the list below.

Note 2: Students who have completed either 6007ENG or 6008ENG should complete the corresponding course (6007ENG or 6008ENG) before 2021. Students who have not completed either 6007ENG or 6008ENG should enrol in 6002ENG.

Type:
HCC-A = Honours Calculable Courses with a weighting factor of 1
HCC-B = Honours Calculable Courses with a weighting factor of 2

**Year 5**

Students must complete the following courses:

| Semester | Type | Course code | Requirement | Course title | CP |
|---|---|---|---|---|---|
| Tri 1 | HCC-B | 6003ENG | | Integrated Design Project | 10 |
| Tri 2 | HCC-B | 6110ENG | | Coastal Engineering and Modelling | 10 |
| Tri 2 | HCC-B | 6109ENG | | Construction Project Management | 10 |
| Tri 2 | HCC-B | 6106ENG | | Transportation Engineering | 10 |

Type:
HCC-A = Honours Calculable Courses with a weighting factor of 1
HCC-B = Honours Calculable Courses with a weighting factor of 2

**Civil Engineering electives**

The availability of these elective courses may be subject to change and students should consult the course offering details and discipline convenor if necessary prior to enrolling.

Civil Engineering students may choose up to 20 credit points from this list in place of Undergraduate free-choice elective/s.

| Semester | Course code | Requirement | Course title | CP |
|----------|-------------|-------------|--------------|-----|
| Tri 1 | 3107ENG | | Construction Materials | 10 |
| Tri 1 | 3114ENG | | Rock Mechanics | 10 |
| Tri 2 | 3105ENG | | Water Resources Engineering | 10 |
| Tri 2 | 3111ENG | | Coastal Zone Management | 10 |
| Tri 2 | 3115ENG | | Geotechnical Engineering Practice | 10 |