

# Bachelor of Engineering (Civil) (Honours)



Moreton Bay, Semester 1 2024

## Program structure

Introductory courses (8) 96 units

ENG100 Materials in Engineering  
ENG101 Professional Engineering  
ENG104 Engineering Design  
ENG105 Engineering Statics  
ENG106 Engineering Computing  
MTH103 Introduction to Applied Mathematics  
MTH104 Introductory Calculus  
SCI107 Physics

Developing courses (10) 108 units

CIV200 Structural Analysis  
CIV201 Geotechnical Engineering  
CIV202 Hydraulics and Hydrology  
CIV203 Construction Technology  
ENG200 Professional Practice(0 units)  
ENG206 Sustainable Engineering (Design)  
ENS254 Earth Observation: Remote Sensing and Surveying  
MEC221 Mechanics of Materials  
MTH201 Calculus II and Linear Algebra  
MTH203 Numerical Analysis

Graduate courses (13) 180 units

CIV300 Structural Design  
CIV301 Road and Traffic Engineering  
CIV302 Concrete Design and Technology  
CIV304 Water and Wastewater  
CIV305 Structural Modelling  
ENG305 Engineering Management  
ENG306 Engineering System Design  
CIV401 Sustainable Transport Systems  
CIV402 Advanced Structural Analysis and Design  
CIV403 Environmental Engineering  
ENG406 Engineering Project 1(24 units)  
ENG407 Engineering Project 2(24 units)  
MEC403 Computational Analysis

Honours

The Bachelor of Engineering (Civil) (Honours) may be awarded with Honours.

The class of Honours awarded to a student is calculated using the mean mark achieved when completing the 96 units of AQF8 level courses (400 coded).

[usc.edu.au/sc410](http://usc.edu.au/sc410)

University of the Sunshine Coast | CRICOS Provider Number: 01595D | Correct as at 5 May 2024  
Study options and teaching period of offer can vary depending on the study location. For full details, visit [usc.edu.au](http://usc.edu.au).

| HONOURS RESULTS CLASSIFICATION | MEAN MARK ACHIEVED IN AQF8 COURSES (400 CODED) |
|--------------------------------|--|
| Honours Class I                | 80% - 100%                                     |
| Honours Class IIA              | 70% - 79.5%                                    |
| Honours Class IIB              | 60% - 69.5%                                    |
| Honours Class III              | 50% - 59.5%                                    |
| Marginal Fail                  | 47% - 49.5%                                    |
| Fail                           | 0% - 46.5%                                     |

Note: Program structures are subject to change. Not all UniSC courses are available on every UniSC campus.

Total units: 384

## Study sequence

### Semester 1

| COURSE                                     | SEMESTER OF OFFER<br>(MORETON BAY) | UNITS | REQUISITES                |
|--|------------------------------------|-------|---------------------------|
| ENG100 Materials in Engineering            | • Semester 1                       | 12    |                           |
| ENG101 Professional Engineering            | • Semester 1                       | 12    |                           |
| MTH103 Introduction to Applied Mathematics | • Semester 1                       | 12    | Anti:<br>MTH102           |
| SCI107 Physics                             | • Semester 1                       | 12    | Anti:<br>SCI108 or SCI507 |

### Semester 2

| COURSE                       | SEMESTER OF OFFER<br>(MORETON BAY) | UNITS | REQUISITES      |
|------------------------------|------------------------------------|-------|-----------------|
| ENG104 Engineering Design    | • Semester 2                       | 12    | Anti:<br>ENG202 |
| ENG105 Engineering Statics   | • Semester 2                       | 12    | Anti:<br>ENG102 |
| ENG106 Engineering Computing | • Semester 2                       | 12    | Anti:<br>ENG103 |
| MTH104 Introductory Calculus | • Semester 2                       | 12    | Anti:<br>MTH202 |

[usc.edu.au/sc410](http://usc.edu.au/sc410)

University of the Sunshine Coast | CRICOS Provider Number: 01595D | Correct as at 5 May 2024

Study options and teaching period of offer can vary depending on the study location. For full details, visit [usc.edu.au](http://usc.edu.au).

## Semester 1

| COURSE                                | SEMESTER OF OFFER<br>(MORETON BAY) | UNITS | REQUISITES                                      |
|---------------------------------------|------------------------------------|-------|---|
| CIV201 Geotechnical Engineering       | • Semester 1                       | 12    | Pre:<br>ENG105 or ENG102                        |
| CIV202 Hydraulics and Hydrology       | • Semester 1                       | 12    | Pre:<br>SCI107<br><br>Anti:<br>ENG330           |
| MEC221 Mechanics of Materials         | • Semester 1                       | 12    | Pre:<br>ENG102 or ENG105<br><br>Anti:<br>ENG221 |
| MTH201 Calculus II and Linear Algebra | • Semester 1                       | 12    | Pre:<br>MTH104 or MTH202                        |

## Semester 2

| COURSE                                  | SEMESTER OF OFFER<br>(MORETON BAY) | UNITS | REQUISITES  |
|---|------------------------------------|-------|---|
| CIV200 Structural Analysis              | • Semester 2                       | 12    | Pre:<br>ENG105 or ENG102  |
| CIV203 Construction Technology          | • Semester 2                       | 12    | Pre:<br>ENG105 or ENG102<br><br>Anti:<br>ENG340                           |
| ENG206 Sustainable Engineering (Design) | • Semester 2                       | 12    | Pre:<br>ENG104  |
| MTH203 Numerical Analysis               | • Semester 2                       | 12    | Pre:<br>MTH202 or (MTH103 and<br>MTH104)<br><br>Anti:<br>MTH532 or MTH312 |

## Semester 1

| COURSE                              | SEMESTER OF OFFER<br>(MORETON BAY) | UNITS | REQUISITES                            |
|-------------------------------------|------------------------------------|-------|---------------------------------------|
| CIV300 Structural Design            | • Semester 1                       | 12    | Pre:<br>CIV200<br><br>Anti:<br>ENG212 |
| CIV301 Road and Traffic Engineering | • Semester 1                       | 12    | Pre:<br>ENG104 or ENG202 or<br>ENG206 |

[usc.edu.au/sc410](http://usc.edu.au/sc410)

University of the Sunshine Coast | CRICOS Provider Number: 01595D | Correct as at 5 May 2024

Study options and teaching period of offer can vary depending on the study location. For full details, visit [usc.edu.au](http://usc.edu.au).

|                                  |                         |    |                          |
|----------------------------------|-------------------------|----|--------------------------|
| CIV305 Structural Modelling      | • Not Currently Offered | 12 | Anti:<br>ENG422          |
| ENG306 Engineering System Design | • Semester 1            | 12 | Pre:<br>CIV200           |
|                                  |                         |    | Pre:<br>ENG206 or ENG104 |
|                                  |                         |    | Anti:<br>MEC336          |

## Semester 2

| COURSE   | SEMESTER OF OFFER<br>(MORETON BAY) | UNITS | REQUISITES                         |
|--|------------------------------------|-------|------------------------------------|
| CIV302 Concrete Design and Technology                  | • Semester 1, Semester 2           | 12    | Pre:<br>CIV200                     |
|  |                                    |       | Anti:<br>ENG451 and CIV451         |
| CIV304 Water and Wastewater                            | • Semester 1, Semester 2           | 12    | Pre:<br>CIV202 or MEC200 or ENG211 |
|  |                                    |       | Anti:<br>CIV400                    |
| ENG305 Engineering Management                          | • Semester 2                       | 12    |                                    |
| ENS254 Earth Observation: Remote Sensing and Surveying | • Semester 2                       | 12    |                                    |

## Semester 1

| COURSE   | SEMESTER OF OFFER<br>(MORETON BAY) | UNITS | REQUISITES  |
|--|------------------------------------|-------|---|
| CIV401 Sustainable Transport Systems           | • Semester 1                       | 12    | Pre:<br>Enrolled in Program GC002, GD002, MC002, GC006, GD006, MC006, SC410 or SC425  |
| CIV402 Advanced Structural Analysis and Design | • Not Currently Offered            | 12    | Pre:<br>(CIV300 and (CIV302 or CIV451) and enrolled in SC410) or (Enrolled in Program GC002, GD002, MC002, GC006, GD006 or MC006) |
| ENG406 Engineering Project 1                   | • Semester 1, Semester 2           | 24    | Pre:<br>Enrolled in Program SC404, SC405, SC410, SC411 or SC425   |
|  |                                    |       | Anti:<br>ENG401   |

[usc.edu.au/sc410](http://usc.edu.au/sc410)

University of the Sunshine Coast | CRICOS Provider Number: 01595D | Correct as at 5 May 2024

Study options and teaching period of offer can vary depending on the study location. For full details, visit [usc.edu.au](http://usc.edu.au).

## Semester 2

| COURSE                           | SEMESTER OF OFFER<br>(MORETON BAY) | UNITS | REQUISITES   |
|----------------------------------|------------------------------------|-------|--|
| CIV403 Environmental Engineering | • Semester 2                       | 12    | Pre:<br>Enrolled in Program GC002, GD002, MC002, GC006, GD006, MC006 or SC410 or SC425<br><br>Anti:<br>CIV404                              |
| ENG407 Engineering Project 2     | • Semester 1, Semester 2           | 24    | Pre:<br>ENG406 and enrolled in Program SC404, SC405, SC410, SC411 or SC425<br><br>Anti:<br>ENG402  |
| MEC403 Computational Analysis    | • Semester 2                       | 12    | Pre:<br>Enrolled in Program GC002, GD002, MC002, GC003, GD003, MC003, GC006, GD006, MC006, SC410 or SC411<br><br>Anti:<br>MEC303 or ENG303 |

## Program requirements and notes

In order to graduate you must:

- Successfully complete 384 units as outlined in the Program Structure
- Complete a minimum of 60 days of suitable work experience. Students must meet all costs associated with the acquisition of practical experience to satisfy this requirement

### Program notes

- Completing this program within the specified (full-time) duration is based on studying 48 unit points per semester (normally 4 courses) and following the recommended study sequence
- The unit value of all courses is 12 units unless otherwise specified
- It is each students responsibility to enroll correctly according to your course requisites, program rules and requirements and be aware of the academic calendar dates
- Courses within this program are assessed using a variety of assessment methods including essays, seminar presentations, reports, in-class tests and examinations. Not all courses will necessarily include all methods
- As part of your UniSC program, you may apply to Study Overseas to undertake courses with an overseas higher education provider
- Refer to the Managing your progression page for help in understanding your program structure, reviewing your progress and planning remaining courses.

### WIL notes

- Refer to Engineering - Work Experience

[usc.edu.au/sc410](http://usc.edu.au/sc410)

University of the Sunshine Coast | CRICOS Provider Number: 01595D | Correct as at 5 May 2024

Study options and teaching period of offer can vary depending on the study location. For full details, visit [usc.edu.au](http://usc.edu.au).