#### Bachelor of

# Engineering (Civil) (Honours)



# Moreton Bay, Semester 1 2023

## 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).

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 (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: MTH102
SCI107 Physics	Semester 1	12	Anti: SCI108 or SCI507

#### Semester 2

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

#### Semester 1

COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
CIV201 Geotechnical Engineering	Semester 1	12	Pre: ENG105 or ENG102
CIV202 Hydraulics and Hydrology	Semester 1	12	Pre: SCI107
			Anti: ENG330
MEC221 Mechanics of Materials	Semester 1	12	Pre: ENG102 or ENG105
			Anti: ENG221
MTH201 Calculus II and Linear Algebra	Semester 1	12	Pre: MTH104 or MTH202
Semester 2			
COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
CIV200 Structural Analysis	Semester 2	12	Pre: ENG105 or ENG102
CIV203 Construction Technology	Semester 2	12	Pre: ENG105 or ENG102
			Anti: ENG340
ENG206 Sustainable Engineering (Design)	Semester 2	12	Pre: ENG104
MTH203 Numerical Analysis	Semester 2	12	Pre: MTH202 or (MTH103 and MTH104)
			Anti: MTH532 or MTH312
Semester 1			
COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
CIV300 Structural Design	Semester 1	12	Pre: CIV200
			Anti: ENG212
CIV301 Road and Traffic Engineering	Semester 1	12	Pre: ENG104 or ENG202 or

ENG206

			Anti: ENG422
CIV305 Structural Modelling	Not Currently Offered	12	Pre: CIV200
ENG306 Engineering System Design	Semester 1	12	Pre: ENG206 or ENG104
			Anti: MEC336
Semester 2			
COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
CIV302 Concrete Design and Technology	• Semester 1, Semester 2	12	Pre: CIV200
			Anti: ENG451 and CIV451
CIV304 Water and Wastewater	• Semester 1, Semester 2	12	Pre: CIV202 or MEC200 or ENG211
			Anti: CIV400
ENG305 Engineering Management	• Semester 2	12	
ENS254 Earth Observation: Remote Sensing and Surveying	• Semester 2	12	
Semester 1			
Semester i			
COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
CIV401 Sustainable Transport Systems	• Semester 1	12	Pre: Enrolled in Program GC002, GD002, MC002, GC006, GD006, MC006, SC410 or SC425
CIV402 Advanced Structural Analysis and Design	Not Currently Offered	12	Pre: (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: Enrolled in Program SC404, SC405, SC410, SC411 or SC425
			Anti:

ENG401

#### Semester 2

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