Bachelor of

Engineering (Electrical and Electronic) (Honours)

Moreton Bay, Semester 2 2022

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 (9) 96 units

ELC200 Digital Logic and Computer Programming
ELC206 Analog and Digital Electronics
ELC207 Communications Engineering
ENG200 Professional Practice(0 units)
ENG206 Sustainable Engineering (Design)
MCH201 Systems and Signals
MCH202 Electrical Machines and Drives
MTH201 Calculus II and Linear Algebra
MTH203 Numerical Analysis

Graduate courses (14) 192 units

ELC300 Electronic Design
ELC302 Digital Signal Processing
ELC305 Power Electronics and System Analysis
ENG305 Engineering Management
ENG306 Engineering System Design
MCH302 Robotics and Autonomous Systems
MCH303 Engineering Computer Applications and Interactive Modelling
MEC308 System Dynamics and Control
ELC401 Advanced Digital Communications
ELC403 Electrical Power Distribution Engineering
ELC404 Advanced Digital and Embedded Systems
ENG406 Engineering Project 1(24 units)
ENG407 Engineering Project 2(24 units)
MCH402 Advanced Control Systems Engineering

Honours

The Bachelor of Engineering (Electrical and Electronic) (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).

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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 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
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

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Semester 2

COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
ELC200 Digital Logic and Computer Programming	• Semester 2	12	Pre: ENG103 or ENG106
ELC207 Communications Engineering	• Semester 2	12	Pre: ENG106 or ENG103 Anti: ELC301
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
ELC206 Analog and Digital Electronics	• Semester 1	12	Pre: ENG106 or ENG103
MCH201 Systems and Signals	• Semester 1	12	Pre: MTH104
MCH202 Electrical Machines and Drives	• Semester 1	12	Pre: SCI107
MTH201 Calculus II and Linear Algebra	• Semester 1	12	Pre: MTH104 or MTH202

Semester 2

COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
ELC300 Electronic Design	• Semester 2	12	
ENG305 Engineering Management	• Semester 2	12	
MCH302 Robotics and Autonomous Systems	• Semester 2	12	
MEC308 System Dynamics and Control	• Semester 2	12	Pre: MCH201 or ELC202

Semester 1

COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
ELC302 Digital Signal Processing	• Semester 1	12	

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ELC305 Power Electronics and System Analysis	• Semester 1	12	Anti: ELC203
ENG306 Engineering System Design	• Semester 1	12	Pre: ENG206 or ENG104 Anti: MEC336
MCH303 Engineering Computer Applications and Interactive Modelling	• Semester 1	12	Pre: ELC200

Semester 2

COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
ELC404 Advanced Digital and Embedded Systems	• Semester 2	12	Pre: Enrolled in Program GC004, GD004, MC004, GC005, GD005, MC005, GC006, GD006, MC006, SC404 or SC405
ENG406 Engineering Project 1	• Semester 1, Semester 2	24	Pre: Enrolled in Program SC404, SC405, SC410, SC411 or SC425 Anti: ENG401
MCH402 Advanced Control Systems Engineering	• Semester 2	12	Pre: Enrolled in Program GC003, GD003, MC003, GC004, GD004, MC004, GC005, GD005, MC005, GC006, GD006, MC006, SC404, SC405 or SC411

Semester 1

COURSE	SEMESTER OF OFFER (MORETON BAY)	UNITS	REQUISITES
ELC401 Advanced Digital Communications	• Semester 1	12	Pre: Enrolled in GC005, GD005, MC005, GC006, GD006, MC006 or SC404
ELC403 Electrical Power Distribution Engineering	• Semester 1	12	Pre: Enrolled in Program GC005, GD005, MC005, GC006, GD006, MC006 or SC404
ENG407 Engineering Project 2	• Semester 1, Semester 2	24	Pre: ENG406 and enrolled in Program SC404, SC405, SC410, SC411 or SC425 Anti: ENG402

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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 student's responsibility to enrol correctly according to course requisites, program rules and requirements, and to 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

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