Bachelor of
Engineering (Electrical and Electronic) (Honours)

UniSC

LOCATION	START
Moreton Bay	Semester 1, Semester 2

Harness the power of a changing world. Electrical and electronic engineers play a role in almost every aspect of modern life, from smartphones to energy systems powering cities. Learn to design, develop and maintain systems of all shapes and sizes.

In this program you will:

- Study fundamentals of engineering, including applied maths, physics, statics and systems design
- Develop in-depth skills in electrical and electronic engineering theory, standards and practice
- Complete specialist courses in circuit design and analysis, electrical power systems (including renewable energy), robotics and automation, computer programming and more
- Understand social, economic and environmental dimensions of engineering, and the importance of sustainable development
- Develop advanced problem solving, communication and project management skills

Career opportunities

- Design, manufacture, testing and maintenance of electrical and electrical systems
- Infrastructure construction
- Data communications
- Aviation
- Mining
- Power generation and transmission
- Renewable energy
- Automotive
- Automation
- Robotics
- Domestic appliances

Accreditation

This program is currently undergoing provisional accreditation by Engineers Australia.

Post admission requirements

Students must complete 60 days of suitable engineering work experience.

CRICOS Code
0100794

Duration
4 years
Only a full-time option is available to international students on a Student visa. Online programs are not available to Student visa holders.

Indicative 2024 fees
A$30,300
Annual fee

Tuition fees are reviewed each calendar year. The fee you must pay for a given teaching period is that which has been approved by UniSC for the calendar year in which the teaching period commences

Prerequisites
English (Units 3 and 4, C)

Recommended prior study
Maths Methods and/or Specialist Maths; and Physics or Chemistry

Delivery mode
Blended Learning

Total courses
31

Total units
384

UniSC program code
SC404

Program structure

Introductory courses (8) 96 units

ENG100 Materials in Engineering
ENG101 Professional Engineering
ENG104 Engineering Design

usc.edu.au/sc404

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).

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.