Bachelor of

Engineering (Mechatronic) (Honours)

LOCATION	START
Moreton Bay	Semester 1, Semester 2

Help engineer the future. Forget about robots coming to take your job – instead, make it your job to design the robots and automated systems of the future! Mechatronics is an exciting field that combines the best of mechanical, electrical and electronic and computer engineering to create new technologies and constantly improve the systems around us.

In this program you will:

- Study the fundamentals of engineering, including applied maths, physics, statistics and system design
- Learn about robotics and autonomous systems, communication engineering, digital logic and computer programming, machine vision and more
- Get hands-on experience through 12 weeks of work experience
- Gain hands-on research project management experience

Career opportunities

- Robotics engineering
- Industrial engineering
- Product design
- Manufacturing
- Data communications
- Automotive

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
0100795

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 2025 fees
$32,420
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
SC405

Program structure

Introductory courses (8) 96 units

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

Developing courses (8) 96 units

ELC200 Digital Logic and Computer Programming
ELC206 Analog and Digital Electronics
ENG206 Sustainable Engineering (Design)
MEC200 Thermodynamics
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
ENG305 Engineering Management
ENG306 Engineering System Design
MCH300 Machine Component Design
MCH302 Robotics and Autonomous Systems
MCH303 Engineering Computer Applications and Interactive Modelling
MEC308 System Dynamics and Control
ELC404 Advanced Digital and Embedded Systems
ENG406 Engineering Project 1(24 units)
ENG407 Engineering Project 2(24 units)
MCH400 Image Processing and Machine Vision
MCH401 Actuators and Drives in Mechatronic Systems
MCH402 Advanced Control Systems Engineering

Honours

The Bachelor of Engineering (Mechatronic) (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.