

# 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.

## 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

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 2024 fees  
\$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  
SC405

[usc.edu.au/sc405](http://usc.edu.au/sc405)

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If you were issued a UniSC Letter of Offer, it will specify your study location and teaching period of offer. 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).

Developing courses (9) 96 units

ELC200 Digital Logic and Computer Programming  
ELC206 Analog and Digital Electronics  
ENG200 Professional Practice(0 units)  
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.

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