

Design and

build

the future



Bachelor of Engineering (Civil) (Honours)

Civil engineers plan, design, build and maintain the infrastructure we rely on as a civilisation – including things like buildings, roads, water systems and more. This program develops your practical skills in engineering design, project management and sustainability, and qualifies you to work as a civil engineer and help shape the world around you in Australia and overseas.

In this program you will:

- Learn how to use mathematical and scientific principles to solve a range of technical problems
- Get hands-on experience through 12 weeks of work experience with professional engineers and engineering associates
- Choose from a wide range of minors including climate change and coastal zone studies, management for engineers, mechatronic engineering and electrical and electronic engineering
- Complete a major final-year research project on a topic of your choice
- Learn from industry professionals through guest lectures that expose you to current engineering professional practice
- Recreate interactive real-life scenarios in USC's state-of-the-art visualisation studio and dedicated engineering laboratories

Exemption for first year Mathematics

High achieving mathematics students can apply for exemptions to introductory mathematics and calculus subjects. However, exempted courses will need to be replaced with engineering relevant courses to fulfil the

requirements of the degree. Apply through the School of Science and Engineering.

Post-admission requirements

Students must complete 60 days of suitable field experience.

Career opportunities

- Government agencies
- Construction companies
- Engineering consultancies
- Building industry
- Mining industry
- Research organisations

2021 Graduate Outcomes Survey

95% of USC engineering graduates find employment within four months of finishing study.

Membership

Engineering students are eligible for free membership to Engineers Australia. Once their degree is completed they are eligible for Graduate membership.

This program is internationally recognised to allow you to work in Australia and overseas.

MORE INFORMATION

Contact the International Office
study@usc.edu.au
+61 7 5430 2843

usc.edu.au/sc410 | CRICOS code: 078425G

University of the Sunshine Coast | CRICOS Provider Number: 01595D | Correct as at 29 November 2021
Note: Study options and semester of offer can vary depending on the study location. For full details, visit usc.edu.au.



Rise, and shine.

PROGRAM STRUCTURE

Introductory courses (8) 96 units

ENG101 Foundations of Engineering
ENG102 Engineering Statics
ENG103 Introduction to the Internet of Things
ENG104 Introduction to Engineering Design
MTH103 Introduction to Applied Mathematics
MTH104 Introductory Calculus
SCI107 Physics
SCI110 Science Research Methods

Developing courses (8) 96 units

CIV200 Structural Analysis and Computer Modelling
CIV201 Soil Mechanics
ENS253 Geographic Information Science and Technology
MEC200 Thermofluids 1
MEC221 Mechanics of Materials
MEC225 Engineering Materials
MTH201 Calculus II and Linear Algebra
MTH203 Numerical Analysis

Graduate courses (12) 144 units

CIV300 Structural Engineering
CIV301 Design of Roads and Drainage
CIV330 Engineering Hydrology
CIV340 Construction Technology
CIV400 Water Supply and Wastewater Treatment systems
CIV401 Sustainable Transport Systems
CIV451 Concrete Structures and Technology
ENG302 Engineering Project Management
ENG304 Engineering Research Methodology
ENG401 Engineering Project 1
ENG402 Engineering Project 2
CIV404 Engineering Sustainable Design

Minor courses (4) 48 units

Students must select one of the following minor study areas:

- Climate Change and Coastal Zone Studies
- Electrical and Electronic Engineering (for Civil Engineers)**
- Entrepreneurship
- Environmental Studies for Engineers[^]
- Management for Engineers[^]
- Mechatronic Engineering (for Civil Engineers)**
- Mechanical Engineering (for Civil Engineers)
- Public Health for Engineers[^]
- Town Planning Studies[^]
- Visualisation and Animation
- Wider Engineering Studies

[^]Not available at Moreton Bay campus

**Not available at Sunshine Coast campus

Honours

The Bachelor of Engineering (Civil) (Honours) may be awarded with Honours. The class of Honours to be awarded to a student is dependent upon:

- the percentage results achieved by study or transfer in twelve courses (144 units) as specified in the table below; and
- the student achieving at least 65% in **ENG402** Engineering Project 2.

COURSES

CIV201 Soil Mechanics
CIV300 Structural Engineering
ENG302 Engineering Project Management
CIV301 Design of Roads and Drainage
ENG304 Engineering Research Methodology
ENG401 Engineering Project 1
ENG402 Engineering Project 2
CIV404 Engineering Sustainable Design
CIV400 Water Supply and Wastewater Treatment systems
CIV451 Concrete Structures and Technology
CIV401 Sustainable Transport Systems
MTH203 Numerical Analysis

A student must complete a minimum of 8 courses (96 units) in the table and the research project for an honours grade to be awarded.

The minimum levels of achievement normally required for each class of honours are shown in the following table:

HONOURS RESULTS CLASSIFICATION	OVERALL PERCENTAGE ATTAINED IN SPECIFIED COURSES*
Honours Class I	80% - 100%
Honours Class IIA	70% - 79%
Honours Class IIB	60% - 69%

*The percentage result shall be rounded up if ≥ 0.5 or rounded down if < 0.5 .

Note: Program structures are subject to change. Not all USC courses are available on every USC campus.