Bachelor of Engineering (Honours)/Bachelor of Data Science (International students)

Program code
1611

Available at
Gold Coast Campus

Duration
5 years full-time

Credit points
400

Indicative fee
$40,500.00* per year (more)
* 2024 indicative annual fee

Entry requirements
6.5
IELTS (Academic) (more)

CRICOS code
0101650

Commencing in
Trimester 1 and Trimester 2

Prerequisites
NIL

Assumed knowledge
Any General or Applied English subject (Units 3 and 4, C)
Mathematical Methods (Units 3 and 4, C)

Apply Now

About this program

As factories and other engineering environments transform into an industrial Internet of Things, the ability to analyse vast quantities of data to extract relevant intelligence is an increasingly and highly sought-after skill.

Data science provides a broad knowledge of the exploration, gathering, manipulation, visualisation, automation and interpretation of data using digital platforms and can be applied to enable real-time performance optimisation.

This double degree will enable you to provide data-based insights based on your specific expertise in engineering, to improve decision-making, reduce costs and increase efficiencies.

You'll gain knowledge in your chosen engineering major and skills to access the insights large data sets provide and lead the way in translating data into actionable information including manipulation, modelling, interpretation and visualisation, using a range of digital platforms and tools.

In your final year, you can enhance your employability through an industry placement to gain practical experience and valuable industry networks.

You'll also graduate with a degree accredited by the national engineering body (Engineers Australia) and be fully equipped to work in local, national and international sectors.

Engineering majors (offered at the Gold Coast)

- Civil Engineering
- Electrical and Electronic Engineering
- Mechanical Engineering
- Software Engineering

My attendance during the program

Attendance information

The Bachelor of Engineering (Honours)/Bachelor of Data Science is available full-time and part time on-campus at the Nathan and Gold Coast campuses. The program includes some Trimester 3 core courses.

If you are an International student on a student visa, you must ensure that you enrol in a way that will allow you to complete your enrolment within the expected program duration as stated on your Confirmation of Enrolment (CoE).

My career opportunities

My career opportunities

Civil Engineering

Civil engineers provide a major contribution to society by supporting the design and development of essential services, and by managing and improving the built environment. Demand for civil engineering professionals has grown and is expected to continue be an area of high demand. You could find employment in jobs such as chief civil engineer, construction engineer, municipal engineer, structural engineer, transport engineer, water supply distribution engineer, project manager and consulting engineer.

Electrical and Electronic Engineering
Electrical devices reach into all aspects of our lives in the form of heating and cooling, lighting and power, communications and computing, entertainment and information systems. As a graduate you will be prepared to work in any of these areas. Electrical and electronic engineers work with senior administrators, civil and mechanical engineers, computer scientists and various workers in the business, building and construction industries. The essential nature of an electrical engineers' role places them in the position to influence the development and application of new and emerging technologies. This includes the fast-growing energy industry. You could work to incorporate locally generated renewable energy resources into our more conventional supply systems, helping to reduce costs, save energy and alleviate global warming. Electrical and electronic engineering is a career for people who want to make a difference.

Mechanical Engineering
Mechanical engineering is the most diverse of all the engineering disciplines, which means you will be able to use your skills in a variety of avenues including design, research, development or production. As a graduate, you will be qualified for a career in medical, automotive, aerospace, renewable energy, marine and sports-related sectors. Not all engineering graduates work as engineers - the transferrable skills and methodology developed through your degree provide a springboard to any career where critical thinking, the ability to analyse and investigate new information and evidenced-based decision making are valued.

Software Engineering
As a graduate, you will be prepared for a career in software development and be equipped to meet the demands of the rapidly changing software industry. You will find employment as a software architect, software developer, software engineer, software tester, IT project manager, systems analyst, security specialist, computational scientist, programmer, networking and communications specialist, and in research and development. Not all engineering graduates work as engineers - the transferrable skills and methodology developed through your degree provide a springboard to any career where critical thinking, the ability to analyse and investigate new information and evidenced-based decision making are valued.

Data Science
Never have we collected so much data about absolutely everything. From things that happen naturally, like climate change or the birth of galaxies, to all the social businesses, individual movements, corporate decisions and human activities. The data is there for its exploitation by machine learning technology, big data, data mining and other artificial intelligence technologies that coupled with traditional statistical analysis enable to produce insights into the future. Nothing is more valuable than anticipation, and data scientist are finding jobs in multiple disciplines.

What are the fees?

International students

An International student is one who is not:

- an Australian or New Zealand citizen or
- a Pacific Engagement visa holder or
- a person who has Australian permanent resident status.

Indicative annual tuition fee

The indicative annual tuition fee is calculated based on a standard full-time study load which is usually 80 credit points (two full-time trimesters).

The indicative annual tuition fee is based on current conditions and available data and should only be used as a guide. These fees are reviewed annually and are subject to change.

Tuition fees

- An International student pays tuition fees.
- Students are liable for tuition fees for the courses they are enrolled in as at the census date.
- The tuition fee for students who commence their program prior to 2014 is charged according to the approved program fee for the trimester in which the student commenced the program.
- The tuition fee for students who commence their program from 2014 onwards is charged according to the approved program fee for the trimester in which the student is enrolled.

Program fees for the Bachelor of Engineering (Honours)/Bachelor of Data Science (1611)

Fees for this program can be found on the Programs and Courses website in the "Overview and fees" section. Select your commencing year to view your fees.

Changing programs

If an International student changes to a different program they will be subject to the approved program fee for the trimester in

which they are enrolled.

Permanent resident status

If an **undergraduate student** obtains permanent resident status in Australia after commencing study in a program, and the student can provide evidence of permanent resident status prior to the census date (of the trimester in which they are enrolled), the student will be provided with a domestic fee-paying place.

The student may then apply for a Commonwealth supported place at the next admission period provided that the student satisfies the conditions for transfer from a domestic fee-paying place to a Commonwealth supported place as set out in the Undergraduate Programs Admission Policy.

If a **postgraduate student** obtains permanent resident status in Australia after commencing study in a program, and the student can provide evidence of permanent resident status prior to the census date (of the trimester in which they are enrolled), the student will automatically be considered for a Commonwealth supported place (subject to availability) or a domestic fee-paying place as applicable for the program.

If a **research student** obtains permanent resident status in Australia after commencing study in a program, and the student can provide evidence of permanent resident status prior to the census date (of the trimester in which they are enrolled), the student will automatically be considered for a Commonwealth Government Research Training Program (RTP) Fee Offset or a domestic fee-paying place as applicable for the program.

Further information

- Fees and Charges Procedure
  - 3.6 - Fees for International Students
  - 3.9 - Administrative and Miscellaneous Charges
  - Fees and Charges Schedules
- Cost of studying in Australia

Additional fee information

Additional costs

Throughout your program you may be required to pay for the following items:

- personal protective equipment; steel-cap boots required for some site visits