Bachelor of Engineering (Honours) (Domestic students)

Program code
1542

Available at
Nathan Campus

Duration
4 years full-time
8 years part-time

Credit points
320

Indicative fee
$9,000.00* per year (more)
* 2024 indicative annual CSP fee

Entry requirements
70.00
ATAR/RANK 2024
(more)

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)

About this program

This is your chance to have an impact on the way the world works. You could have the opportunity to make your mark on major global systems and infrastructure or be at the forefront of localised urban projects. When you choose this degree, you'll be engineering from day one.

In your first year, you'll develop a strong foundation in basic science and engineering principles. You'll study a range of engineering areas, letting you decide which area interests you the most. We're strong believers in `learning by doing', so this degree has a strong practical focus. You'll learn from teachers who are passionate about engineering and the difference it makes in the world, so you'll get to experience their energy in your studies.

Industry and expert connections

In your second year you'll choose your preferred major so you can focus on the area you feel passionate about. Learning from industry kicks into another gear, and you'll participate in genuine engineering projects. You'll also hear from the very best, with guest lecturers explaining their vision and the results of significant projects. You'll have direct access to them for questions and advice as part of our smaller more personalised experience.

Entering your final year, you'll take your skills and work with one of our industry partners here or overseas, undertaking a trimester-long project through our capstone Industry Affiliates Program.

Graduate outcomes

As a graduate you'll have the hands-on skills that employers tell us they're after. Plus, because this is an accredited degree, you will have met Engineers Australia stage one competencies. This degree is also internationally recognised, which means you can put your skills into practice right around the world.

Majors

- Civil Engineering (Nathan, Gold Coast)
- Electronic Engineering (Nathan)
- Electronic and Energy Engineering (Nathan)
- Electronic and UAV Engineering (Nathan)
- Electrical and Renewable Energy Engineering (Gold Coast)
- Electrical and Electronic Engineering (Gold Coast)
- Environmental Engineering (Nathan)
- Mechatronics (Nathan)
- Mechanical Engineering (Gold Coast, Nathan)

Global Mobility

Students may be eligible to do an international field trip, organised by the academic staff. This may count towards a component

of the degree, depending on the structure.

My attendance during the program

Attendance information

The Bachelor of Engineering (Honours) program is offered full-time at the Gold Coast and Nathan campuses and delivery is via internal mode (on-campus) with a Trimester 1 and 2 intake only.

This program includes compulsory study in Trimester 3. Students who commence in Trimester 2 should note that you will be required to study in Trimester 3 for the first year of the program.

Student Income Support

To be classed as a full-time student, you are required to enrol in a minimum number of credit points each standard study period. The minimum credit points for full-time enrolment in this program is 30 credit points.

Trimester 1 and Trimester 2 are deemed standard study periods. As Trimester 3 is a non-standard study period, continuing students moving from one year to the next will not be required to study during this trimester to be eligible for student income support.

Domestic students who commence in Trimester 3 may be eligible for student income support from the onset of study provided they are enrolled full-time in this study period.

Please refer to the Australian Government website for more details.

Work-integrated learning

An integrated program of exposure to industry practice will be built into the program. Practising engineers will be directly involved in the learning and teaching process, particularly through involvement with laboratory and tutorial sessions. Staff will draw upon their industry/professional experience in choosing their laboratory activities, their projects and/or case studies and problems. Field trips will enhance awareness of the current industry/professional practice. The final year Professional Practice course provides a WiL experience, integrating technical expertise with the practical issues of professional/industry practice. A co requisite of this course is the completion of a minimum of 12 weeks (60 days) of approved experience in an engineering practice environment (or a satisfactory alternative).

The pinnacle of our work-integrated learning experience is the 40 credit point Industry Affiliates program (IAP) wherein students will undertake a trimester-long capstone project. Students are encouraged to conduct their IAP-Thesis project in industry and our IAP office will assist in finding placements for students who might have been unable to find their own placement. Total work placement (hours): 408.

My career opportunities

My career opportunities

Key employment sectors*

- Civil engineering
- Communications
- Energy
- Technology
- Medical
- Information Technology

Potential job outcomes

- Civil engineer
- Electronic engineer
- Electrical engineer
- Mechanical engineer

*Source: *Australian Government Job Outlook*

Your future career will be guided by your choice of major. Here's an overview of where your choice could take you:

Civil Engineering (Gold Coast and Nathan)

Civil engineers support the design and development of essential services and manage and improve the built environment. By studying civil engineering, you'll develop your knowledge in the planning, design and construction of buildings and infrastructure. 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. If you want a career creating tomorrow's cities, then this major is for you.

Electronic Engineering (Nathan)

In our modern world, we're surrounded by technologically advanced electronic devices. The phone in your pocket, your computer, or the jet airliner flying overhead only exist because of advanced electronic circuits developed by electronic engineers. In this major, you'll focus on the development, construction and design of electronic parts and systems, ranging from everyday items to applications for large corporations and industries. You could find employment in areas such as energy production, transport control systems development, and communications, including satellite navigation, broadband services and telecommunications.

Electronic and Energy Engineering (Nathan)

The energy sector is a fast-advancing engineering discipline, with huge investments expected in the coming decades. You will be prepared for a career in areas such as electronics design and fabrication, power transmission, renewable power generation, solar energy systems, wind energy systems, electric vehicles, efficient lighting and energy research.

Electronic and UAV Engineering (Nathan)

As Unmanned Aerial Vehicles (UAVs) are rapidly finding application in many areas, the need for both certified pilots and for engineers to design and maintain these vehicles is on the rise. The Electronic and UAV Engineering major offers UAV flight training and professional pilot licence theory. Graduates will be employable as UAV pilots, UAV designers, engineers in the aviation and general electronics industries. This degree is also a pathway for students wishing to be a Pilot Engineer but with a private rather than commercial licence.

Electrical and Renewable Energy Engineering (Gold Coast)

Australia has a plan to reach net-zero by 2050 and renewable energy (e.g. wind and solar) is the key to unlocking the carbon emission reduction. Thus, the investment in renewable energy generation has increased dramatically over recent years in Australia, which also creates a big job market in the renewable energy integration and energy storage sector. Renewable energy will bring opportunities to reduce carbon emissions while it also brings technological challenges to the security of the existing power grid. By studying renewable energy integration courses, you will master the renewable energy integration technologies, methods of analysis, and solutions to mitigate the new challenges. The main job markets are Australian Energy Market Operator, transmission/distribution network service providers, power industry consulting companies, solar/wind farm commissioning companies, and renewable energy development/construction companies.

Electrical and Electronic Engineering (Gold Coast)

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 engineer's 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 cut greenhouse gas emissions.

Environmental Engineering (Nathan)

Environmental professionals with strong ecological social science backgrounds are in demand both in Australia and internationally. You'll find opportunities in government departments such as Transport and Main Roads, Natural Resources and Mines, Department of Science, IT and the Arts (DSITIA) along with Environment and Resource Management. You'll also enjoy opportunities with consulting firms in the construction, mining, oil, smelting and manufacturing industries.

Mechanical Engineering (Gold Coast and Nathan)

Mechanical engineering is the most diverse of all the engineering disciplines. As a graduate, you'll be qualified for a career in medical, automotive, aerospace, renewable energy, marine and sports-related sectors.

Mechatronics (Nathan)

With specialised skills across both electronic and mechanical engineering, as a graduate you'll be prepared for work in the design, development and production of smart engineering systems and products. You'll find career opportunities across many industries including manufacturing, mining, transport and defence and emerging fields such as medical and assistive technology smart cities, precision agriculture and robotics.

Program accreditation

Program accreditation

In Australia, professional accreditation of entry to practice engineering programs is the responsibility of Engineers Australia and is normally carried out on a five-yearly cycle. Griffith University underwent this review in August 2015.

Accreditation ensures academic institutions consistently meet national and international benchmarks and engineering graduates of an accredited program are assured membership with Engineers Australia at the relevant career grade and enjoy reciprocal privileges by equivalent professional bodies overseas.

Countries such as the USA, United Kingdom, Hong Kong (SAR), New Zealand, Canada, South Africa and others that are co-

signatories to international agreements on joint recognition offer international recognition.

The Washington Accord, the Sydney Accord and the Dublin Accord recognise the substantial equivalence of accreditation systems and accredited programs across international boundaries at the Professional Engineer, Engineering Technologist and Engineering Associate levels respectively. Please refer to the International Engineering Alliance (IEA) website for more details.

Please see the Engineers Australia website for the most recent list of accredited programs.

Pathways to further study

Pathways to further study

The Bachelor of Engineering (Honours) program provides a pathway to research higher degrees with direct entry into doctoral programs for students who graduate with First Class Honours. It also provides the opportunity for gifted graduates to apply for scholarships and awards.

What are the fees?

Commonwealth supported students

- The indicative fee represents the expected average fee for an annual full-time study load (80 credit points). This is based on average study patterns across courses and the Australian Government's broad discipline areas (student contribution bands). A student's actual annual fee may vary in accordance with his or her choice of majors and electives. The Australian Government sets student contribution amounts on an annual basis.
- Find out more...

Fee-paying undergraduate (domestic) students

These fees are only applicable to domestic students who are not Commonwealth supported including:

- Full-fee paying domestic students who commenced their program prior to 2009.
- International students who have been approved to pay domestic tuition fees after obtaining Australian or New Zealand citizenship or permanent residency or a permanent humanitarian visa and who have not obtained a Commonwealth supported place.

Tuition fees

- A fee-paying undergraduate 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 is charged according to the approved program fee for the trimester in which the student is enrolled.
- Find out more...

FEE-HELP

Eligible undergraduate fee-paying students may defer their tuition fees by taking out a FEE-HELP loan which is part of the Higher Education Loan Program (HELP). Payment of the loan is via the taxation system when income reaches a specified level.

- Higher Education Loan Program (HELP)

Further information

- Calculating tuition fees
- Calculating your EFTSL
- Fees and Charges Procedure
    - 3.2 - Fees for Undergraduate Students (Non-international)
    - Fees and Charges Schedules
- Financial help and support

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