



Bachelor of Engineering (Honours) (Domestic students)

Program code	Entry requirements	Prerequisites
1546	12	English (4SA)
Available at Gold Coast Campus	Overall position (OP) 2019 73	Maths B (4SA)
Duration 4 years full-time 8 years part-time	Rank 2019 (more) OR VET qualification Certificate IV (Additional requirements)	Assumed knowledge Nil
Credit points 320	Offered in Trimester 1 and Trimester 2	OP 1-6 Guarantee If you receive an OP 1-6 or equivalent and meet subject prerequisites, you are guaranteed a place in this program.
Indicative fee \$9,359.00* per year (more) * 2019 indicative annual CSP fee Calculate your fees		

Why choose this program?

If you are inspired by great engineering achievements, this degree is for you. As part of your core first year, you will develop a strong foundation in basic science and engineering principles, practice and management. You will study over a range of engineering areas, to help you decide where your engineering passion lies. You will learn about current industry practices from passionate academics who are leaders in their fields. Our degree has a strong practical focus and from your first year provides you with the opportunity to develop work-ready skills as our teaching focuses on 'learning by doing'.

From your second year you will study your preferred major and focus more on your selected area of interest. We maintain strong links with industry ensuring our degrees are relevant and you benefit from leading guest lecturers and participation in real engineering projects. In your final year you will take these skills and work with our Industry partners here or overseas to undertake a trimester long project through our capstone Industry Affiliates Program.

You will graduate as a well-grounded, qualified professional with advanced engineering knowledge and be prepared to take advantage of a range of opportunities in Australia and overseas.

Majors

- Civil Engineering (Gold Coast and Nathan)
- Electronic Engineering (Nathan)
- Electronic and Energy Engineering (Nathan)
- Electronic and UAV Engineering (Nathan from 2018)
- Electrical and Electronic Engineering (Gold Coast)
- Environmental Engineering (Nathan)
- Mechanical Engineering (Gold Coast) (Nathan from 2019)
- Software Engineering (Nathan)

Civil Engineering (Gold Coast and Nathan)

Look around you - much of the physical infrastructure that makes up our modern society is made possible by Civil engineers. 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. By studying civil engineering you will develop your knowledge in the planning, design and construction of buildings and infrastructure such as: roads, bridges and highways, rail networks, irrigation, drainage and flood mitigation systems, airports, water and wastewater treatment plants, port harbours and residential homes. If you want to get a career creating tomorrow's cities, then this is the degree for you.

Electronic Engineering (Nathan)

We are surrounded by technologically advanced electronic devices and gadgets that make our modern lifestyle possible. These are all developed by electronic engineers.

In this major you will gain a foundation in electronics, as well as develop the hardware and software skills needed for the

design, development and engineering of the electronic circuits used for many applications. You will learn about computer-based products and essential systems in our society. You will focus on the development, construction and design of electronic parts and systems - ranging from everyday items to applications for large corporations and industries. Choose to specialise in computing, communications and microelectronics by selecting from our range of minors.

Electronic and Energy Engineering (Nathan)

The energy sector is one of the fastest growing areas in engineering. Our future as an advanced society depends upon our ability to produce, store and use energy in a sustainable way. In this major, you will acquire the knowledge of an electronics engineer, while learning to develop high technology systems that generate, store, distribute and use power in a highly efficient way. This will make you highly employable in the fast-growing energy industry and in any other electronic engineering roles.

Electronic and UAV Engineering (Nathan from 2018)

As Unmanned Aerial Vehicles (UAV) are rapidly finding application in many areas, the need for both certified pilots and engineers to design and maintain the vehicles grows. The Electronic and UAV Engineering major offers UAV flight training and professional pilot license theory. The major will provide a pathway to being a highly qualified UAV pilot while giving the graduate full engineering qualifications.

Electrical and Electronic Engineering (Gold Coast)

Electrical engineers design and create devices and equipment that use electrical energy and underpin modern economies, contributing to our quality of life. Electrical engineers work with equipment ranging from heavy power generators to tiny computer chips. In this major, you will learn about the fundamentals of electrical engineering and gain knowledge and a range of practical skills. You will learn how to design, develop, adapt, install, test and maintain electrical components, circuits and systems used for computer systems, entertainment, transport and other industrial applications. If you are interested in working with your hands, technical equipment and making things happen, an electrical and electronic engineering career could be for you.

Electrical and electronic engineers work with senior administrators, civil and mechanical engineers, computer scientists and various workers in the business, building and construction industries. In this discipline, you'll learn about the fundamentals of electrical and electronic engineering and gain knowledge and technical skills in areas such as communications, power machinery, and digital signal processing. You will develop a range of practical skills and be able to design, develop, adapt, install, test and maintain electronic components, circuits and systems used for computer systems, entertainment, transport and other industrial applications.

Environmental Engineering (Nathan)

The wants and needs of a rapidly expanding, global population means it has never been more important to shape our environmental future. Environmental engineering is your pathway to protecting the natural environment and its resources by ensuring that we minimise the adverse effect we may have on it.

In this major you will develop an understanding of complex environmental problems and issues, and of the challenges facing environmental sustainability. You will learn to design creative engineering solutions and manage key projects associated with environmental protection in the area of air quality, water & wastewater, and waste management. If you want an environmental career that can change the world, this is the degree for you.

Mechanical Engineering (Gold Coast) (Nathan from 2019)

Mechanical engineering is one of the broadest engineering disciplines including the design, analysis, manufacture and maintenance of mechanical systems. This major is built on a strong foundation of theory and reinforced by practical experience - all underpinned by our ethos of learning by doing. You will be involved in the development and use of new materials and technologies, as well as design and analysis using advanced software and computer systems.

Software Engineering (Nathan)

Software engineers design and implement the software systems our society depends on - from biotechnology to sports and submarines. In this major, gain a foundation in mathematics, computer systems, engineering principles and information systems. You will learn about software engineering theory and software development as well as program construction. Our teaching focuses on learning by doing so you will also complete project work developing software for real clients, ensuring our graduates gain practical skills in teamwork, project management and quality management. You will also learn about international standards and industry best practice techniques.

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.

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 30 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.

My career opportunities

My career opportunities

Civil Engineering (Gold Coast and Nathan)

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 to be an area of high demand. You will 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.

Electronic Engineering (Nathan)

Our graduates find opportunities in Australia and overseas undertaking the research, design, development and manufacture of electronic systems. You may also find work with employers who specialise in computer-based hardware and software systems. You will be equipped for a career in areas such as communications, including satellite navigation, broadband services and telecommunications, energy production, and transport control systems development. If you specialise in microelectronics you can also look to work in microelectronics design and fabrication. You will find employment in many multinational companies, as well as in specialist technology companies.

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 from 2018)

Graduates will be employable as UAV pilots, UAV designers, Engineers in the aviation and general electronics industries. This program is also a pathway for students wishing to be a Pilot Engineer but with a private rather than commercial licence.

Electrical and Electronic Engineering (Gold Coast)

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 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 alleviate global warming. Electrical and electronic engineering is a career for people who want to make a difference.

Environmental Engineering (Nathan)

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

with local government and research organisations.

Mechanical Engineering (Gold Coast) (Nathan from 2019)

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.

Software Engineering (Nathan)

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.

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 fee is indicative of an annual full-time load (80 credit points) in a program categorized to one of the Australian Government's three 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...](#)