The University of Tasmania has recently re-confirmed its position as one of Australia’s best universities in a wide range of disciplines, as ranked by the internationally recognised QS World University Rankings for 2015.

The international ratings agency evaluate more than 3000 universities for academic reputation, employer reputation and research impact.
We help you become who you want to be

From the development of the hydroelectricity industry to today’s manufacturing, maritime and agricultural industries, our engineers have always played a pivotal role for Tasmania and the University.

An engineering degree offers one of the most interesting, diverse and mobile careers.

Engineers balance creative design, analysis and applied science. They design, build and manage structures, machines, manufacturing processes and infrastructure. They are involved in key decisions of almost every industry, including the construction of buildings, roads and major infrastructure projects, product development, electronics and transport. They adopt current thinking, science and technology to solve problems in almost every facet of our lives.

Inter-disciplinary research, a commitment to a breadth of knowledge and hands-on training, are just some of the strengths of the University. Our research strengths include optimisation of alternative energy systems, such as hydro and wind-power systems, high-speed catamarans, and biomedical implants. We have strong industry partnerships, especially in renewable energy and power systems and industrial control systems.

Our engineers have always played a pivotal role for Tasmania and the University.
Studying Engineering

Who Studies Engineering?
People with inquiring minds who love to problem-solve, create, refine and build. Engineers are collaborators. They work with designers, scientists, technicians and other specialists with the drive of discovery, the will to meet a challenge and the desire to create something new.

If you enjoy maths and science, an Engineering degree is one of the most sought after degrees at university. Engineering requires more commitment in class, lab and study time than most university degrees, but it provides rewards that go way beyond the classroom. Group work, projects and competitions provide extra challenges and opportunities to work alongside world-class academics and researchers.

You’ll be encouraged to find opportunities for international exchange. You will also be required to complete a prescribed amount of industrial experience work during vacations. Where possible, the work experience placements are arranged through the University, and you’ll be paid by your employer at the appropriate award rate.

Career opportunities with Engineering degrees
Graduates qualify for technical positions but often move into management roles within companies, organisations or consultancies across many industries.

- Aerospace
- Biomedical
- Building and Construction
- Civil and Environmental Engineering
- Computer Systems
- Government Agencies
- Health Industry
- Industrial Electronics
- International Development
- Manufacturing
- Mining and Exploration
- Petrochemical
- Power Generation and Transmission
- Property Development
- Robotics and Automation
- Software Engineering
- Telecommunications
- Transport

Your study opportunities
Different students have different goals. If you simply want to give yourself the best start for a better chance at a great career, a degree course is an excellent option.

If you want to pursue a passion or want more specialist knowledge and expertise in a chosen field, a double degree or a degree with honours can give you expanded career opportunities.

Degrees
The Engineering degree usually takes four years to finish (full-time). A full-time study load is 8 units per year.

In Engineering, all students share a common first three semesters before choosing a specialist discipline. In 4th year, students also undertake a substantial high-level, two-semester project within their engineering discipline.

Students are also required to complete 12 weeks of industrial experience, typically undertaken in summer between 3rd and 4th year.

Specialist studies
Engineering students study a breadth of core subjects then select the area of engineering to which they are best suited and in which they wish to specialise.

An Engineering specialisation is completed through theory and major laboratory work in:

- Biomedical
- Civil
- Civil and Environmental
- Computer Systems
- Electrical Power
- Electronics and Communications
- Geotechnical
- Mechanical, or
- Mechatronics

▼A distinctive, energising and rewarding university experience for all students.
Double or Combined degrees
Double degrees are pretty much exactly how they sound. A double degree merges the core requirements of two different degrees. This lets you graduate with the equivalent of two degrees faster than it would take to do two separate degrees. Double degrees can give you greater depth of knowledge in more than one area. This gives you more career options.

If you’re academically capable and want to challenge yourself, a double degree is an ideal way to get the most from your time at university.

At the University of Tasmania a Bachelor of Engineering (Honours) and Bachelor Science double degree is available.

Alternative entry pathways
If you don’t have the prerequisites or ATAR score for direct entry into your chosen degree, an alternative entry pathway can help you get into the course you want.

One option is to complete foundation units to meet a prerequisite requirements, such as mathematics or physics. These units can be taken individually and are a way to quickly bridge a prerequisite gap so you can start your studies faster.

The Bachelor of General Studies (Engineering pathway) is designed for applicants who do not meet general Engineering entrance requirements or for those who want a more supported introduction to their studies. You undertake six foundation level units and two introductory level units. Successful completion of the Bachelor of General Studies (Engineering pathway) guarantees entry into a Bachelor of Engineering (Honours) with credit.

A TAFE advanced diploma in Civil, Mechanical or Electrical Engineering may be accepted as an alternative prerequisite for admission to the Bachelor of Engineering (Honours) course with advanced standing.

Professional recognition
Our Engineering degree is accredited by Engineers Australia and recognised internationally via the Washington Accord. Graduates may also be eligible for memberships within their specialist discipline.

All specialisations of the Bachelor of Engineering (Honours) are fully accredited by Engineers Australia (EA) as providing qualification for Graduate membership of the Institution, except biomedical which has provisional accreditation, and civil and environmental for which accreditation is being sought.

Our degree is also recognised by Engineers Australia (EA) as providing qualification for Graduate membership of the Institution. It is also recognised in a number of other countries such as Canada, China, Ireland, Japan, Korea, Malaysia, NZ, Russia, Singapore, South Africa, Turkey, UK and USA through the Washington Accord agreements between the EA and like professional bodies overseas.

The computer systems engineering specialisation is also accredited by the Australian Computer Society for graduate entry and the Geotechnical engineering specialisation is accredited by the Australian Institute of Mining and Metallurgy (AusIMM).
Your study experience

The University learning experience goes beyond lectures, labs and tutorials.

The teaching environment at the University of Tasmania aims to provide a distinctive, energising and rewarding university experience for all students. Led by experienced and approachable staff, your learning could also include an international study exchange, valuable industry placement and practical project work.

Study Abroad
Our international exchange program offers opportunities for a semester of study at universities around the world, including partner institutions in the USA.

Study Abroad Scholarships
The University actively encourages our students to extend their learning opportunities by undertaking international study exchange. To facilitate this, we offer a range of scholarships and financial assistance.

More info at utas.edu.au/education/international/international-student-exchange

Industry experience
Engineering students are required to complete 12 weeks of relevant industrial experience before being eligible to graduate. Most commonly students complete this in the summer between their 3rd and 4th years and the School is often able to assist in finding paid work placements.

Formula SAE
The Formula SAE Competition is a national competition between universities. A team of students conceive, design, fabricate and compete a small, formula-style racing car. The competition is particularly relevant for those who wish to pursue a Mechatronic or Mechanical Engineering specialisation, but the team needs and attracts cross-discipline interest.

STEM Student Ambassadors
Undergraduate Engineering students can serve as STEM (Science, Technology, Engineering and Mathematics) Student Ambassadors. The goals of the program are to provide exceptional STEM education, outreach, and community engagement in schools and elsewhere. The program provides opportunities and experiences that will lead to personal and professional growth for participants, particularly improving public speaking skills.

Additional learning resources
Our University provides extensive teaching laboratory facilities that provide valuable hands-on experience in all engineering specialisations. Students also experience the latest in technology development and application, through challenging team projects.

The Central Science Laboratory at our University provides Engineering students with high-level electronic and mechanical engineering workshop support, ranging from design, programming and construction of unique analytical equipment through to general electronic and mechanical repairs.

A series of dedicated labs and workshops provide our students with the latest technology and testing environments for their specialist discipline. These include:
- Aerodynamics lab
- Applied Mechanics lab
- Biomedical lab
- Communications Engineering lab
- Concrete and Structural Testing lab
- Control Systems Laboratory
- Dynamics lab
- Electronics lab
- Geomechanics lab
- Hydrodynamics lab
- Mechanical workshop
- Mechatronics lab
- Power lab
- Renewable Energy Lab
- Stress Analysis lab
- Thermodynamics lab

The University provides online academic skills tutorials to help with your research assignments, as well as access to programs designed to develop your communication, mathematical and English language skills. Students also have 24-hour access to dedicated computer labs.

Scholarships
Each year, the University offers more than 900 general and specific scholarships across all academic areas. Awards are based on merit and equity and reward excellence and improve access for new or commencing students. Application details and selection criteria for each scholarship are clearly noted on our website and within the online application.

Some specific scholarships and bursaries in Engineering:
- Caterpillar North-West Scholarship in Engineering
- Cement Australia West North-West Bursary
- Delta Hydraulics Scholarship in Engineering
- DJ Motors Tasmania University Scholarship
- Engineering Scholarship
- Larry Knight Memorial Scholarship
- MMG Rosebery Undergraduate Scholarship
- Philip John Medhurst Scholarship in Engineering
- Professor C H Miller Scholarship in Engineering
- TasPorts West North-West Bursary
- TasWater Steve Balcombe Scholarship
- West Tamar Council Scholarship in Engineering

See: utas.edu.au/scholarships-bursaries
Course information

There are nine areas you can choose to specialise in. These are:
- Biomedical Engineering
- Civil Engineering
- Civil and Environmental Engineering
- Computer Systems Engineering
- Electrical Power Engineering
- Electronics and Communication Engineering
- Geotechnical Engineering
- Mechanical Engineering
- Mechatronics Engineering

All students start their degree with a common first three semesters. These include foundation studies in civil, mechanical and electrical engineering. You then select to study one of the nine engineering specialisations.

Biomedical Engineering

Biomedical Engineering combines the principles of engineering, medicine, biology and anatomy to conceive, analyse, model, design, build & administer biomedical devices that support and enhance human life.

Civil Engineering

Civil Engineers study the design, construction, and maintenance of the physical and naturally built environment. This includes infrastructure projects including roads, bridges, tunnels, buildings and dams.

Computer Systems Engineering

This field combines the principles of engineering with the fast growing field of computer science. Graduates design not only the computer itself, but its use in controlling aircraft and ship navigation, the manufacture of steel, chemicals and drugs, high-speed trains, and many other systems and devices.

Electrical Power Engineering

These engineering studies involve the generation, transmission, distribution and utilisation of electrical energy. Power engineers are concerned with how electricity is used in the steel, mining, transportation, chemical, marine and off-shore industries. Such professionals drive forward the use of sustainable and renewable energy systems.

Geotechnical Engineering

This specialist discipline of engineering deals with how earth materials can be used for engineering purposes such as civil infrastructure or mining. This includes the study of different soil types, rocks on the surface, and natural resources or precious minerals underground.

Electronics and Communication Engineering

One of today's fastest-growing sectors involving cell-net communications, fibre optic lines, satellite TV and video. The safe navigation of ships and aircraft by radar and GPS, the fast signalling of road and rail vehicles, the bionic ear, pacemakers and life support systems are all made possible by electronic and communication engineers.

Mechanical Engineering

This branch of engineering deals with mechanical systems. It combines the principles of engineering, materials science and physics to contribute to the design, analysis, manufacture, production, maintenance and operation of all types of machinery.

Mechatronics Engineering

Mechatronics engineers design products with built-in intelligence such as active car suspensions, flight control systems, robotic vehicles, advanced medical and surgical techniques and factory automation. They also work in aviation, space technology, intelligent vehicles and security systems. They integrate instrumentation and sensors, intelligent systems, automatic control, actuators and robotics, and computing.

Civil and Environmental Engineering

Civil and Environmental Engineers understand and manage the relationship between the built and natural environments. They use multiple disciplines to create urban environments and engineering solutions that are harmonious with the natural environment.

They address issues like accessible clean water, sustainable wastewater solutions, removing pollution, promoting sustainable development, and managing the impact of natural hazards such as floods on the built environment.
Bachelor of Engineering (Honours)

Duration
Four years full-time or equivalent part-time

Prerequisites
Successful completion of TCE (Tasmanian Certificate of Education) including maths and physical sciences, or interstate equivalent, or General Entry Requirements*

Entry
February (July intakes only for students with advanced standing)

Location
Hobart, Launceston (First year only)

Course code
N4F

2015 Round 1 Clearly-in ATAR
70

All engineering courses combine core and specialist knowledge to provide a sound basis in the physical sciences, mathematics and basic engineering science, as well as a huge amount of practical experience. A major feature of the engineering course is the emphasis placed on laboratory work. Design classes provide you with opportunities to learn the techniques of designing safe and reliable designs.

You develop adaptable skills and an international outlook. You will be required to complete 12 weeks of industrial experience. In your final year, you will also get the opportunity to design and develop a prototype, from requirements and feasibility through to design and development.

Career opportunities
Engineers are well paid and get interesting positions in government, private companies, industry and consulting firms. After starting in technical positions, Engineers often move into management roles within companies and organisations. Opportunities exist in:
- Automation
- Communications
- Construction

Professional recognition
Graduates are eligible for membership of the Institution of Engineers Australia. This degree is internationally recognised by the Washington Accord.

Additional information
The Bachelor of Engineering (Honours) is offered by the Faculty of Science, Engineering and Technology at Hobart. The first year of all Engineering disciplines can also be taken at Launceston, after which students transfer to Hobart to complete their final 3 years.

Note 1: Students intending to study at Launceston should contact the School for advice prior to enrolling.

Note 2: Mid-year entry into Engineering is normally only available to students with advanced standing. We recommend contacting the Degree Co-ordinator to discuss the possibility of mid-year entry prior to submitting an application.

Bachelor of General Studies (Engineering Pathway)

Duration
One year full-time or equivalent part-time

Prerequisites
N/A

Entry
February, July

Location
Hobart, Launceston, Cradle Coast

Course code
X3N

2015 Round 1 Clearly-in ATAR
N/A

The Bachelor of General Studies – Foundation Year Pathway is the first year of the Bachelor of General Studies and is designed as an alternative entry pathway to university study. In the foundation year, students study units which provide the skills and knowledge related to their intended pathway and are provided with additional support to maximise their chances of success.

Successful completion of the Bachelor of General Studies (Engineering pathway) guarantees entry into a Bachelor of Engineering (Honours) with credit. Students who successfully complete the foundation year of the Bachelor of General Studies can exit with a Diploma of University Studies.

Areas of study
Students in the Engineering Pathway study six Foundation level units and two introductory level units. The use of technology is embedded into a range of teaching and learning activities in this course.

Career opportunities
The Bachelor of General Studies (Engineering Pathway) is an alternative entrance program for the Bachelor of Engineering (Honours), and as such, is not a stand-alone qualification with engineering career outcomes.

If you're interested in Engineering, you may also wish to look at the following undergraduate degrees in the relevant Study Theme booklets:
- Bachelor of Applied Science (Marine Engineering)
- Bachelor of Applied Science (Maritime Technology Management)
- Bachelor of Applied Science (Nautical Science)
- Bachelor of Surveying and Spatial Science
- Advanced Diploma of Applied Science (Maritime Operations – Engineering)

*General Entry Requirements are briefly outlined in the ‘How to apply’ section. Visit utas.edu.au/admissions for further details.
Financial matters

When you commence study with the University of Tasmania in a Commonwealth supported place (CSP), you must contribute towards the cost of your tuition. The amount you pay depends on which units you study and the payment method you choose.

Student contribution amounts and rules

To be eligible for a CSP you must be an Australian citizen, a New Zealand citizen or hold an Australian Permanent Resident Visa.

The student contribution is calculated based on the units of study that you enrol in. Each unit is assigned to a ‘band’ according to the subject area it comes from. The band tells us how much to charge for one Equivalent full-time student load (EFTSL), equivalent to 100 credit points, or 100% load.

Most units at the University of Tasmania are 12.5 credit points (0.125 EFTSL), so to calculate the cost of a unit we multiply the contribution amount for that designated band by 0.125. For example, the student contribution amount for a 12.5 credit point Nursing unit of study would be $6152 \times 0.125 = $1076.63.

A typical four-year degree is made up of 32 units.

HECS-HELP

The majority of university students across Australia choose to defer their student contribution until after they have commenced in the workforce. You can do this by taking out a HECS-HELP loan. HECS-HELP is available to eligible students enrolled in a CSP. This loan can cover all or part of the student contribution amount. You are eligible for HECS-HELP if you are a Commonwealth supported student and an Australian citizen or the holder of a Permanent Humanitarian Visa.

Under this option, the Commonwealth Government pays the loan amount directly to the University of Tasmania. Then, when your salary reaches the minimum repayment threshold, you will make compulsory repayments through the tax system.

To learn more, visit studyassist.gov.au

Other costs

Students are required to pay a student services and amenities fee (SSAF). In 2015, the fee is around $340 for a full-time undergraduate student.

Part-time students are charged on a pro-rata of study load undertaken. Students who are unable to pay the fee up-front can defer all or part of the fee through an element of the Higher Education Loan Program, known as SA-HELP.

The fee contributes to funding student services such as legal and health services, counselling, and sport and recreation activities.

You will also need to cover costs such as textbooks, materials, art supplies or software for your course. These costs can vary from course to course.

Accommodation and general living expenses will also vary depending on your chosen living arrangements.

To learn more about accommodation options, visit utas.edu.au/accommodation

<table>
<thead>
<tr>
<th>2015 student contribution by band</th>
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<tbody>
<tr>
<td><strong>BAND 1</strong></td>
</tr>
<tr>
<td>$6152* per full-time year (100% load)</td>
</tr>
<tr>
<td>Nursing*</td>
</tr>
<tr>
<td>Education*</td>
</tr>
<tr>
<td>Humanities</td>
</tr>
<tr>
<td>Social Studies</td>
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<tr>
<td>Behavioural Science</td>
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<tr>
<td>Clinical Psychology</td>
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<tr>
<td>Foreign Languages</td>
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<tr>
<td>Visual &amp; Performing Arts</td>
</tr>
<tr>
<td>Mathematics*</td>
</tr>
<tr>
<td>Science*</td>
</tr>
<tr>
<td>Computing</td>
</tr>
<tr>
<td>Built Environment</td>
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</tbody>
</table>

*The student contribution amounts for mathematics, statistics and science are subject to passage of the Higher Education Support Amendment (Student Contribution Amounts and Other Measure Bill 2012).

1. For pre-2010 students, the maximum annual student contribution amount that may be charged for Education and Nursing units is $4696.

2. From 1 January 2010, the maximum annual student contribution amount for commencing Commonwealth supported students undertaking Education and Nursing units of study has been increased from the ‘national priority’ rate to the Band 1 rate.

3. The increased maximum annual student contribution amounts affect only students who commence their course of study at a higher education provider on or after 1 January 2010.

4. If you are a mathematics, science, education, nursing or midwifery graduate you may be eligible for a HECS-HELP Benefit.

5. This table is a guide only. Fees are reviewed each year by the Commonwealth Government and may vary.
How to apply

Applications are made directly to the University of Tasmania.

**Year 12 applicants**

For Year 12 students, applications for Semester 1 should be submitted electronically via the University’s online application process.

The ‘timely’ application period opens in August and closes in the last week of September. Late applications will be accepted by the University, but some programs that have special requirements and will not accept late applications.

**Changing your preference**

You can change your original ‘timely’ application course preferences during the Change of Preference period in December. This allows you to modify your course selection depending on your results from your final examinations.

Learn more by visiting [utas.edu.au/apply](utas.edu.au/apply).

**Non-school leaver (mature aged) applicants**

If you are not a Year 12 student, you apply directly to the University via the online application process. As a non-year 12 student your application will be considered on a broad range of factors, including previous studies, work experience and any extra requirements specified for the course.

To meet the General Entry Requirements (GER) into an undergraduate degree, at least one of the following must be completed:

- Year 12
- Certificate IV, diploma or advanced diploma and/or
- Successful completion of a University enabling program including foundation units in any prerequisite requirements, such as chemistry, mathematics or physical sciences
- Personal competency statement demonstrating how work experience or background meets the University’s General Entry Requirements

Particular degrees may also require you to sit a Special Tertiary Admissions Test.

Visit [utas.edu.au/courses](utas.edu.au/courses) or [utas.edu.au/apply](utas.edu.au/apply) for further details.
## Quick reference guide

### Degrees

<table>
<thead>
<tr>
<th>COURSES</th>
<th>DURATION</th>
<th>Clearly-in ATAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Engineering (Honours)</td>
<td>4 yrs FT or equivalent PT</td>
<td>70</td>
</tr>
<tr>
<td>Bachelor of Engineering (Biomedical Stream) (Honours)</td>
<td>4 yrs FT or equivalent PT</td>
<td>90</td>
</tr>
<tr>
<td>Bachelor of Engineering (Marine and Offshore Engineering) (Honours)</td>
<td>4 yrs FT or equivalent PT</td>
<td>70</td>
</tr>
<tr>
<td>Bachelor of Engineering (Naval Architecture) (Honours)</td>
<td>4 yrs FT or equivalent PT</td>
<td>70</td>
</tr>
<tr>
<td>Bachelor of Engineering (Ocean Engineering) (Honours)</td>
<td>4 yrs FT or equivalent PT</td>
<td>70</td>
</tr>
</tbody>
</table>

### Double Degrees

<table>
<thead>
<tr>
<th>COURSES</th>
<th>DURATION</th>
<th>Clearly-in ATAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Engineering (Honours) / Bachelor of Science</td>
<td>5 yrs FT or equivalent PT</td>
<td>70</td>
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</table>

### Pathways

<table>
<thead>
<tr>
<th>COURSES</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of General Studies (Engineering Pathway)</td>
<td>1 yr FT or equivalent PT</td>
</tr>
<tr>
<td>University Preparation Program</td>
<td>1 yr FT or equivalent PT</td>
</tr>
</tbody>
</table>

To find more information about all University of Tasmania courses, visit [utas.edu.au/courses](utas.edu.au/courses)
KEY DATES

30 August 2015
University of Tasmania Open Day

Year-round availability
One-on-one course adviser appointments

FURTHER INFORMATION

1300 363 864
utas.edu.au