Welcome to UNSW Engineering

UNSW Sydney is the number one destination in Australia for the study of engineering. In this guide to our postgraduate coursework, you will find an overview of each available discipline, learn about our stunning Sydney location, and discover all the information needed to enrol and find accommodation.

Once you have established the degree that is the right fit for your interests and ambitions, you will find a link to an online portal. There you’ll find your way to more information and services.

Welcome to UNSW Engineering!
Message from the Dean

Dean of Engineering

Professor Mark Hoffman

There is no better way to measure the value of studying at UNSW – or any institution – than the achievements of our graduates. Their success speaks for itself.

Yes, we can be justifiably proud of the educational excellence in the Faculty, having achieved a five-star rating for teaching and employability for the past five years.

Yes, we can be sure of a strong demand for our postgraduate courses given the exceptional opportunity that is provided by the largest program and widest range of specialisations in Australia. This includes Nuclear and Geothermal Engineering, which are only found at UNSW.

Yes, we can acknowledge that UNSW Engineering is a powerhouse of real-world innovation. Our slogan, “Innovation in Action,” describes us; we’re an international pioneer in solar cells, quantum computing, artificial intelligence and bioengineering.

We hold the world record for solar cell efficiency at 40%, created the first ever two qubit logic gate in silicon, have won a record five RoboCup World Championship trophies, and we are recognised leaders in chip-scale implantable bionics. It is the creators of these technologies and many others like them who teach our students.

But a university’s greatness is best determined by the impact of its graduates. And here the rubber really hits the road: UNSW graduates more engineers and has more engineering alumni than any Australian institution.

UNSW Engineering is number one. Their impact is profound: in business, research and civil society. It’s in the hard work of making all of our lives better and our economy richer. UNSW is ranked number one in Australia for producing millionaires and graduates who create world-changing technology start-ups – like Atlassian, which was floated for six billion dollars in late 2015.

Our graduates also have a social impact, working in developing countries to create clean drinking water or building devices to allow the deaf to hear. It’s no accident that our graduates dominate Engineers Australia’s Top 100 Most Influential Engineers list every year – UNSW had 22 researchers and alumni appear in 2015.

Our graduates work at the very heart of our modern technological society. Their labour creates the fabric of our community. The buildings we live and work in, the energy that powers our world, and the transport networks we use every day. Engineering creates real-life solutions using technology, design and teamwork. It applies the principles of science and mathematics to fashion solutions to technical problems, whether for commercial applications or societal and consumer needs.

Our students are driven by lateral thinking and a passion for improving the lives of others. These are the skills we develop in our students to take into the world. And so far, we’ve been very impressed with the results.

Professor Mark Hoffman
Dean of Engineering

The No.1 Engineering faculty in Australia *

Faculty Facts

GLOBALLY RECOGNISED
UNSW Sydney is one of only two universities in the world to be ranked in 50 subject areas by the influential ShanghaiRankings Global Ranking of Academic Subjects 2017. This includes 38 making it into the top 100

FIVE-STAR QS RATINGS
For five years straight, the UNSW Engineering faculty has received a five-star rating in three key categories; employability, teaching and research

THE MOST POSTGRADUATE SPECIALISATIONS
We offer more engineering disciplines than any other university, allowing students to develop career paths in multiple industries

TRUE INDUSTRY READINESS
In our Master of Engineering programs, students complete 60 days of relevant industry training. Students have the flexibility to train in Australia or overseas

GLOBALY LEADER
Our faculty is ranked No. 31 in the world **

THE TIMES HIGHER EDUCATION WORLD UNI RANKINGS 2016-17
UNSW has moved up to #56 in engineering and technology globally and #2 in Australia

ROCK STARS OF THE NEW ECONOMY
Four UNSW Engineering researchers and alumni appear among the coveted 2015 Knowledge Nation 100 – “the visionaries, intellects, founders and game changers”

SPECIALISATIONS
UNSW has moved up to #56 in engineering and technology globally and #2 in Australia

5 ENGINEERING DISCIPLINES
In the 2017 World’s Top 50 QS Rankings

Civil and Structural, Electrical, Manufacturing, Mechanical and Mining Engineering

* According to the 2016 ARWU/SJTU rankings

** According to the 2016/17 QS rankings
First choose the right program

What best describes you?

I have already finished a four-year, engineering degree and now I am interested in developing my job prospects through cross-training, retraining or specialising.

I have not completed an accredited engineering degree. However, I do have either a non-accredited engineering degree, or I have completed three-years of accredited engineering coursework.

### Master of Engineering Science
- Takes 1 to 2 years, depending on your background
- 25 specialisations on offer
- A non-accredited program
- No industrial training involved
- Flexible learning

**TYPICAL PROGRAM STRUCTURE**
16 courses:
- 4 x Disciplinary Knowledge Courses
- 5 x Advanced Disciplinary Courses
- 3 x Research Courses
- 4 x Elective Courses (including one Engineering and Technology Management course)

**NEED A STEPPING STONE?**
Graduate Diploma of Engineering Science
Suitable for graduate engineers who want to retrain or undertake a shorter program of specialised study. It’s also a starting point for a Masters. The graduate diploma runs for one year.

Graduate Certificate of Engineering
This program is designed for engineers who already have professional experience, but are seeking formal qualifications. As well as graduate engineers who want to retrain or specialise in a specific discipline. The graduate certificate runs for six months.

**Master of Engineering**
- Takes 2 years
- There are 5 specialisations offered (Mechanical, Electrical, Environmental, Telecommunications or Civil Engineering)
- Accredited by Engineers Australia*
- Industrial training included

* Civil, Mechanical and Environmental are currently provisionally accredited

**TYPICAL PROGRAM STRUCTURE**
16 courses:
- 6 x Disciplinary Knowledge Courses
- 5 x Advanced Disciplinary Courses
- 2 x Engineering & Technical Management Courses
- 1 x Design Course
- 2 x Research Project Courses
UNSW: a great university

Did you know that UNSW has again been awarded the maximum QS Five Star Plus Rating across teaching, employability, facilities and innovation categories* Or that UNSW’s links to industry, government and community are truly unrivalled? Or that UNSW Engineering has more specialisations than any other university in the world? Here are more great reasons to choose UNSW...

Campus facilities
The UNSW Kensington campus has over 40 cafés and restaurants, two banks, four ATMs, a post office, a supermarket, a food cooperative, a pharmacy, medical centre and dentist, two libraries, a fitness and aquatic centre, plus sports fields.

Study areas
Work on assignments at one of our many indoor computer labs or outdoor study areas. Stay connected to family with free Wi-Fi throughout the campus.

Clubs and societies
Choose from over 250 student-led clubs and societies, covering many hobbies, as well as cultural and social activities.

Student association
Arc is our student association, run by students for students. Find out about parties and events, get discounts from partner organisations, free legal advice, and assistance with finding a part-time job or volunteer work.

Language and conversation skills
Improve your language skills by participating in one of our many programs or discussion groups. We can even match you with a partner who shares your language.

Religious centre
Our interfaith religious centre is for all UNSW students. Chaplains conduct services and studies, and offer spiritual counselling. The Islamic Society has an Imam in attendance with meeting and prayer rooms available.

Staying safe
Our security service provides a 24-hour comprehensive presence across the campus. Our StaySafe@UNSW free app allows you to track the night bus, and provides safety tips, contacts, a newsfeed, and more.

UNSW Kensington campus has over 40 cafés and restaurants, two banks, four ATMs, a post office, a supermarket, a food cooperative, a pharmacy, medical centre and dentist, two libraries, a fitness and aquatic centre, plus sports fields.

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### Biomedical Engineering

This discipline focuses on the adaptation and application of engineering principles to biomedicine. Graduates solve problems in a range of healthcare-related fields such as implantable bionics, drug-delivery systems, medical imaging, radiotherapies, orthopaedic devices, telemedicine, robotic surgery, and cell and tissue engineering. They’re also involved in records management and physical rehabilitation.

#### Master of Engineering Science (Biomedical Engineering)

Degree overview – courses include:
- Fundamentals of Anatomy
- Principles of Physiology
- Medical Imaging
- Biological Signal Analysis
- Biosensors & Transducers
- Mass Transfer in Medicine
- Cellular & Tissue Engineering
- Introductory Polymer Chemistry
- Clinical Information Systems
- Mechanics of the Human Body
- Biomechanics of Physical Rehabilitation

For a full list of the course options, visit [unsw.to/mengbio](http://unsw.to/mengbio)

#### Master of Biomedical Engineering

This program is designed for students with either a biological science background, or with an engineering or physical science background, who wish to further their education in Biomedical Engineering.

Degree overview – courses include:
- Fundamentals of Anatomy
- Principles of Physiology
- Mechanical Properties of Biomaterials
- Implantable Bionics
- Medical Imaging
- Biological Signal Analysis
- Biosensors & Transducers
- Mass Transfer in Medicine
- Introductory Polymer Chemistry
- Biomedical Instrumentation
- Dynamics of the Cardiovascular System
- Mechanics of the Human Body
- Modelling Organs, Tissues & Devices

For a full list of the course options, visit [unsw.to/mengbio](http://unsw.to/mengbio)

#### PROGRAM OPTIONS

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For entry requirements, a fee guide and application instructions, see page 22

### Chemical Process Engineering

This discipline’s courses teach students advanced technical and management skills, and provides essential specialist knowledge in Chemical Engineering across a range of areas. This includes the fuel and energy sector, mineral processing, fine chemicals, pharmaceuticals, petrochemicals, consumer products and the food and beverage industry.

#### Master of Engineering Science (Chemical Process Engineering)

Degree overview – courses include:
- Environmental Chemistry in the Process Industries
- Advanced Reaction Engineering
- Advanced Particle Systems Engineering
- Advanced Transport Phenomena
- Advanced Polymer Science and Research
- Operational Energy Efficiency
- Complex Fluid Microstructure and Rheology
- Engineering Economics & Financial Management
- Project Management Framework
- Engineering Decisions
- Maintenance Engineering
- Advanced Process Control
- Complex Fluid Microstructure & Rheology
- Sustainable Electrical Energy Technology Assessment
- Life Cycle Engineering

For a full list of the course options, visit [unsw.to/menschem](http://unsw.to/menschem)

### PROGRAM OPTIONS

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For entry requirements, a fee guide and application instructions, see page 22

### CONTACT US:

**Biomedical Engineering**

- gabme.unsw.edu.au
- biomedeng@unsw.edu.au
- +61-2-9385-3911

**Chemical Process Engineering**

- che.unsw.edu.au
- che@unsw.edu.au
- +61-2-9385-4319

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12TH IN THE WORLD
1ST IN AUSTRALIA
2016 NTU Rankings: Chemical Engineering
Civil Engineering

Civil Engineering is one of the oldest and largest fields in engineering and it offers graduates the opportunity to get involved in projects that enhance humanity’s quality of life. As the broadest engineering discipline available at UNSW, it also offers an incredible range of specialisation options.

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US:
civeng.unsw.edu.au           cven.enquiries@unsw.edu.au           + 61-2-9385-5033

PROGRAM OPTIONS  PROGRAM CODE  DURATION  BEGINS

Master of Engineering Science (Civil Engineering) CVENZS8338 24 months Feb & July

Graduate Diploma of Engineering Science (Civil Engineering) CVENAT5341 12 months Feb & July

Graduate Certificate of Engineering Science (Civil Engineering) CVENGT7320 6 months Feb & July

Master of Engineering CVENYS8621 24 months Feb & July

Degree overview – courses include:
- Problem Solving for Engineers
- Sustainability in Construction
- Advanced Concrete Structures
- Rock & Slope Engineering
- Structural Dynamics
- Transport Systems – Network Analysis
- Project Management
- Advanced Water Engineering
- Water, Wastewater & Waste Engineering
- Project Management
- Advanced Water Engineering
- Geotechnical Engineering & Engineering Geology
- Advanced Concrete Structures
- Environmental Engineering

For a full list of the course options, visit unsw.to/mengscicivil

Master of Engineering (Civil Engineering)*

Degree overview – courses include:
- Professional Civil Engineering
- Civil Engineering Practices
- Fundamentals of Geomechanics
- Fundamentals of Water Engineering
- Steel Structures
- Concrete Structures
- Planning Sustainable Infrastructure
- Ground Improvement & Management Techniques
- Rock & Slope Engineering
- Sustainable Timber Engineering
- Satellite Remote Sensing & Applications
- Transport Systems - Network Analysis
- Environmental Engineering
- Project Management

For a full list of the course options, visit unsw.to/mengcivil

* Provisionally accredited with Engineers Australia.

2017 QS RANKINGS
Ranked Number 1 in Australia for Civil Engineering

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US:
civeng.unsw.edu.au           cven.enquiries@unsw.edu.au           + 61-2-9385-5033
Postgraduate study in Electrical Engineering allows students to consolidate a specialisation from an undergraduate degree, change direction to a new area within the field, or lay the foundation for a career in research and development.

**Master of Engineering Science (Electrical Engineering)**

The Master of Engineering Science program is designed for graduate engineers seeking to develop or enhance their careers through cross-training, re-training and specialisation. An extensive research component ensures students are armed with practical and analytical skills upon completion.

Degree overview – courses include:
- Solid State Electronics
- Continuous Time Control System Design
- Electrical Drive Systems
- Power Electronics
- Real Time Engineering
- Multimedia Signal Processing
- Network Performance
- Industrial & Commercial Power Systems
- Quantum Devices
- Speech Processing
- Digital Signal Processing Theory and Applications

For a full list of the course options, visit unsw.to/mengscielec

**Master of Engineering Science (Systems and Control)**

This specialisation offers a broad range of theoretical and applications-based electives within the discipline of Control Systems Engineering.

Degree overview – courses include:
- Continuous Time Control System Design
- Computer Control Systems
- Real-Time Engineering
- Advanced Digital Signal Processing
- Optical Circuits & Fibres
- Wireless Communication Technology
- Electrical Drive Systems
- Robust & Linear Control Systems
- Analysis & Design of Non-linear Systems
- Real Computing & Control

For a full list of the course options, visit unsw.to/mengscisystem

**CONTACT US:**
- eet.unsw.edu.au
- eet@unsw.edu.au
- +61-2-9385-4000

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* For entry requirements, a fee guide and application instructions, see page 22
### Environmental Engineering

This degree is concerned with the safe, ecological, sustainable and ethical development of urban infrastructure. It’s a fantastic discipline for students who want to move their career in the direction of Environmental Engineering or who are looking to gain formal qualifications.

**Degree overview – courses include:**
- Sustainability in Construction
- Environmental Chemical & Microbial Processes
- Transport & Transformation of Contaminants
- Environmental Management
- Sustainability Assessment & Risk Analysis in Water & Energy Systems Planning
- Transport Modelling
- Wastewater Treatment
- Water Treatment
- Hazardous Waste Management

*For a full list of the course options, visit unsw.to/mengscienv

### Master of Engineering Science (Environmental Engineering)

This program offers a broad range of theoretical and applications-based electives providing deep knowledge across several broad areas. It’s perfect for electrical engineers wishing to upgrade their skills.

**Degree overview – courses include:**
- Microelectronic Design & Technology
- Power System Equipment
- Power System Analysis
- High Voltage Systems
- Mobile & Satellite Communication Systems
- Industrial & Commercial Power Systems
- Electricity Industry Planning
- Electrical Safety
- Smart Grids & Distribution Networks

*For a full list of the course options, visit unsw.to/mengscienv

### Energy Systems

This discipline is currently undergoing a renaissance thanks to the introduction of intelligent power supply systems (aka smart grids). The growing need to interface renewable energy generation sources with the conventional electricity grid, and the increasing use of electric motors in everything from smartphones to hybrid cars and satellites, is also boosting job opportunities in Energy Systems.

**Master of Engineering Science (Energy Systems)**

This program offers a broad range of theoretical and applications-based electives providing deep knowledge across several broad areas. It’s perfect for electrical engineers wishing to upgrade their skills.

**Degree overview – courses include:**
- Microelectronic Design & Technology
- Power System Equipment
- Power System Analysis
- High Voltage Systems
- Mobile & Satellite Communication Systems
- Industrial & Commercial Power Systems
- Electricity Industry Planning
- Electrical Safety
- Smart Grids & Distribution Networks

*For a full list of the course options, visit unsw.to/mengscienergy

### Energy Systems

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**CONTACT US:**
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- +61-2-9385-4000

### QS RANKINGS

- Ranked No. 48 globally for Electrical & Electronic Engineering in 2017
- Ranked Number 3 in Environmental Science and Engineering (Aus)

### Master of Engineering (Environmental Engineering)*

This program offers a broad range of theoretical and applications-based electives providing deep knowledge across several broad areas. It’s perfect for electrical engineers wishing to upgrade their skills.

**Degree overview – courses include:**
- Sustainability in Construction
- Environmental Chemical & Microbial Processes
- Transport & Transformation of Contaminants
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- Transport Modelling
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* For Provisionally accredited with Engineers Australia.

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- +61-2-9385-5033
Our flexible, advanced options in Food Science & Food Process Engineering provide students with a deeper understanding of the food and beverage business. At UNSW you’ll gain the strategies and tools required to increase efficiency and performance, and the opportunity to learn alongside likeminded industry professionals.

Master of Engineering Science (Food Process Engineering)
This program, for engineers transitioning to the food industry, provides a thorough study of factors affecting the science, processes, operation technology and engineering of foods, and the life cycle of plants. Students also study issues that may affect business decisions encountered in the food industry.

Degree overview – courses include:
- Advanced Process Control
- Food Diagnostics
- Food & Nutritional Toxicology
- Advanced Food Chemistry
- Food Microbiology
- Advanced & Applied Nutrition
- Food Processing Principles
- Advanced Processing Technologies
- Complex Fluid Microstructure & Rheology

* For a full list of the course options, visit unsw.to/mengscifood

Master of Food Science
This program is designed for students with a science background who wish to deepen their knowledge in food science and technology. It’s also for those who want to move into food science with a scientific perspective.

Degree overview – courses include:
- Food Processing Principles
- Advanced & Applied Nutrition
- Food Diagnostics
- Food Microbiology
- Nutrition
- Food Science & Technology Laboratory
- Food Preservation
- Advanced Food Chemistry
- Advanced Processing Technologies
- Complex Fluid Microstructure and Rheology
- Sensory Analysis of Foods
- Advanced Food Microbiology

* For a full list of the course options, visit unsw.to/mengfoodsci

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* For entry requirements, a fee guide and application instructions, see page 22

CONTACT US:
che.unsw.edu.au che@unsw.edu.au +61-2-9385-4319

The ARC Training Centre
The ARC Training Centre for Advanced Technologies in Food Manufacture (ATFM) works closely with the Australian food industry. Its goal is to ensure Australian companies can sustain a globally competitive position in markets that demand the highest level of quality, freshness, flavour and safety.

The Centre focuses on developing a suite of industry-aligned and commercially relevant projects that help companies compete for market share against manufacturers. This will lead to success in an increasingly competitive global market. The projects undertaken are selected according to industry priorities and the Centre provides the industry with a continuum of high-level skills through technological and engineering knowledge transfer.

NTU RANKING
Ranked No. 1 in Australia for Chemical Engineering
Guide to the program fees*

Because each student’s study choices are different, it’s impossible to provide a definitive cost of studying at UNSW. The program fees below are an estimate based on the total units of credit. The fees stated here are indicative 2017 fees and are subject to change, please refer to unsw.edu.au/fees to stay up-to-date.

* Minimum 65% average using the UNSW PG Calculator in a relevant discipline at unsw togpperth calculator
Students from China or South Asia should check for more details at unsw.to/csp

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Program Code</th>
<th>Minimum Academic Entry Requirement*</th>
<th>Duration** (Full Time)</th>
<th>Domestic Full Fee</th>
<th>International Program Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Engineering Science</td>
<td>8338</td>
<td>4-year Bachelor degree in an appropriate area of engineering with a minimum 65% average</td>
<td>24 months</td>
<td>$62,880</td>
<td>$86,960</td>
</tr>
<tr>
<td>Master of Engineering Science</td>
<td>8621</td>
<td>4-year non-accredited (Washington Accord) Bachelor of Engineering degree or equivalent in a related discipline with a minimum 65% average (70% for Electrical Engineering and Telecommunications)</td>
<td>24 months</td>
<td>$62,880</td>
<td>$86,960</td>
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<tr>
<td>Master of Food Science</td>
<td>8037</td>
<td>A Food Science degree with 65% average</td>
<td>24 months</td>
<td>$60,000</td>
<td>$86,960</td>
</tr>
<tr>
<td>Master of Information Technology</td>
<td>8543</td>
<td>4-year degree in Science or Engineering with a 65% average OR a 3-year degree in Computer Science or Engineering with a 65% average</td>
<td>24 months</td>
<td>$62,880</td>
<td>$86,960</td>
</tr>
<tr>
<td>Master of Biomedical Engineering</td>
<td>8660</td>
<td>4-year BE with a 65% average OR a 4-year degree in a biomedical, health-related discipline with at least a 65% average</td>
<td>18 months</td>
<td>$47,160</td>
<td>$64,620</td>
</tr>
<tr>
<td>Master of Mining Engineering</td>
<td>8335</td>
<td>4-year degree in Mining Engineering (or related discipline) with a 65% average</td>
<td>18 months</td>
<td>$55,120</td>
<td>$64,620</td>
</tr>
<tr>
<td>Graduate Diploma of Engineering Science</td>
<td>5341</td>
<td>4-year degree in a relevant discipline of engineering OR a 3 or 4-year Engineering or Science degree, plus the required relevant professional experience</td>
<td>12 months</td>
<td>$31,440</td>
<td>$42,280</td>
</tr>
<tr>
<td>Graduate Diploma of Food Science</td>
<td>5037</td>
<td>Food Science or related discipline with an average of 65%</td>
<td>12 months</td>
<td>$31,440</td>
<td>$42,280</td>
</tr>
<tr>
<td>Graduate Diploma of Information Technology</td>
<td>5543</td>
<td>3-year degree with mathematics up to at least year two level, with a 65% average</td>
<td>18 months</td>
<td>$47,160</td>
<td>$64,620</td>
</tr>
<tr>
<td>Graduate Diploma of Mining Engineering</td>
<td>5335</td>
<td>4-year degree in Mining Engineering or related discipline OR a 3-year degree with minimum of one year of industry experience</td>
<td>12 months</td>
<td>$34,080</td>
<td>$42,280</td>
</tr>
<tr>
<td>Graduate Certificate of Computing</td>
<td>7543</td>
<td>3-year degree in Science or Engineering OR at least three years of work experience in an area of Engineering or Science</td>
<td>6 months</td>
<td>$15,720</td>
<td>$21,140</td>
</tr>
<tr>
<td>Graduate Certificate of Mining Engineering</td>
<td>7335</td>
<td>Four years of relevant professional experience in mining OR a degree in a technical discipline with one year of relevant industry experience</td>
<td>6 months</td>
<td>$17,040</td>
<td>$21,140</td>
</tr>
<tr>
<td>Graduate Certificate of Petroleum Engineering</td>
<td>7343</td>
<td>3 or 4-year degree in a relevant discipline OR relevant petroleum industry experience (with a minimum of five years of full time professional experience)</td>
<td>12 months</td>
<td>$23,580</td>
<td>$39,960</td>
</tr>
</tbody>
</table>

HOW TO APPLY

1. Choose your program
   It should suit your interests, skills and career goals.

2. Check the program’s entry requirements
   This guide has a list of information, but more details and the latest requirements are in the Online Handbook:
   • handbook.unsw.edu.au

3. Apply online
   Go to apply.unsw.edu.au to complete the application form and upload:
   • Copies of academic transcripts and testamurs (if it’s not in English, a NAATI-approved translation must be provided).
   • Copies of IELTS or TOEFL (or equivalent) test scores (if applicable).
   • Details of work experience, if applicable. Some programs may require additional documentation.

4. Track your application
   Once you submit your application, you will receive a receipt. This will contain your student ID number so you can track your application online.
   • my.unsw.edu.au

5. A letter of offer
   You will be advised of the outcome of your application via email. If you’re receiving assistance, your nominated representative will also receive a copy.

6. Accept your offer
   Go to my.unsw.edu.au and follow the instructions in your offer letter. Once we receive your acceptance and deposit, you will be sent your electronic confirmation of enrolment (eCoE).

7. Enrol online
   Once you accept your offer, enrol at
   • my.unsw.edu.au to secure your place in your program.

Fees and funding support

FEE-HELP is a Federal Government loan to assist full fee-paying students pay part or all of their tuition fees. FEE-HELP is available to students who are Australian citizens or permanent Australian residents with a humanitarian visa. Visit studyassist.gov.au for more info. For eligibility advice, please contact the FEE-HELP on 1800 020 108.

Country and regional specific entry requirements

• For Chinese students
   Students from a non-211 university in China need a minimum 70% average for both the Master of Engineering Science and Master of Engineering programs, or a 75% average for the ME in the Electrical or Telecommunications streams.

• For South Asian students
   Students who have a degree from an institution in India, Pakistan, Bangladesh, Nepal or Sri Lanka have varying grade point average (GPA) requirements based on the institution at which they completed their undergraduate degree. The minimum equivalent is either 65%, 75% or 80% depending on the previous institution.

• For British students
   Students with three-year British degrees are eligible to apply for UNSW Engineering’s postgraduate programs. However, applications will be considered on a case-by-case basis and outcomes are reliant on the GPA and discipline background of the student.

Note: Students accepted with three-year degrees will not be granted Advanced Standing for UNSW Engineering Masters programs and must complete the full two years of Masters study.

Note: The minimum average required for entry is determined by the UNSW Postgraduate Entry Score Calculator, which adjusts for the pass mark of your particular institution. Students from other institutions will be assessed on a case-by-case basis. Entry requirements for the Master of Engineering program in Electrical Engineering or Telecommunications will be 5% higher in all cases.
As the demand for energy increases globally, the need for new modes of generation becomes more important. Sustainable forms of energy are of priority in the modern world. Geothermal energy uses the heat stored in the Earth to produce sustainable energy. This is a unique new degree and the first time it has been offered in Australia.

Degree overview – courses include:

- Introduction to Petrophysics
- Fundamentals of Reservoir Engineering A
- Petroleum Geology
- Petroleum Geophysics
- Well Drilling Equipment and Operations
- Natural Gas Engineering
- Geomechanics A
- Geothermal Engineering
- Design Project for Petroleum Engineers
- Geothermal Engineering Project A & B

For a full list of the course options, visit unsw.edu.au/mengscigeoth

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: petrol.unsw.edu.au  tetb@unsw.edu.au  +61-2-9385-5189

PROGRAM OPTIONS | PROGRAM CODE | DURATION | BEGINS
--- | --- | --- | ---
Master of Engineering Science (Geothermal Engineering) | PTRLIS8338 | 24 months | Feb & July
Graduate Diploma of Engineering Science (Geothermal Engineering) | CVENST5341 | 12 months | Feb & July

As the demand for energy increases globally, the need for new modes of generation becomes more important. Sustainable forms of energy are of priority in the modern world. Geothermal energy uses the heat stored in the Earth to produce sustainable energy. This is a unique new degree and the first time it has been offered in Australia.

Degree overview – courses include:

- Rock & Slope Engineering
- Advanced Topics in Geotechnical Engineering
- Ground Improvement & Monitoring Techniques
- Advanced Concrete Structures
- Geomechanical Models
- Slope Instability
- Advanced Foundation Engineering
- Pavement Engineering
- Earthquake Engineering & Foundation Dynamics

For a full list of the course options, visit unsw.edu.au/mengscigeo

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: civeng.unsw.edu.au  cven.enquiries@unsw.edu.au  +61-2-9385-5033

PROGRAM OPTIONS | PROGRAM CODE | DURATION | BEGINS
--- | --- | --- | ---
Master of Engineering Science (Geotechnical Engineering and Engineering Geology) | CVENRT8338 | 24 months | Feb & July
Graduate Diploma of Engineering Science (Geotechnical Engineering and Engineering Geology) | CVENST5341 | 12 months | Feb & July

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: petrol.unsw.edu.au  tetb@unsw.edu.au  +61-2-9385-5189

PROGRAM OPTIONS | PROGRAM CODE | DURATION | BEGINS
--- | --- | --- | ---
Master of Engineering Science (Geothermal Engineering) | PTRLIS8338 | 24 months | Feb & July

For a full list of the course options, visit unsw.edu.au/mengscigeoth

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: petrol.unsw.edu.au  tetb@unsw.edu.au  +61-2-9385-5189

PROGRAM OPTIONS | PROGRAM CODE | DURATION | BEGINS
--- | --- | --- | ---
Master of Engineering Science (Geothermal Engineering) | PTRLIS8338 | 24 months | Feb & July

For a full list of the course options, visit unsw.edu.au/mengscigeoth

For entry requirements, a fee guide and application instructions, see page 22

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PROGRAM OPTIONS | PROGRAM CODE | DURATION | BEGINS
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Master of Engineering Science (Geothermal Engineering) | PTRLIS8338 | 24 months | Feb & July

For a full list of the course options, visit unsw.edu.au/mengscigeoth

For entry requirements, a fee guide and application instructions, see page 22

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PROGRAM OPTIONS | PROGRAM CODE | DURATION | BEGINS
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For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: petrol.unsw.edu.au  tetb@unsw.edu.au  +61-2-9385-5189
Information technology provides students with the skills to use today's technology as well as create the technology of tomorrow. Graduates are trained to anticipate future requirements and develop applications, frameworks, products and services to meet those needs in areas such as networking, data mining, robotics and internet services.

Master of Information Technology
This program provides students with a broad IT education and specialised knowledge that enables them to work in a range of positions. It's perfect for students with minimal (if any) prior computing experience, or students with a computing-related bachelor degree who want to gain a broader understanding or specialise in an area. Students with prior IT and computing experience may be eligible for up to one year's advanced standing.

Graduate Diploma of Information Technology
This is intended for students with little (if any) prior computing experience or students with some knowhow seeking a broader understanding of the discipline.

Graduate Certificate of Computing
If you aren't eligible for entry to the Graduate Diploma, or wish to take a shorter postgraduate qualification, you should consider this certificate. It develops students' knowledge and skills in IT, and can lead to the Masters program. Students can choose to study any course for which they are eligible.

Degree overview – courses include:
- Artificial Intelligence
- Bioinformatics
- Information Technology
- Database Systems
- e-Commerce Systems
- Geospatial
- InterNetworking
- Data Science and Engineering
* For a full list of the course options, visit unsw.to/minfo

NTU RANKING
Ranked No. 2 in Australia for Computer Science

QS RANKINGS 2017
Ranked No. 2 in Australia for Mechanical, Aeronautical & Manufacturing Engineering

Manufacturing engineers are involved in all facets of production and have a broad knowledge of the design and operation of machines and systems. As such they often manage multidisciplinary teams. This program integrates engineering, technology and management, providing students with a grounding in everything from product conception, through to design, manufacture, sales, distribution and end of life.

Master of Engineering Science (Manufacturing Engineering and Management)
Degree overview – courses include:
- Design & Analysis of Product Process Systems
- Reliability & Maintenance Engineering
- Process Modelling & Simulation
- Strategic Manufacturing Management
- Engineering Management
- Industrial Management
- Concurrent Product & Process Development
- Life Cycle Engineering
- Process & Product Quality in Engineering
- Engineering Project Management
- Economic Decision Analysis in Engineering
- Operations & Supply Chain Management in Eng.
- Production Planning & Control
- Computer Aided Design
/ Computer Aided Manufacture
* For a full list of the course options, visit unsw.to/mengscimanuf
The best way to advance in the mining industry is to be armed with the latest skills and knowledge. Postgraduate coursework programs can make a significant difference to those already working in the industry or for those planning a career change.

**Master of Mining Engineering**
This degree provides advanced study in Mining Engineering with various entry points and pathways of study depending on the student’s background. It’s designed to cater for people with an engineering or technical background, and can be undertaken on either a part-time or full-time basis.

**Degree overview – Mine Geomechanics Plan**
- courses include:
  - Fundamentals of Mining Engineering
  - Mining Processes & Analysis
  - Hazard Identification, Risk & Safety Management in Mining
  - Mining Geomechanics
  - Mine Geology & Geophysics for Mining Operations
  - Mining Geotechnical Project
  - Mine Slope Stability
  - Advanced Soil Mechanics & Mine Fill
  - Drilling, Blasting & Machine Excavations

+ For a full list of the course options, visit unsw.to/mmine

**Degree overview – Mine Management Plan**
- courses include:
  - Mining Processes & Analysis
  - Environmental Management for the Mining Industry
  - Technology Management in Mining
  - Mining & Resources Law
  - Mine Geology & Geophysics for Mining Operations
  - Advanced Mineral Economics & Project Evaluation
  - Mineral Processing
  - Mine Design & Feasibility
  - Mine Water & Waste Management
  - Uranium Mining Fundamentals
  - Mine Ventilation

+ For a full list of the course options, visit unsw.to/mmine

**Degree overview – Graduate Certificate**
- courses include:
  - Fundamentals of Mining Engineering
  - Mining & Resources Law
  - Technology Management in Mining
  - Mine Design & Feasibility
  - Mineral Processing

+ For a full list of the course options, visit unsw.to/mmine

**Master of Mine Geotechnical Engineering**
This program is designed for those who work within the underground hard rock or underground coal mining industries, and who have responsibilities in the field of strata control. It has been specifically designed to cater for those professionals with both an engineering and a scientific background.

**Degree overview – Coal Mine Strata Control Plan**
- courses include:
  - Fundamentals of Rock Behaviour
  - Geotechnical Assessment
  - Mining Excavations in Rock
  - Ground Control Principles
  - Applied Geomechanics
  - Operational Geotechnical Management
  - Drilling, Blasting & Machine Excavation
  - Numerical Methods in Mine Geomechanics

+ For a full list of the course options, visit unsw.to/mmine

**Graduate Diploma of Mine Ventilation**
This highly flexible program is delivered in a predominantly distance-based format. It provides professional development in mine ventilation and the environment for mining engineers and others who work in the industry. The program covers the needs of the metalliferous and coal-mining sectors. Students must take a set eight core courses.

+ For a full list of those courses, visit unsw.to/mmine

**PROGRAM OPTIONS**

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<thead>
<tr>
<th>PROGRAM OPTIONS</th>
<th>PROGRAM CODE</th>
<th>DURATION</th>
<th>BEGINS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Mining Engineering</td>
<td>B335</td>
<td>18 months</td>
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<td>Mine Geomechanics Plan</td>
<td>MINEJS8335</td>
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<td>Mine Management Plan</td>
<td>MINEPS8335</td>
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<tr>
<td>Graduate Diploma of Mining Engineering</td>
<td>S335</td>
<td>12 months</td>
<td>Feb</td>
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<tr>
<td>Mine Geomechanics Plan</td>
<td>MINER55335</td>
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<tr>
<td>Mine Management Plan</td>
<td>MINEPS5335</td>
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<tr>
<td>Graduate Certificate of Mining Engineering</td>
<td>7335</td>
<td>6 months</td>
<td>Feb</td>
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<tr>
<td>Master of Mine Geotechnical Engineering</td>
<td>B059</td>
<td>36 months</td>
<td>Feb</td>
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<tr>
<td>Coal Mine Strata Control</td>
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<tr>
<td>Graduate Diploma of Mine Geotechnical Engineering</td>
<td>5059</td>
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<td>Feb</td>
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<tr>
<td>Coal Mine Strata Control</td>
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<tr>
<td>Graduate Diploma of Mine Ventilation</td>
<td>5046</td>
<td>12 months</td>
<td>Feb</td>
</tr>
</tbody>
</table>

+ For entry requirements, a fee guide and application instructions, see page 22

**CONTACT US:**
- mining.unsw.edu.au
- mining@unsw.edu.au
- +61-2-9385-5006

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**DID YOU KNOW?**
Our Mine Management plan can be completed 100% online by distance students

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**5TH IN THE WORLD**
2017 QS World University Rankings for the subjects Minerals and Mining

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**MINING ENGINEERING**
28

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**MINING ENGINEERING**
29
This degree offers the unique opportunity to combine various disciplines together in order to develop and improve products, processes and systems. In short, to change the world for the better. Our programs provide students with the knowledge, tools and strategies to design engineering systems and manage a product's lifecycle.

Master of Engineering Science (Mechanical Engineering)

Degree overview – courses include:
- Mechanical Design
- Computational Fluid Dynamics
- Refrigeration & Air Conditioning
- Mechanics of Fracture & Fatigue
- Computer Aided Design/Computer Aided Manufacture
- Fundamentals of Acoustics & Noise
- Composite Materials & Mechanics
- Automobile Engine Technology

+ For a full list of the course options, visit unsw.to/mengscimech

Master of Engineering (Mechanical Engineering)*

This degree is for students who want to develop their technical knowledge and skills, and enter the engineering profession with a degree that is accredited with Engineers Australia.*

Degree overview – courses include:
- Engineering Mechanics
- Computational Fluid Dynamics
- Fundamental & Advanced Vibration Analysis
- Finite Element Methods
- Introduction to Micro Electromechanical Systems
- Solar Thermal Energy Design
- Machine Condition Monitoring
- Automobile Engine Technology

+ For a full list of the course options, visit unsw.to/mengmech

Nuclear Engineering continues to be a growing field. In addition to the increasing number of new build proposals in the Western world, existing reactors require maintenance, servicing, operations and eventual decommissioning. Waste also needs to be managed and the fuel cycle requires servicing and handling, too. All of this requires engineers with an understanding of what makes the nuclear environment unique.

Master of Engineering Science (Nuclear Engineering)

This program provides engineering graduates with the fundamental theory that underpins Nuclear Engineering. This theory is developed into practical knowledge to work professionally with nuclear technology. It provides streams that allow graduates from a range of backgrounds to prepare for a career in a range of nuclear-related fields. This includes nuclear energy, medicine, regulatory and government, mining, waste processing and the fuel cycle. Research and innovation is central to the program and students frequently pursue original research projects.

Degree overview – courses include:
- Power System Equipment
- Power System Analysis
- Electricity Industry Planning
- Electrical Industry Operation
- Sustainable Energy Technology Assessment
- Introduction to Nuclear Engineering
- Reactor Physics for Engineers
- Fuel Cycle, Waste Management & Life-Cycle Management
- Project Reports A & B
- Safety, Security & Safeguards
- Uranium mining fundamentals
+ For a full list of the course options, visit unsw.to/mengscinuclear

Program Options

<table>
<thead>
<tr>
<th>Program Options</th>
<th>Program Code</th>
<th>Duration</th>
<th>Begins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Engineering Science</td>
<td>MECHIS8338</td>
<td>24 months</td>
<td>Feb &amp; July</td>
</tr>
<tr>
<td>Master of Engineering Science (Nuclear Engineering)</td>
<td>ENGCPS8338</td>
<td>24 months</td>
<td>Feb &amp; July</td>
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<tr>
<td>Graduate Diploma of Engineering Science</td>
<td>MECHZS5341</td>
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<td>Feb &amp; July</td>
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<tr>
<td>Graduate Diploma of Engineering Science (Nuclear Engineering)</td>
<td>ENGCCQ5341</td>
<td>12 months</td>
<td>Feb &amp; July</td>
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<td>Graduate Certificate of Engineering Science</td>
<td>ENGGRS7320</td>
<td>6 months</td>
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<td>Graduate Certificate of Engineering Science (Nuclear Engineering)</td>
<td>ENCGS7320</td>
<td>6 months</td>
<td>Feb &amp; July</td>
</tr>
</tbody>
</table>

+ For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: mech.unsw.edu.au mech.go@unsw.edu.au +61-2-9385-4093

CONTACT US: eet.unsw.edu.au eet@unsw.edu.au +61-2-9385-4000
Petroleum engineers explore, design, develop and produce the oil and gas resources that underpin the energy and materials industries. This specialisation prepares an engineer from a non-petroleum background to work in a role that requires Petroleum Engineering knowledge, and enables students already with a background in this discipline to extend and broaden their knowledge.

Master of Engineering Science (Petroleum Engineering)
This program caters for those already working in the field who want to deepen their knowledge and improve their technical understanding of Petroleum Engineering.

Degree overview – courses include:
- Petroleum Geology
- Petroleum Geophysics
- Numerical Reservoir Simulation
- Natural Gas Engineering
- Enhanced Oil & Gas Recovery
- Well Completions & Stimulation
- Reservoir Characterisation
- Drilling Fluids & Cementing
- Formation evaluation
- Petroleum Geomechanics

For a full list of the course options, visit unsw.to/mengscipetro

Open Learning Program
Our Open Learning Program is designed to provide students with the skills and knowledge required to meet the demands of working in the oil and gas industries. Professionals often work in remote locations and can’t attend traditional university programs. So our Open Learning students are now working and studying all over the world.

PROGRAM OPTIONS

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<th>BEGINS</th>
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</thead>
<tbody>
<tr>
<td>Master of Engineering Science (Petroleum Engineering)</td>
<td>PTRLES8338</td>
<td>24 months</td>
<td>Feb &amp; July</td>
</tr>
<tr>
<td>Master of Engineering Science (Petroleum Engineering) by Open Learning</td>
<td>PTRLC8338</td>
<td>24 months</td>
<td>Feb &amp; July</td>
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<tr>
<td>Graduate Diploma of Engineering Science (Petroleum Engineering)</td>
<td>PTRLD5341</td>
<td>12 months</td>
<td>Feb &amp; July</td>
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<tr>
<td>Graduate Certificate of Engineering Science (Petroleum Engineering)</td>
<td>PTRLC57343</td>
<td>12 months</td>
<td>Feb &amp; July</td>
</tr>
</tbody>
</table>

+ For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: petrol.unsw.edu.au tetb@unsw.edu.au +61-2-9385-5189

Photovoltaics & Renewable Energy

Engineers interested in the burgeoning photovoltaics and renewable energy industries can choose advanced postgraduate study options through UNSW Engineering. Students can develop their existing skills or refocus in the direction of renewable energy technologies systems and integration with existing energy systems.

Master of Engineering Science (Photovoltaics & Solar Energy)
Degree overview – courses include:
- Applied PV
- Low Energy Buildings and PV
- PV Technology & Manufacturing
- Solar Cells
- PV Systems Design
- Advanced Photovoltaics
- Advanced Solar Cell Characterisation
- RE System Performance Modelling & Analysis
- Advanced Photovoltaic Manufacturing

For a full list of the course options, visit unsw.to/mengscipv

Program Options

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</tr>
</thead>
<tbody>
<tr>
<td>Master of Engineering Science (Photovoltaics &amp; Solar Energy)</td>
<td>SOLACS8338</td>
<td>24 months</td>
<td>Feb &amp; July</td>
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<td>Graduate Diploma of Engineering Science (Photovoltaics &amp; Solar Energy)</td>
<td>SOLAES5341</td>
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+ For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: pv.unsw.edu.au pv.course@unsw.edu.au +61-2-9385-7120
Postgraduate study in Project Management provides students with the skills to excel in a professional career in the public or private sectors, and from strategic to details management. Designed as a professional qualification for practitioners, this program enables graduates to take a leading role in the industry.

Master of Engineering Science (Project Management)

Our detailed program, developed with extensive industry consultation, covers the fundamentals and applications of Project Management. This includes the study of planning, risk, contracts, people, equipment, materials, legal, finances and economics.

Degree overview – courses include:
- Problem Solving for Engineers
- Engineering Contracts
- Sustainability in Construction
- Strategic Management for Engineering
- Management of Risk
- Marketing in Technology & Engineering
- Strategic Management for Engineering
- Transport Systems - Network Analysis
- Engineering Economics & Financial Management
- Project Planning and Control
- Resource Management
- International Project Management

For a full list of the course options, visit unsw.to/mengsciproject

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US:  civeng.unsw.edu.au  cven.enquiries@unsw.edu.au  +61-2-9385-5033

PROGRAM OPTIONS

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TIMES HIGHER ED
No. 5 in Australia (Mechanical & Aerospace Engineering) 2016/17

This program was designed with input from both the space industry and global leaders in education. The focus is on producing "industry savvy" professionals with knowledge of satellite engineering. This extends from management and law, through mission development, launch, operations and maintenance, and all the way to satellite applications.

Master of Engineering Science (Satellite Systems Engineering)

This program focuses on the Systems Engineering aspect of satellites before delving into satellite applications. Through core and elective courses, and a year-long practical project, students gain a comprehensive foundation in Satellite Systems Engineering from the space segment to the ground-based operations, as well as typical applications.

Degree overview – courses include:
- Space Mission Development
- Space Systems Engineering
- Mobile & Satellite Communications Systems
- Space Systems Architectures and Orbits
- Space Law and Radio Regulations
- Principles of GPS Positioning
- The Space Segment
- The Ground Segment & Space Operations
- Digital Image Processing
- GPS Receivers
- Requirements Engineering
- The Space Segment
- Remote Sensing Applications

For a full list of the course options, visit unsw.to/mengscisat

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US:  eet.unsw.edu.au  eet@unsw.edu.au  +61-2-9385-4000

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CONTACT US:  eet.unsw.edu.au  eet@unsw.edu.au  +61-2-9385-4000
This discipline suits practising structural engineers and recent graduates planning a long career in Structural Engineering. Postgraduate study develops students’ skills in the analysis and design of steel and concrete structures, and develops a deeper understanding of modern materials.

Master of Engineering Science (Structural Engineering)

This exciting program allows students to develop advanced professional skills in the computational analysis and design of steel composite and prestressed concrete structures.

Degree overview – courses include:
- Rock & Slope Engineering
- Advanced Concrete Structures
- Structural Dynamics
- Deformation Monitoring Surveys
- Earthquake Engineering & Foundation Dynamics
- Structural Stability
- Ground Improvement & Monitoring Techniques
- Advanced Topics in Geotechnical Engineering
- Operations & Projects
- Reinforced Concrete Design
- Steel & Composite Structures
- Advanced Materials Technology

For a full list of the course options, visit unsw.to/mengscistruct

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: civeng.unsw.edu.au  cven.enquiries@unsw.edu.au  +61-2-9385-5033

QS RANKINGS 2017
No. 1 in Australia for Civil & Structural Engineering

Ready to take Environmental Engineering to the next level? This is what Sustainable Systems Engineering and industrial ecology is all about. This new discipline examines how engineers develop holistic and effective solutions to unsustainable practices in the modern world.

Master of Engineering Science (Sustainable Systems)

Degree overview – courses include:
- Ethics & Leadership in Engineering
- Environment & Sustainability
- Sustainability in Construction
- Planning Sustainable Infrastructure
- Society, Environmental Policy & Sustainability Treatment
- Solid Waste Management
- Life Cycle Assessment
- Low Energy Buildings & Photovoltaics
- Renewable Energy Policy & International Programs
- Energy Efficiency
- Engagement, Values & The Environment
- Life Cycle Engineering
- Industrial Ecology
- Hazardous Waste Management
- Environmental Management

For a full list of the course options, visit unsw.to/mengscisustain

For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: civeng.unsw.edu.au  cven.enquiries@unsw.edu.au  +61-2-9385-5033
For those working in the booming Telecommunications industry, or those who can see its potential, there's no better way to gain a leading edge than through postgraduate study in this degree. Our programs provide advanced training in the latest in industry theory and application.

Master of Engineering Science (Telecommunications)

Degree overview – courses include:

- Optical Circuits & Fibres
- Photonic Networks
- Network Performance
- Wireless Communication Technology
- Mobile & Satellite Communications Systems
- Digital Signal Processing Theory & Applications
- Network Systems Architecture
- Switching Systems Architecture
- Network Operations & Control
- Advanced Wireless Communication

For a full list of the course options, visit unsw.to/mengsitele

Master of Engineering (Telecommunications)

This two-year degree is for students who want to develop their technical knowledge and skills, and enter their profession with a degree accredited with Engineers Australia.

Degree overview – courses include:

- Advanced Digital Signal Processing
- Principles of GPS Positioning
- Optical Circuits & Fibres
- Photonic Networks
- Entrepreneurial Engineering
- Receivers & Systems
- GeoIT & Infomobility Applications
- Network Systems Architecture
- Switching Systems Architecture
- Network Operations & Control

For a full list of the course options visit unsw.to/mengtele

With increases in population and urban sprawl, the need for safe, quick, reliable and efficient transport systems has never been more important. This discipline looks at the planning, functional design, operation and management of transport infrastructure, with a focus on its economic and environmental impact.

Master of Engineering Science (Transport Engineering)

Degree overview – courses include:

- Engineering Contracts
- Project & Systems Skills
- Deformation Monitoring Surveys
- Rock & Slope Engineering
- Transport Systems
- Urban Transport Planning
- Transport Modelling
- Transport Logistics Engineering
- Traffic Management & Control
- Engineering Economics & Financial Management
- Transport Applications of GIS

For a full list of the course options visit unsw.to/mengsitelectransport

PROGRAM OPTIONS  PROGRAM CODE  DURATION  BEGINS

Telecommunications

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For entry requirements, a fee guide and application instructions, see page 22

CONTACT US: eet.unsw.edu.au  eet@unsw.edu.au  +61-2-9385-4000

Transport Engineering

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CONTACT US: civeng.unsw.edu.au  cven.enquiries@unsw.edu.au  +61-2-9385-5033

QS RANKINGS 2017

No. 3 in Australia for Electrical & Electronic Engineering
This discipline looks at the full cycle of water in natural and engineered systems. It's best suited to practising water engineers and recent graduates planning a career in large-scale water engineering.

Taught by industry leaders, this program provides advanced study in large-scale water engineering, such as surface water hydrology, urban hydrology and stormwater management, catchment and water resources modelling, groundwater investigations, coastal engineering and the hydrodynamics of river and estuaries.

### Master of Engineering Science (Water Engineering: Catchments to Coast)

Degree overview – courses include:
- Deformation Monitoring Surveys
- Groundwater Investigation
- Advanced Water Engineering
- Urban Hydrology
- Catchment & Water Resources Modelling
- Channels, Rivers & Estuaries
- Groundwater Engineering
- Advanced Topics in Geotechnical Engineering
- Waves & Beaches
- Sustainability in Construction
- Rock & Slope Engineering
- Advanced Concrete Structures

For a full list of the course options, visit [unsw.to/mengsciwater](http://unsw.to/mengsciwater)

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**CONTACT US:**
- civeng.unsw.edu.au
- cven.enquiries@unsw.edu.au
- +61-2-9385-5033

Effective and sustainable water and wastewater treatment are crucial for urban populations, as is environmentally responsible waste management. For engineers and other professionals interested in expanding their knowledge and skills, our programs cover current and future technologies for water usage, wastewater treatment and waste disposal.

### Master of Engineering Science (Water, Wastewater and Waste Engineering)

Degree overview – courses include:
- Deformation Monitoring Surveys
- Groundwater Investigation
- Advanced Water Quality Principles
- Water & Wastewater Analysis
- Water Treatment
- Wastewater Treatment
- Solid Waste Management
- Environmental Management
- Sustainability Assessment & Risk Analysis in Water & Energy Systems Planning
- Surface Water Hydrology
- Urban Hydrology
- Groundwater Engineering
- Hazardous Waste Management

For a full list of the course options, visit [unsw.to/mengsciwaste](http://unsw.to/mengsciwaste)

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**CONTACT US:**
- civeng.unsw.edu.au
- cven.enquiries@unsw.edu.au
- +61-2-9385-5033
UNSW is the largest provider of student housing in Sydney with award-winning accommodation on and off campus. Live within walking distance of your lecture halls, meet people from around the world and make lifelong friends. Alternatively, find your own home in the neighbouring Eastern Suburbs or by the beach.

Accommodation at UNSW

Colleges

Colleges provide a choice of full board, partly catered and self-catered style accommodation. There is also a range of gender-specific options including male only, female only, and mixed male and female accommodation. Most colleges cater for dietary requirements like halal, kosher and vegetarian.

Apartments

Apartments offer independent-style living for undergraduates, postgraduates, couples and families with children. There are apartments available on and off campus, and the costs vary depending on the number of rooms and the location. University accommodation should be organised in advance as places book up quickly. Apply for UNSW accommodation at:

+ housing.unsw.edu.au

Your private accommodation options

Rental property

There are many private rental properties available in the suburbs surrounding UNSW. Costs vary according to the number of bedrooms, condition and location. When renting, you can expect to sign a 6 or 12-month lease and pay rent in advance, plus a security deposit called a bond. Rental properties can come furnished or unfurnished, and additional expenses like electricity, gas, telephone and Wi-Fi are typically not included in the rental price. Costs vary, but usually range from A$150 – A$300 per student per week in a shared house or apartment.

Homestay (full board and room-only)

Homestay options include full board and single room-only accommodation. Full board usually includes a furnished room, use of facilities in the private home of a family or single person, plus breakfast and dinner. Some may also include bed linen, a laundry service and weekly room cleaning.

Single room-only homestays include a furnished room, and gas and electricity expenses in the rental price. You will be responsible for your own food, cooking, cleaning, laundry and phone costs. Costs vary, but usually range from A$180 – A$300 per student per week. Search our database of locally listed private properties at:

+ studystay.unsw.edu.au

Temporary accommodation

If you haven’t confirmed your university accommodation before you arrive, we recommend you allow three to four weeks before classes begin to look for private housing, to settle in and to attend orientation sessions. Be sure to book short-term accommodation first, then look for long-term options in person. This can include private hotels, motels, hostels, lodges or furnished apartments ranging from A$45 to A$300 per day. For private student housing assistance, our International Student Housing Assistance team (ISHA) can help you look for temporary or private accommodation if UNSW accommodation isn’t available when you apply. This helpful service is available at the start of each semester.

+ student.unsw.edu.au/housing-assistance

Under 1Bs

Arrangements must be made for students under 18 years of age. These requirements are in line with Australian Government regulations for the care and welfare of international students that are under 18.

+ student.unsw.edu.au/visa18

UNSW3+

There’s a lot to think about when deciding on the university and degree that can take your career to the next level. While we’ve aimed to cover as much information as possible in this guide, we thought we’d provide some additional answers to the most common questions asked by prospective students.

When can I start my postgraduate program?

Most programs offer a Semester 1 (February) or Semester 2 (July) start. UNSW is moving to a new academic calendar model from 2019. The new calendar consists of three normal terms each with ten weeks of teaching and an optional five-week summer term. The new academic calendar is called UNSW3+.

When is the final date I can apply?

• Semester 1 (February), due by November 30
• Semester 2 (July), due by May 30

Late applications may be accepted subject to the availability of places.

Where can I find additional course information?

For information on course descriptions, program structures and specialisations, visit:

+ handbook.unsw.edu.au

What is the delivery mode about?

Most courses are offered face-to-face at the UNSW Kensington campus. Some courses are offered online or in an intensive mode, particularly those courses in the Computing, Petroleum, Mining and Civil Engineering disciplines. For more, please visit:

+ handbook.unsw.edu.au

What is FEE-HELP?

FEE-HELP is a loan scheme that assists eligible fee paying students to pay all or part of their university tuition fees. It cannot be used for additional study costs such as accommodation or textbooks.

The Australian Government does not subsidise fee paying places. Instead, it provides access to the FEE-HELP loan scheme to help eligible fee paying students with their tuition fees, up to the FEE-HELP limit. Full details are available at:

+ studyassist.gov.au

Are there flexible study options available?

Some of our postgraduate courses are offered in the early evening, usually between 6.00 and 9.00pm. These are designed to accommodate students with full-time employment. Some programs also offer courses via Distance and Intensive mode.

What is a typical study load for working adults?

If you’re employed full-time, you’ll typically study one or two courses per semester. Each course requires students to study approximately ten hours per week, including face-to-face classes and independent study.

What about Commonwealth Supported Places?

Limited postgraduate Commonwealth Supported Places are available to eligible students in some UNSW programs. This is a higher education place for which the Government makes a contribution towards the course fee.

A Student Contribution (previously known as HECS) is paid, which varies depending on the course. Commonwealth Supported Places are subject to availability at the time of application and are limited, so apply early. To find out whether a program has CSPs available, visit:

+ au/upcoming-events

FAQs