

UNSW CANBERRA

Undergraduate Engineering programs at UNSW Canberra are now open to all for 2016

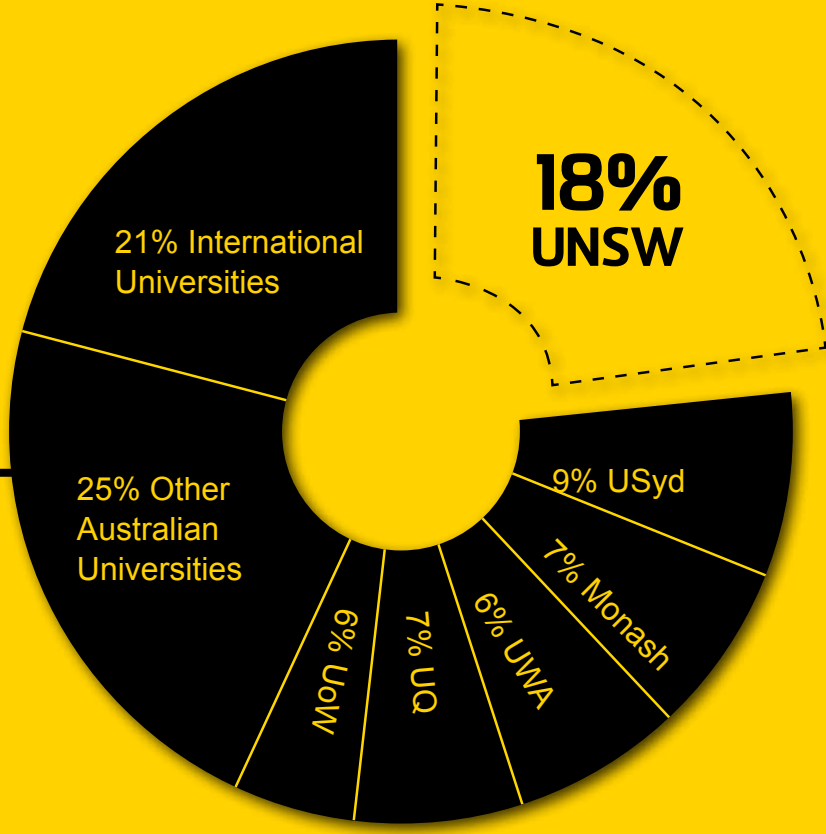
Small class sizes

UNSW Canberra has the best university teacher-to-student ratio in Australia

<p>Elite engineering programs with a small student intake</p>	<p>Modern facilities UNSW Canberra has purpose built workshops and facilities</p>	<p>50 Years UNSW Canberra has been educating leaders in defence, government and industry in Canberra for half a century</p>
--	--	--

Globally recognised engineering degrees
with Engineers Australia accreditation

18% of the **top 100** most influential engineers in Australia are UNSW Graduates*
*Engineers Australia Top 100 list in 2014



Undergraduate Engineering Programs 2016

Never Stand Still



Because there are no limits

Contact Us

UNSW Canberra at the Australian Defence Force Academy
Northcott Drive
Canberra ACT 2600

Phone: +61 (2) 6268 8201
Email: studyunswcanberra@adfa.edu.au
Web: unsw.adfa.edu.au

Follow us on:



UNSW AUSTRALIA

Innovation, technology and creativity are at the heart of what we do

<p>Top Choice UNSW graduates are the most hired by LinkedIn's top 30 most in-demand employers in 2015</p>	<p>Best links to Industry UNSW is recognised as the Australian university with the strongest links to industry</p>	<p>Employer Reputation UNSW is ranked 21st in the world for employer reputation in the QS World University Rankings 2014/15</p>
<p>Top world ranking The University is ranked 46th in the 2015 QS World University Rankings</p>	<p>Leader in education UNSW is a member of the prestigious Group of Eight - a coalition of Australia's leading research intensive universities</p>	<p>Research Leaders For 2015, UNSW researchers won the highest amount of funding in Australia from the Australian Research Council (ARC)</p>
<p>Diversity We celebrate the diversity of backgrounds and cultures from which we attract students of the highest potential. We are proudly a university of our Asia-Pacific region and a peer of the best globally</p>	<p>More top entrepreneurs UNSW has produced more technology entrepreneurs in the past 15 years than any other Australian university - Research by <i>CrunchBase</i> (2013)</p>	<p>Best CEOs Research by <i>LeadingCompany</i> 2012 found that more of Australia's top CEOs who lead ASX100 companies studied at UNSW than any other university</p>

ENGINEERING STUDY OPTIONS

BACHELOR OF ENGINEERING (Aeronautical) Hons

UAC CODE 450040

Aeronautical Engineering is the study of the design, development, manufacture, maintenance and control of machines or vehicles operating in the Earth's atmosphere or in outer space.

The design of a flight vehicle is complex and demands knowledge of many engineering disciplines such as aerodynamics, propulsion systems, structural design, materials, avionics, and stability and control systems. Maintaining and operating a flight vehicle requires an understanding of materials, reliability and maintenance, structural analysis for necessary repairs, together with knowledge of the disciplines within the design process.

As an Aeronautical Engineer you could work in aircraft, defence or space industries on the design and manufacture of light aircraft, passenger aircraft and military jets. Engineering graduates also work in the airline industry on aircraft acquisitions, maintenance and configuration as well as manufacturing engineers working in manufacturing companies, process engineering, warehousing and logistics, business and operations modelling, and transport.

DEGREE STRUCTURE

First Year	Second Year	Third Year	Fourth Year
- Statics	- Thermofluids	- Engineering Structures	- Engineering Project
- Engineering Practice	- Mechanical and Electronic Design	- Engineering Materials	- Aircraft and Systems Design
- Dynamics	- Fundamentals of Flight	- Aerodynamics	- Applied Thermodynamics and Propulsion
- Engineering Mathematics	- Fluid Mechanics	- Aircraft and Systems Design	- Mechanical and Aeronautical Engineering Management
- Engineering Problem Solving	- Mechanics of Solids	- Flight Dynamics and Aircraft Control	
- Physics	- Engineering Materials and Chemistry	- Introduction to Cyber Security	
	- Engineering Mathematics		

BACHELOR OF ENGINEERING (Mechanical) Hons

UAC CODE 450070

The Mechanical Engineering degree is built on a branch of engineering that is concerned with machines and the production of power, and particularly with forces and motion. It focuses on the core task of Mechanical Engineers - devising new and better ways to extract mechanical power from heat and to use that power to perform useful tasks.

You develop a solid understanding of thermodynamics, mechanical systems dynamics, properties of solid materials, fluid dynamics, design and management.

The Mechanical Engineering program focuses on building high-level project management skills and engineering expertise.

As a Mechanical Engineer, you could work in the automotive, aerospace and transport industries, power generation, refineries, insurance industries, building services, railway systems design, consumer goods design and production and management consultancies.

BACHELOR OF ENGINEERING (Civil) Hons

UAC CODE 450050

The Civil Engineering degree provides students with professional engineering design, construction and management skills. Attention is given both to the interaction between civil engineering and other disciplines and to the effect of civil engineering works on the environment.

Present day civil engineering has maintained strong commonality with military engineering - the design and construction of facilities such as roads, bridges, airfields, buildings, water supply and waste treatment facilities, structures of all types, and the associated planning and management of projects.

With a degree in Civil Engineering you could work in all fields of infrastructure development, from constructing skyscrapers through to design and building dams and bridges. You could also work in regulatory and planning roles with government agencies, specialist consulting firms (which vary in size from sole practitioners to major firms employing hundreds of engineers); construction companies; large public companies; government organisations which construct, manage and maintain public utilities; and financial and management consultancies.

DEGREE STRUCTURE

First Year	Second Year	Third Year	Fourth Year
- Statics	- Thermofluids	- Engineering Materials	- Engineering Project
- Dynamics	- Mechanics of Solids	- Structural Analysis	- Civil Design Practice
- Introduction to Civil Engineering	- Soil Mechanics and Engineering Geology	- Environmental Engineering	- Design of Concrete Structures
- Engineering Mathematics	- Hydraulic Engineering	- Geotechnical Design	- Hydro and Environmental Engineering Practice
- Engineering Problem Solving	- Introduction to Cyber Security	- Design Steel and Timber Structures	- Foundation and Pavement Engineering
- Physics	- Engineering Materials and Chemistry	- Project Management Civil Engineering	
	- Engineering Mathematics		

DEGREE STRUCTURE

First Year	Second Year	Third Year	Fourth Year
- Statics	- Thermofluids	- Engineering Structures	- Engineering Project
- Engineering Practice	- Mechanical and Electronic Design	- Engineering Materials	- Mechanical and Aeronautical Engineering Management
- Dynamics	- Fluid Mechanics	- Vibration and Control Engineer	- Mechanical Design
- Engineering Mathematics	- Mechanics of Solids	- Mechanical Design	
- Engineering Problem Solving	- Mechanics of Machines	- Introduction to Cyber Security	
- Physics	- Engineering Materials and Chemistry		
	- Engineering Mathematics		

BACHELOR OF ENGINEERING (Electrical) Hons

UAC CODE 450060

The Electrical Engineering degree is built on a foundation of mathematics, computer science and physical science.

In your final year you specialise in areas such as communications, surveillance and radar and computer engineering and undertake a major research project supervised by a member of academic staff.

The Electrical Engineering degree develops high-level project management skills and engineering expertise which equips you with the skills you will practice as an electrical engineer.

You may choose to work with a telecommunications or electricity company, with large industrial groups in fields ranging from steelmaking to mobile phone manufacturing or with specialist firms making hi-tech biomedical or internet products and in service industries such as electricity and water, large private industrial groups, new technology firms, telecommunications and wireless electronics, internet services, biomedical instrumentation, manufacturing, and transport.

DEGREE STRUCTURE

First Year	Second Year	Third Year	Fourth Year
- Computational Problem Solving	- Computer Technology	- Signals and Systems	- Systems Engineering
- Introduction to Programming	- Data Structures	- Design of Electronic Circuits	- Power and Machines
- Design of Electronic Circuits	- Design of Electronic Circuits	- Communications Techniques	- Electrical Engineering Design
- Introduction to Electrical Engineering	- Programmable Digital Systems	- Engineering Electromagnetics	- Engineering Project
- Engineering Mathematics	- Introduction to Cyber Security	- Vibration and Control Engineer	
- Physics	- Engineering Mathematics	- Digital Signal Processing	
	- Physics		

All Students are required to enrol in 2 general education courses.

For all enquiries contact the Student Recruitment Officer:

Phone: +61 (2) 6268 8201

Email: studyunswcanberra@adfa.edu.au

How to apply:



I want to study without joining the Australian Defence Force

STEP 1. Lodge a UNSW Canberra application online at www.unsw.adfa.edu.au/apply

STEP 2. Lodge your UAC application online at www.uac.edu.au/undergraduate/apply

UNSW Code	UAC Code	Degree Program	ATAR (indicative)
4472	450040	BEngineering (Hons) Aeronautical Engineering	91
4473	450050	BEngineering (Hons) Civil Engineering	
4471	450060	BEngineering (Hons) Electrical Engineering	
4474	450070	BEngineering (Hons) Mechanical Engineering	



I want to study as a trainee officer in the Australian Defence Force

Please contact Defence Force Recruiting on **13 19 01** or visit www.defencejobs.gov.au