Aerospace

Invent the future

What do aerospace engineers do?

Aerospace Engineers "take flight" in the science and practice of air and space travel. You’ll learn about designing, testing, developing and producing aerospace vehicles, maintaining and operating aircraft, and aerospace research.

Owing to the international nature of the aerospace industry, students receive the same depth of understanding as professional aerospace training programs in other industrial countries.

Career opportunities

Graduates can work on the design, manufacture and operation of flight vehicles. You could work with aircraft and spacecraft manufacturers, and major satellite companies or airlines. You could do research for civil and military aerospace organisations, or work in the space, defence, automotive and power industries.

Contact us

Future Students Office
Call 1300 UNI NSW (1300 864 679)
Ask a question unsw.edu.au/ask

Engage with us
UNSW Engineering
@UNSWEngineering
@UNSWEngineering

Student blog: unsw.io/imagineering
Faculty of Engineering Admissions Scheme: unsw.io/feas

UNSW Mechanical and Manufacturing Engineering

- The Ainsworth Building is a new $67 million state-of-the-art centre for learning available to UNSW students.
- Mechanical Engineering has been available to study at UNSW since 1986, representing 58 years of education and research.
- The school is known for its ultra-modern teaching labs and cutting-edge facilities.
- It has strong partnerships with industry in education, research, training and employment.
- There are over 120 staff.
- Students can enjoy campus life with over 1,500 peers.

Faculty facts

WORLD RENOWNED
UNSW Sydney is ranked 43rd in the world, in the QS World University Rankings for 2019

CAMPUS INVESTMENT
UNSW Sydney has invested $1.2 billion in improving and adding to its student facilities

TOP CHOICE
UNSW has again been awarded the maximum QS 5+ rating across teaching, research, employability, facilities and innovation categories in the QS Stars University rankings for 2019

Student exchange opportunities are available for over 200 universities around the world

DISCLAIMER: UNSW reserves the right to change any degree, admission requirement or other information herein without any prior notification.

CRICOS Code: 00098G
ABN: 57 195 873 179

Career opportunities

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Bachelor of Engineering (Honours) in Aerospace Engineering

UAC code: 425050
Duration: 4 years
Term 3 entry: yes

What will your study involve?
All degrees offered by the School of Mechanical and Manufacturing Engineering (except Mechatronic Engineering) have common subjects across their first two years – meaning you don't need to decide on your specialisation until after that.
A number of dual degrees are also available that offer students the chance to complete two degrees in as little as five years.

Assumed knowledge
HSC Mathematics Extension 1 and Physics.

Bridging courses
Do you want to hit the ground running in your first year but are worried your maths and physics need some attention? Then you should investigate attending UNSW's bridging courses, hosted by the Faculty of Science. science.unsw.edu.au/bridging

Industrial experience
To ensure you finish your degree work ready, we make it compulsory to complete at least 60 days of approved industrial training. Students can do this in Australia or overseas, and many students are offered jobs as a result of their experience. The school also hosts many industry nights and networking events to help connect students with employers.

Professional recognition
Your Bachelor of Engineering (Honours) degree is recognised globally, accredited with Engineers Australia, and acknowledged by the Washington Accord.

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Sample degree outline

YEAR 1
TERM 1 TERM 2 TERM 3
Engineering Design Engineering Design Mathematics 1B Engineering & Telecomms Eng
Computing for Engineers Physics 1A Engineering Mechanics
Mathematics 1A Design and Manufacturing

YEAR 2
TERM 1 TERM 2 TERM 3
L1 Elective Numerical Methods and Statistics Engineering Design 2
Thermodynamics Fluid Mechanics

YEAR 3
TERM 1 TERM 2 TERM 3
Aerospace Structures Aerospace Design General Education
Aerodynamics Prof Eng and Comm L1 Elective
Flight Performance, Propulsion Linear Systems and Control

YEAR 4
TERM 1 TERM 2 TERM 3
Dynamics of Aerospace Vehicles Aerospace Design Project A Elective
General Education Elective Elective
Thesis A Thesis B Thesis C

This is a sample degree outline only and may be subject to change.

Other degrees

DEGREE YEARS UAC CODE
Bachelor of Engineering (Honours) 4 425050
(Mechanical and Manufacturing Engineering)
Bachelor of Engineering (Honours) 4 425050
(Mechanical Engineering)
Bachelor of Engineering (Honours) 4 425050
(Mechatronic Engineering)

How to apply

Australian and New Zealand students: Direct entry via UAC uac.edu.au
International students in Australia: Apply via UAC International uac.edu.au/international
International students not in Australia: Apply online via UNSW international.unsw.edu.au

“I’m fascinated with aircraft and I wanted to understand how they operate and how they’re manufactured. I chose UNSW due to its reputation, strong ties with the industry, support system and range of societies. My career dream is to become a successful manager of the engineering operations at Qantas.”

RENEE WOODTON
Aerospace Engineering (Honours)