

# UNSW Engineering Bachelor of Engineering (Honours) (Environmental Engineering)

#### What do environmental engineers do?

Environmental engineers focus on the impact of engineering activities on the environment. They apply a broad knowledge of engineering, scientific and environmental processes to identify environmental problems and develop effective solutions. They also coordinate the activities of various specialist groups such as biologists, ecologists and geologists within major projects.

Environmental engineers also work on providing sustainable infrastructure. They improve current degraded environments and minimise the disruption of today's engineering activities on tomorrow's environment.

#### What will your study involve?

You'll gain a fundamental understanding of Science together with elements of Civil Engineering to equip you to solve problems in ethical

infrastructure and environmentally sustainable design. When studying at the UNSW School of Civil and Environmental Engineering, you'll focus on Management, System Design, Water, Geotechnical and Transport Engineering. You'll also study aspects of Chemical Engineering, Biological Sciences and Environmental Engineering. You can now incorporate a Humanitarian Minor into your program.

### **UNSW Civil & Environmental Engineering**

- 1st in Australia and 17th globally for Civil and Structural Engineering (QS Subject Rankings 2024).
- We have close links with key professional, commercial and industrial organisations, allowing us to offer exciting and innovative student-led projects and industry-based training.
- Our degrees place a strong emphasis on practical design and problem-solving.

#### Program details Lowest Selection Rank (2024): 90

**Duration:** Four-year embedded honours degree

**Study areas:** Environmental Engineering, Environmental Studies, Geotechnical Engineering, Transport Engineering, Water and Waste Engineering

**Assumed knowledge:** HSC level Mathematics Extension 1, Physics

**Portfolio Entry:** UNSW offers the Faculty of Engineering Admission Scheme (FEAS) which is a pathway for students interested in studying undergraduate engineering to support their academic results, find out more at <u>unsw.to/feas</u>

## Accreditation

Your Bachelor of Engineering (Honours) degree is recognised globally, is accredited with Engineers Australia, and is also acknowledged by the Washington Accord, which lets you work in over 20 countries across the globe upon graduation.

#### **Career options**

There is a broad range of rewarding career opportunities available to environmental engineers across the water, construction, energy and manufacturing industries. Graduates also consult on major tender projects such as recycling or desalination plants, and play a large role in planning sustainable infrastructure and government policy.

## **Student Testimonials**

"This degree provides excellent job flexibility as there is such a wide range of industries you can work in and positively impact. This year I helped organise the Inter-Uni Appropriate Technology Competition for Engineers Without Borders, and I loved seeing all the unique designs and discussing ideas with other students."

## Cassie Murphy, Environmental Engineering



## Example study plan

	TERM 1			TERM 2			TERM 3		
YEAR 1	Introduction to Engineering Design & Innovation	Mathematics 1A	Engineering Chemistry 1A	General Education	Mathematics 1B	Physics 1A	Material & Energy Balances	Computing for Engineers	Environmental Principles
YEAR 2	Ecology & Sustainability	Fluid Mechanics for Engineers	Engineering Mathematics 2E	Engineering Computations	Engineering Design & Professional Practice	Water & Atmospheric Chemistry	Solid Wastes	Engineering Operations & Control	Soil Mechanics
YEAR 3	Water Resources Engineering	Environmental Frameworks	Applied Geotechnics	Transport Engineering & Environmental Sustainability	Water & Wastewater Engineering	General Education	Industrial Training		
YEAR 4	Elective	Elective	Thesis A	Sustainable Infrastructure	Elective	Thesis B	Elective	Elective	Thesis C

You'll be required to complete 60 days of Industrial Training throughout your degree.

This is a sample degree outline only and may be subject to change. Please refer to the UNSW Handbook for further information and relevant course

codes.