UNSW Engineering

Bachelor of Engineering (Honours) (Civil Engineering)

What do civil engineers do?

Civil engineers design, construct, manage, maintain and assess sustainability of modern infrastructure. They work on buildings, bridges, roads, tunnels, airfields, dams, ports, railways, new mine sites, water supply and sewerage schemes, irrigation systems and flood mitigation. Civil engineers undertake office and field work with a range of exciting and rewarding career opportunities available in Australia and abroad.

What will your study involve?

This highly sought-after UNSW degree will give you an solid foundation in civil engineering fundamentals and applications, within a framework of ethical and environmentally sustainable design practice. You'll study structural engineering, geotechnical engineering, transport engineering and water engineering, as well as construction and management. In your fourth year, you can choose from a full suite of electives. You can also incorporate a Humanitarian Minor into your degree. The development of your thesis involves opportunities to take charge of your learning and focus on the areas that spark your passion. You'll partake in student-led projects and industrial training.

UNSW Civil & Environmental Engineering

- 1st in Australia and 16th globally for Civil and Structural Engineering (QS Subject Rankings 2023).
- 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 (2023): 90

Duration: Four-year embedded honours degree

Study areas: Civil Engineering, Engineering Construction and Management, Geotechnical Engineering, Structural Engineering, Transport Engineering, Water 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 unsw.to/feas

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

Graduates find employment with specialist consulting firms, which vary in size from sole practitioners to major companies employing hundreds of engineers.

Career opportunities include engineering consulting, construction and large public companies, and financial and management consultancies. Government organisations that construct, manage and maintain public utilities are big employers of civil engineers.

Student Testimonials

"UNSW offers a truly world-class engineering program, a massive amount of clubs and societies, impressive student-led projects and numerous exchange opportunities – it was a definite first choice for me. Some of the projects are tough, but I'm learning so much about the impact of modern engineering."

George Chard, Civil Engineering

Example study plan

	TERM 1			TERM 2			TERM 3		
YEAR 1	Introduction to Engineering Design & Innovation	Mathematics 1A	Physics 1A	Elective	Engineering Mechanics	Engineering Construction	Mathematics 1B	Computing for Engineers	Engineering Materials and Chemistry
YEAR 2	Mechanics of Solids 1	Fluid Mechanics for Engineers	Engineering Mathematics 2E	Engineering Computations	Structural Analysis & Modelling	Engineering Design & Professional Practice	Engineering Operations & Control	Soil Mechanics	General Education
YEAR 3	Steel Structures	Water Resources Engineering	Applied Geotechnics & Engineering Geology	Sustainable Trans & Hwy Eng	Concrete Structures	Water & Wastewater Engineering	Industrial Training		
YEAR 4	Elective	Elective	Thesis A	General Education	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.