

UNSW Engineering

Bachelor of Engineering (Honours) (Civil Engineering with Architecture)

What do civil engineers do?

Civil engineers construct, manage and maintain the infrastructure of modern society using mathematics, mechanics, physics and creative problem-solving. Civil engineers work on more than just buildings and bridges, for example tunnels, water supplies, airports and harbours all rely on civil engineers. This degree will build on your Civil Engineering understanding by immersing you in Architecture subjects. You'll be able to appreciate and understand architectural principles and develop your creativity, allowing you to work closely with architects to incorporate these into new and innovative designs.

What will your study involve?

You'll be inspired to become a conceptual thinker with a mix of aesthetic and structural expertise. This degree provides civil engineers with an appreciation and understanding of architectural principles, focusing

on creativity and inventiveness. Civil electives can be chosen from disciplines including structural, geotechnical, transport or water engineering, or engineering construction and management.

Students will graduate qualified and equipped to work with architects and other building professionals to produce integrated and sustainable designs.

UNSW Civil & Environmental Engineering

- 1st in Australia and 13th globally for Civil and Structural Engineering (QS Subject Rankings 2022).
- 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 (2022): 94

Duration: Four-year embedded honours degree

Study areas: Architecture, Civil Engineering

Assumed knowledge: HSC level Mathematics Extension 1, Physics

Accreditation

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

Career options

Graduates can be employed by specialist structural engineering design consultants, construction and contracting companies, federal, state, and local government organisations, airport and harbour authorities, project developers, and management consultancies.

Student Testimonials

"I wanted to be able to build upon my creativity and passion for design while capitalising on my strong mathematical background, and this degree promotes a balance between analytical skills and imagination. Being able to contribute to a project and see its outcome is an extremely satisfying experience."

Tom LY Banh, Civil Engineering with Architecture



Example study plan

	TERM 1			TERM 2			TERM 3		
YEAR 1	Architecture and Enabling Skills	Mathematics 1A	Physics 1A	History of Design Thinking	Engineering Mechanics	Engineering Construction	Engineering Materials and Chemistry	Introduction to Engineering Design & Innovation	Mathematics 1B
YEAR 2	Architectural Design Studio 1	Fluid Mechanics for Engineers	Mechanics of Solids 1	Engineering Computations	Structural Analysis and Modelling	Elective	Architectural Design Studio 2	Engineering Mathematics 2E	Soil Mechanics
YEAR 3	Architectural Design Studio 3	Steel Structures	Applied Geotechnics	Concrete Structures	Water and Wastewater Engineering	Elective	Engineering Operations and Control	Elective	
YEAR 4	Communication in the Built Environment	Water Resources Engineering	Thesis A	Sustainable Infrastructure	Elective	Thesis B	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.