



UNSW Engineering

Bachelor of Engineering (Honours) (Software Engineering)

What do software engineers do?

The software industry is one of the fastest growing in the world. Software engineers work with processes, methods and tools to design and develop high-quality, reliable software systems used on computers. When you study software engineering at UNSW learn to write code and design programs to meet a need or solve a problem.

Software Engineering workshops are a key feature of this degree, you'll undertake realistic projects working in teams to gain experience in all aspects of software development.

What will your study involve?

Software Engineering is more than simple programming. This degree features foundations in computing studies combined with study in

design and project management to ensure you graduate work-ready. Software Engineering workshops allow students to immerse themselves in realistic projects. You'll experience all aspects of planning and designing, as well as developing secure, reliable and efficient software.

UNSW Computer Science and Engineering

- UNSW Computer Science and Engineering is ranked 3rd in Australia by the 2023 QS Subject Rankings.
- UNSW Computer Science and Engineering is one of the largest schools of its kind in Australia which provides the most technically challenging computing degrees in the country.
- UNSW Computer Science and Engineering is home to five-time world robot soccer champions, the UNSW 'rUNSWift' team.

Program details

Lowest Selection Rank (2023): 90

Duration: Four-year embedded honours degree

Study areas: Computing, Software Engineering, Software Development, Software Process, System Design

Assumed knowledge: Mathematics Extension 1

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.

This degree is also accredited by the Australian Computer Society.

Career options

Graduates can pursue careers in software development and computing, software engineers can work in the telecommunications, defence, security

finance, electronics, medical, power and transport industries, as well as in business.

Student Testimonials

"I love solving problems and I think programming is a really great tool for making the world a better place. Although I plan to start my own company one day, at the moment UNSW has been fantastic in getting me as much experience as possible across different fields so I can expand my future opportunities."

Khanh Nguyen, Software Engineering (Hons)



Example study plan

	TERM 1			TERM 2			TERM 3		
YEAR 1	Programming Fundamentals	Introduction to Engineering Design & Innovation	Mathematics 1A	Computer Systems Fundamentals	Discrete Mathematics	General Education	Software Eng Fundamentals	Data Structures and Algorithms	Mathematics 1B
YEAR 2	Requirements & Design Workshop	Software Construction: Techniques & Tools		Finite Mathematics	Engineering Design & Professional Practice	General Education	Object-Oriented Design & Programming	Database Systems	Workshop on Reasoning about Programs
YEAR 3	Computer Networks & Applications	Software Engineering Workshop		Software System Design & Implementation	Elective	Elective	Elective	Elective	Elective
YEAR 4	Research Thesis A	Elective	Elective	Research Thesis B	Elective	Elective	Research Thesis C	Management and Ethics	

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.