



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 #1 in Australia by Times Higher Education.
- 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 (2022): 90

Duration: Four-year embedded honours degree

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

Assumed knowledge: Mathematics Extension 1

Alternative 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.