

## **UNSW Engineering**

# Bachelor of Engineering (Honours)/ Computer Science

Develop your engineering knowledge as well as an in-depth understanding of computer science in this double degree. When you undertake this double degree you'll graduate with two separate degrees that provide a diverse but complementary knowledge and skill-base

#### What will your study involve?

Throughout this five-year degree you will be able to specialise in two separate areas: Choose one of the 16 majors available in the Bachelor of Engineering (Hons) program – these include traditional options like Civil, Mechanical and Electrical Engineering but also new and emerging options like Renewable Energy Engineering and Quantum Engineering. Complement your Engineering degree, with a cutting-edge Computer Science major in areas like Artificial Intelligence, Security Engineering and much more. You'll graduate with two powerful and complementary degrees, which will expose you to a variety of career options and opportunities.

### **UNSW Engineering**

- We are ranked #1 in Australia for Engineering and Technology and 49th in the world according to the 2023 QS Rankings.
- We educate the next generation of innovative engineers with the skills and knowledge to make a positive impact on industry and the community.
- Our strong industry links provide opportunities for industry partnerships and professional development.
- Our facilities are globally renowned for developing industry standard practical experience.

#### **Program details**

Lowest Selection Rank (2023): 90

**Duration:** Five-year double degree with embedded honours.

**Study areas:** Computer Science + Engineering (Aerospace, Chemical, Chemical Product, Civil, Electrical, Environmental, Mechanical, Manufacturing, Mechatronic, Mining, Photovoltaics and Solar, Quantum, Renewable, Telecommunications)

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

**Portfolio Entry:** Faculty of Engineering Admission Scheme (FEAS), as an alternative pathway for students who want to study at UNSW but don't meet the required selection unsw.to/feas

#### **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 and your Bachelor of Science (Computer Science) is accredited by the Australian Computer Society.

#### **Career options**

When you combine two Engineering degrees to receive two qualifications, you increase your attractiveness to prospective employers and set yourself apart with a unique skill set. Double degree graduates can open the door to more opportunities.

#### **Student Testimonials**

"In my combined degree, It has taught me to grow and learn beyond what I knew was capable. UNSW allows you to develop your interests whilst preparing you for the professional world. Whether in Aerodynamics, Design or Propulsions, I can feel comfortable with adapting to problems beyond my university career. Computer Science has also diversified me with the technical skills and thinking patterns that, if I decide to venture into either one industry I am equipped me with the knowledge and understanding to thrive. This is why I chose UNSW, for its addictive campus life and a safe and cultivating environment."

Kelly Pan, Bachelor of Engineer (Honours)/ Computer Science



Example study plan

	TERM1			TERM 2			TERM 3		
YEAR 1	Programming Fundamentals	Physics 1A	Mathematics 1A	Mathematics 1B	Computer System Fundamentals	Engineering Specialisation Course	Discrete Mathematics	Engineering Specialisation Course	
YEAR 2	Engineering Design and Innovation	Computer Science Course	Engineering Specialisation Course	Object-Oriented Design & Programming	Data Structures and Algorithms		Software Engineering Fundamentals	Engineering Specialisation Course	Engineering Specialisation Course
YEAR 3	Algorithms and Programming Technique	Professional Issues & Ethics in Information Technology		Computer Science Course	Engineering Specialisation Course	Engineering Specialisation Course	Computer Science Course	Engineering Specialisation Course	Engineering Specialisation Course
YEAR 4	Computer Science Course	Engineering Specialisation Course	Engineering Specialisation Course	Computer Science Course	Engineering Specialisation Course	Engineering Specialisation Course	Computer Science Project	Engineering Specialisation Course	Engineering Specialisation Course
YEAR 5	Engineering Specialisation Course	Engineering Specialisation Course	Engineering Research Thesis A	Engineering Specialisation Course	Engineering Specialisation Course	Engineering Research Thesis B	Engineering Specialisation Course	Engineering Research Thesis C	

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.