

BACHELOR OF SOFTWARE ENGINEERING (HONOURS)

Software is everywhere. It does everything from dispensing medicine to controlling flight paths to monitoring and shaping our shopping habits. Our world's major companies, governments and organisations depend on smartly designed and well-built software. And they rely on the expertise of skilled software engineers to make it happen.

After completing this specialisation you will be able to:

- Analyse, develop and improve software using engineering design principles
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As a software engineer, you will apply engineering principles to systematically analyse, develop and improve software to ensure it runs effectively, safely and securely.

Specialise in software engineering from second year and graduate with a Bachelor of Software Engineering (Honours). This project-rich specialisation is designed to address industry demand for tech-savvy graduates with large-scale software systems project capability.

You will acquire high-level programming expertise, but software engineering goes well beyond writing code. Most modern IT systems are so complicated that teams must work together to create them. This specialisation's emphasis on collaborative studio-based learning will give you strong skills in teamwork, project management and communication.

You will have a huge choice of IT electives including cybersecurity, games development, and business information systems.

Software Engineering is also available as a minor in the Bachelor of Computer Science and Bachelor of Information Technology.



Software engineering is one of those disciplines that keeps you on your toes; you never know everything in a field that evolves with such rapidity. The demand for software engineers is much higher than the supply, so job opportunities tend to fall in your lap if you have the skills and the potential."

SALONI SHARMA

ASSOCIATE (DIGITAL TRUST) AT PwC.
BACHELOR OF SOFTWARE ENGINEERING (HONOURS).
INDUSTRY-BASED LEARNING (IBL) PROGRAM

INDUSTRY BASED LEARNING (IBL) PROGRAM

In the Bachelor of Software Engineering (Honours) you can do a half-year placement with our industry partners which counts towards your course, and is supported by an \$18,000 scholarship per placement. For more information go to monash.edu/it/ibl

DOUBLE DEGREE OPTIONS

- Arts
- Commerce
- Computer Science
- Information Technology
- Science

COURSE UNITS

- Algorithms and data structures
- Introduction to computer science for engineers
- Object-oriented design and implementation
- Operating systems
- Software engineering process and management
- Software quality and testing
- Software engineering: architecture and design
- Computer architecture
- Software engineering practice
- Databases
- Software engineering industry experience studio project or Industry-based learning
- Software engineering research project
- Computer networks
- Discrete mathematics for computer science

DID YOU KNOW?

If you complete **VCE Algorithmics Units 3/4**, you can apply for credit towards your Monash degree.

COURSE DETAILS

Location: Clayton
ATAR: 92
IB Score: 34
Duration: 4 years
Structure: Specialist

VCE PREREQUISITES

30 English (EAL) or 25 English other than EAL	+	25 Mathematical Methods (any) +	25 Chemistry or 25 Physics
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INTERNATIONAL BACCALAUREATE SUBJECT PREREQUISITES

4 English A SL or	3 English A HL or	4 Literature + Performance SL or	5 English B SL or	4 English B HL or	5 English AB SL
+					
4 Mathematics SL	or	3 Further Mathematics HL	or	3 Mathematics HL	
+					
4 Chemistry SL	or	3 Chemistry HL	or	4 Physics SL	or 3 Physics HL

FURTHER INFORMATION

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