

	Computer Engineering	Software Engineering	Computer Science	Computer Science (Advanced)
Focus	Computer engineering has a focus on computer systems design and development including digital circuits and computer architecture.	Software engineering has a focus on computer software design and project management.	Computer science has a focus on data representation and structures, and algorithms for programming languages and machine systems	Computer Science (Advanced) has a strong focus in programming, software engineering, computer hardware, data structures and algorithms.
Degree and Duration	Bachelor of Engineering (Hons) 4 years	Bachelor of Engineering (Hons) 4 years	Bachelor of Computer Science 3 years	Bachelor of Advanced Computer Science (Honours) 4 years
Study areas	<ul style="list-style-type: none"> • Computing • Electronics • Embedded Systems • Operating Systems • Networks • Systems and Control • Telecommunications 	<ul style="list-style-type: none"> • Computing • Software Engineering • Software Development • Software Process • System Design 	The available majors are: <ul style="list-style-type: none"> • Artificial Intelligence • Computer Networks • Computer Science • Database Systems • eCommerce Systems • Embedded Systems • Programming Languages • Security Engineering 	Alongside completing Advanced Computer Science electives, can choose from three majors <ul style="list-style-type: none"> • Computer Science • Security Engineering • Artificial Intelligence And an optional Minor in Maths And an optional Minor in Maths
Program Structure	<ul style="list-style-type: none"> • Common first year covering introductory courses in mathematics, physics and computing. • Courses from study areas above plus electives to deepen knowledge • 60 days industrial training • Final year will include a thesis project in Computer Engineering. 	<ul style="list-style-type: none"> • Common first year covering introductory courses in mathematics, physics and computing. • Courses from study areas above plus electives to deepen knowledge • Team-based workshops that focus on project work • 60 days industrial training • Final year will include a thesis project in Software Engineering. 	<ul style="list-style-type: none"> • Core courses including Mathematics, Programming, Computer Systems, Software Engineering, Data Structures, Computer Networks, Ethics, Object Oriented Design, Algorithms and Programming techniques. • One major from the above • Possible Minor in Accounting, Finance, Information Systems, Marketing, Maths, Psychology • Final year includes a computer science project. 	<ul style="list-style-type: none"> • Core courses including mathematics, Programming, Computer Systems, Software Engineering, Data Structures, Computer Networks, Ethics, Object Oriented Design, Algorithms and Programming techniques. • Two Mathematics Course • Study courses relevant to your major of choice • Two general electives • In the final year will complete an Honours thesis- Computer Science Thesis Project.
Accreditation	Engineers Australia & Australian Computer Society	Engineers Australia & Australian Computer Society	Australian Computer Society	Accreditation from the Australian Computer Society is in progress.
Career Opportunities	<p>Computer Engineers can work in many different fields.</p> <p>Computer Engineers work with computer systems of any type, including desktops and laptops but also embedded systems for gaming, vehicles and PDAs.</p> <p>Computer Engineers also work with supercomputers as used in climate modelling and gene analysis as well as prosthetic systems such as ocular implants.</p>	<p>Professional's work involving large-scale software development across a range of sectors including IT, Finance, Energy, Healthcare and more.</p> <p>Some careers include Application Developer, Web Developer, Systems Developer or Technical Team Leader, Software Architect</p>	<p>Specialists in Computer Science are increasingly sought-after across many different industries from finance to consulting, government to healthcare. Potential roles upon graduation include:</p> <ul style="list-style-type: none"> • Cybersecurity Consultant • Information Systems Manager • Database Administrator • Data Scientist • Data Engineer • Systems Analyst • Games Developer 	<p>Potential Pathway to PHD</p> <p>Potential roles upon graduation include:</p> <ul style="list-style-type: none"> • Cybersecurity Consultant • Information Systems Manager • Database Administrator • Systems Analyst • Games Developer <p>Graduates also have the opportunity to be at the forefront of research across diverse areas including AI, data science, cyber-security and software and systems.</p>