

At least four **advanced computing electives** are studied, and chosen from the following:

Advanced Dynamic Web Development
Artificial Intelligence
Computer Graphics & Animation
Computer Networks
Computer Security
Concurrent Systems
Data Mining & Text Retrieval
Human-Computer Interaction
Mobile & Ubiquitous Computing
Network Administration & Security

At least four, and up to eight, **non-computing electives** are studied within any other discipline – giving you the opportunity to gain valuable knowledge in a field that complements your computing skills. Eight units from one discipline may constitute a 'major' in that area.

RELATED COURSES

In addition to the Bachelor of Computing, the School of Computing and Information Systems offers the following degrees:

- Bachelor of Science (major in Computer Science)
- Bachelor of Computing (Honours)
- Bachelor of Information Systems
- Bachelor of Science (Honours in Computing)
- Graduate Diploma of Computing
- Master of Information Technology by coursework
- Master of Computing by coursework
- Master of Science by research
- PhD

COMBINED DEGREES

- Bachelor of Arts and Bachelor of Computing
- Bachelor of Business and Bachelor of Computing
- Bachelor of Computing and Bachelor of Economics
- Bachelor of Computing and Bachelor of Information Systems
- Bachelor of Computing and Bachelor of Laws
- Bachelor of Computing and Bachelor of Science
- Bachelor of Computing and Bachelor of Teaching

JOINT PROGRAM

It is also possible to study the TAFE Diploma of Information Technology concurrently with the Bachelor of Computing, with credit granted for some computing units.

COMPUTING UNITS FOR NON-COMPUTING STUDENTS

Many computing units may be studied as electives within another degree, with four units forming a computing minor, and eight units a computing major. A computing major may be completed as a component of any of the following:

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Economics
- Bachelor of Business
- Bachelor of Information Systems

ENTRY REQUIREMENTS

Minimum university entry requirements apply. To study the Bachelor of Computing, there are no prerequisite subjects. However, TCE level English, Mathematics, Computer Science and/or Information Systems would be beneficial. Students who have completed a TAFE Diploma in Information Technology may be eligible for credit for some units of the degree.

FOR MORE INFORMATION

Full details of courses are published on the UTAS website www.utas.edu.au/courses

OR CONTACT

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Computing and Information Systems



FACULTY OF SCIENCE, ENGINEERING & TECHNOLOGY



FACULTY OF SCIENCE,
ENGINEERING & TECHNOLOGY

School of Computing
& Information Systems

CRICOS Provider Code: 00586B

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The Faculty of Science, Engineering and Technology encourages applicants from all equity groups.

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UNIVERSITY OF TASMANIA

DID YOU KNOW

that there is a predicted shortage of IT graduates in Australia in the next three to five years? By starting a degree with the School of Computing and Information Systems soon, you can help fill that shortfall when you graduate.



COMPUTING

CAREERS IN COMPUTING

In order to meet expected growth over the next few years, the IT industry will be seeking computing professionals with skills in areas such as mobile computing, systems and network administration, software engineering, information retrieval and search engines, graphic design and multimedia, artificial intelligence, learning systems, Internet and web engineering.

A degree from the School of Computing and Information Systems will give you these skills and more, and start you on a career in a vital technology-based industry, in research and development, business, manufacturing, education or a government sector, especially in the areas of informatics and bioinformatics, games, e-security, health and education.

WHAT MAKES US DISTINCTIVE?

- We integrate the disciplines of computer science, software engineering and applied computing to provide our students with skills that are highly regarded by local, national and international employers.
- We have an active interface with the Tasmanian business community. In the final year of the Bachelor of Computing degree, students obtain practical work experience during a project unit in which they design, engineer and implement software solutions to real industry problems.
- Our internationally qualified academic staff members provide students with a high-quality blend of industry experience and academic expertise.
- Our focus areas for teaching and research include:
 - Artificial Intelligence
 - Computer Security
 - Software Engineering
 - Multimedia and Internet Technologies
 - Systems and Networks
 - Mobile and Ubiquitous Computing
 - Distributed Systems
 - Programming Languages

LOCATION

The School of Computing and Information Systems is a cross-campus school, with state-of-the-art teaching and laboratory facilities available on each of the Hobart and Launceston campuses. First-year units of the Bachelor of Computing are also available at the Cradle Coast campus in Burnie.

FACILITIES AND RESOURCES

Students will gain experience on Sun and Silicon Graphics Unix computers, Apple Macintosh and IBM-compatible personal computers. All systems in the school access AARNet (the Australian Academic and Research Network), which connects most universities and all research organisations in Australia to the Internet. In the future, look forward to using wireless communication in the laboratories and for your private study. School facilities and resources are available to students 24 hours per day, seven days per week.

In addition to the academic program, the School holds social events throughout the year, and there are support and interest groups such as Students in Computing (SIC), Internet Development Society (IDS), and a mentor scheme for beginning students.

COURSE STRUCTURE

The Bachelor of Computing degree is a three-year, full-time-equivalent program.

Year 1

Programming & Problem Solving
Programming with Data Structure
Introduction to Systems
Data Management
Schedule B Elective
Schedule B Elective
Non-Computing Elective
Non-Computing Elective

Year 2

Algorithms
Professional ICT Management
Software Construction
Operating Systems
Non-Computing or Advanced Computing Elective
Non-Computing or Advanced Computing Elective
Non-Computing Elective
Non-Computing Elective

Year 3

Software Engineering Project A
Software Engineering Project B
Advanced Computing Elective
Advanced Computing Elective
Advanced Computing Elective or Non-Computing Elective
Advanced Computing Elective or Non-Computing Elective
Advanced Computing Elective or Non-Computing Elective
Advanced Computing Elective or Non-Computing Elective

Specified electives are selected from the following:

Building Interactive Multimedia Systems
Dynamic Web Development
Introduction to Electronics
Digital Electronics & Microprocessors
Electrical Engineering
Information Modelling & Infrastructure
Introduction to Logic
Calculus & Applications IA and IB
Data Handling & Statistics
Advanced Calculus & Applications A and B
Mathematics I and II
Interactive Entertainment (Digital Games & Animated Film)
Virtual Reality & Advanced Media Technology
Physics IA and IB

