# BACHELOR OF INFORMATION TECHNOLOGY



Computers and related technologies are a part of everyday life, but relatively few people have the skills to design and build the systems we all rely on. As an IT student at Deakin, you will develop a thorough grounding in the fundamental skills of computing while having the flexibility to choose from a wide range of specialisations according to your interests and career aspirations.

Location: Melbourne Burwood Campus (B), Geelong Waurn Ponds Campus (G) and Cloud (online) (X) Duration: 3 years full-time study (or part-time equivalent) Deakin Code: S326

VTAC code: 1400514441 (CSP, Melbourne Burwood Campus); 1400314441 (CSP, Geelong Waurn Ponds Campus); 1400614441 (CSP, Cloud (online)).

#### **Course overview**

The Bachelor of Information Technology provides you with the knowledge, skills and experience necessary to keep abreast of this rapidly changing field. In addition to acquiring a core set of IT skills that are relevant in almost every industry, you will have the opportunity to choose from a diverse range of IT specialisations according to your interests and career aspirations. We offer a full range of IT disciplines from the technical (software development and cloud computing) to the creative (interactive media design and games design). You can further diversify your studies through elective units in IT and/or complimentary study areas. An Honours year is available for high-achieving students upon completion of this degree.

## **Course structure**

The Bachelor of Information Technology consists of 24 credit points of study, comprising nine core units, at least one IT-related major sequence from the options outlined below, and up to nine elective units. Students can use their elective units to undertake a second IT-related major sequence. Up to 8 credit points of elective units may be selected from any area across the University.

#### Games Development (B, G, X)

This major sequence provides you with the knowledge and skills to develop modern computer game software. You will learn how to structure and develop solutions to the complex problems faced by professional game developers, using industry standard programming languages, libraries and development environments to create a range of games and virtual environments.

#### Interactive Media Design (B)

Combining both technical IT and creative skills, this major sequence cuts across traditional disciplines, allowing you to develop complementary skills that extend core studies in IT into the design and development of interactive media. You will learn how to design and author multimedia information, create electronic documents, design and manipulate databases and information systems, and develop in-demand interactive media project management skills.

#### Programming (B, G, X)

This sequence equips you with the skills to develop and implement modern computer software on different types of computing platforms, from mobile devices to high performance servers. Graduates will be able to implement complex software, databases and networks in real-world, rapidly changing environments.

#### Mobile and Apps Development (B, X)

Development and increased use of mobile devices and applications are shaping and changing the way businesses operate and interact with their customers. This major sequence gives you the knowledge to thrive in the fast-growing field and the skills required to develop profitable apps. You will acquire the capacity to build marketable apps; develop apps for business; and plan, develop and manage app projects.

#### Cloud Computing (B, G)

Cloud Computing is a significant development in the IT industry that is having a major impact on how software solutions are developed, deployed, and delivered over the web. You will undertake a study of the concepts and technologies of cloud computing and acquire the necessary expertise to work effectively in this field, both by exploiting public cloud infrastructure options and through the construction of private cloud infrastructure.

The major sequence incorporates the Cisco Certified Networking Associate (CCNA) curriculum that trains you in the skills needed to construct and maintain network infrastructures to effectively support organisational needs.

#### Security (B, G, X)

Gain practical and theoretical knowledge in this critical aspect of IT, with an emphasis on understanding and assessing the need for IT security in a working environment, knowledge of the security solutions available, as well as understanding the business, ethical and legal implications of risk management. You will learn in a leadingedge study environment and graduate as a qualified IT professional with specialised skills in IT security.

For more information about this course, including further details of the course structure, major sequences and units involved, please visit **deakin.edu.au/handbook.** 

## **Career opportunities**

IT professionals are employed across all industry sectors in Australia. Graduates will be highly sought-after for employment in a range of areas. You could work as a software engineer, a system or business analyst, an iOS or Android developer, games designer, a security specialist, a network engineer, multimedia system designer or a 3D graphic designer.

# Professional recognition

The Bachelor of Information Technology is professionally accredited with the Australian Computer Society (ACS), providing international recognition and graduate eligibility for membership of the ACS.

## Industry certification

In addition to studying towards a Bachelor of Information Technology, students have the opportunity to undertake industry certification curriculum such as the Cisco Certified Network Associate (CCNA) through Deakin's Cisco Academy.

## Practical industry experience

As an IT student at Deakin, you will undertake a work placement as part of your course. A work placement will enable you to experience a professional work environment, develop professional networks and explore career opportunities before you graduate. Highachieving students will also have opportunities to apply for industrybased learning placements, which come with an industry-funded scholarship. For more information, please visit **deakin.edu.au/sebe/students/wil.** 

## Industry informed teaching

Deakin's teaching and research staff are experts in their respective fields, with broad international links and connections with industry. Our IT courses are regularly reviewed and updated with industry input to ensure the curriculum is up-to-date and reflects workplace needs. Students also have the opportunity to learn from professional industry guest lecturers, and are encouraged to critique, participate and contribute to industry-linked research and development projects.

# **Specialised facilities**

Experiential learning and practical hands-on exposure to current and emerging technology is a key feature of Deakin's IT courses. The specialised IT labs are well-equipped with modern facilities and enthusiastic and experienced staff. You will also have access to current state-of-the-art software right from the beginning of the course.

# Teaching methods

Students enrolled at the Melbourne Burwood Campus or Geelong Waurn Ponds Campus, will be taught using a range of located learning methods including classes and practical experiences. This course may also be completed via Cloud (online) learning. Some units are also available during Trimester 3. You can take advantage of this flexibility to study when, where and how you like, and to fit your studies around your work and personal commitments.

## **Contact hours**

A typical full-time student undertakes 4 credit points of study per trimester, with an average of 10 hours per week of study expected for each credit point undertaken. This comprises a combination of hours spent participating in classes, practicals and online activities in addition to private study undertaken to research, review and prepare assessments.

## **Related courses**

If you are interested in the Bachelor of Information Technology, you may also wish to consider to following related courses at Deakin:

- Bachelor of Computer Science
- Bachelor of IT Security
- Bachelor of Games Design and Development
- Bachelor of Information Systems/Bachelor of
  Information Technology
- Bachelor of Criminology/Bachelor of IT Security

#### Pathways

Deakin provides a number of pathway options for students seeking admission to its courses. TAFE pathways for application to the Bachelor of Information Technology include the Diploma of Information Technology, Diploma of Computing and Advanced Diploma of Information Technology.

Successful completion of the Bachelor of Information Technology can lead to postgraduate studies in information technology, networking and security. Those interested in pursuing research, may wish to consider application to an Honours program followed by a higher degree by research (masters and PhD).

# Information for applicants

**Applications:** Applications for Trimester 1, 2015 can be made through the Victorian Tertiary Admissions Centre (VTAC), **www.vtac.edu.au.** 

**Year 12 prerequisites:** VCE units 3 and 4 – a study score of at least 25 in English (EAL) or 20 in English other than EAL.

**Non-Year 12 requirements:** Educational history including GPA. Applicants who wish for experience to be considered must include this information on their VTAC Personal Statement.





More information 1300 DEGREE (1300 334 733) enquire@deakin.edu.au deakin.edu.au/study-at-deakin/find-a-course/information-technology

While the information provided here was correct at the time of publication, Deakin University reserves the right to alter, amend or delete details of course and unit offerings. Printed July 2014.