



•STUDENT
PROFILE

Damien White
Bachelor of Information Technology
(Computer Science and Software
Development)
Completed: 2010
Employed: Software company,
Business Development Manager

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‘While there are challenges to being an off-campus student, there are benefits too. Importantly in my case, studying off campus and part time meant I was able to keep working and earn an income while I worked towards my degree.

I now have greater confidence in my skill set. I can hold a conversation with IT professionals and truly understand what they’re saying. I’m better equipped to meet the needs of our clients.’



Information Technology

If you want a career that gives you the opportunity to be at the forefront of technology with employment opportunities in just about every industry, a Deakin Information Technology (IT) course could put you on the right path.

A career in IT has almost endless possibilities. You could work as a computer games designer, a security specialist, a software engineer, a system or business analyst or 3D graphic designer.

Deakin's cutting-edge research, industry collaborations and innovative teaching programs will provide you with an IT degree that matches the 21st century's technology-driven future.

Flexibility

At Deakin, you can tailor your IT or Business Information Systems course to suit your career aspirations by choosing between study options offered through the Faculty of Science and Technology, the Faculty of Business and Law, or in other disciplines within the University. For example you can choose to focus on IT, or combine IT with Engineering or Business. You can also study on or off campus, giving you choices about how and when you study.

Hands-on learning

Whether you are working on developing a state-of-the-art computer game or studying the business application of IT, you will learn by doing rather than just seeing.

Experiential learning is a key feature of Deakin's IT courses. You will have access to computing laboratories and specialised computing facilities. For example, if you are studying games design and development, you will have access to games lounges and games studios where you can interact and develop team-based projects or just chill out and test your gaming skills on the latest gaming technology.

This practical experience is complemented by our first-class teaching in a friendly environment with accessible lecturers and small class sizes.

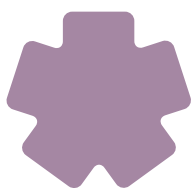
Industry input

As a graduate of a Deakin IT course you will be a sought-after employee.

Our IT programs reflect industry needs, offering areas of study that are of crucial importance to IT development and applications.

Industry representatives from organisations such as Telstra, IBM, Microsoft, ANZ, Computershare, government, and games and multimedia production companies contribute to course development to ensure our courses are tailored to produce industry-ready graduates.

Deakin's IT and Business Information Systems degrees are accredited at the highest level by the Australian Computer Society (ACS), providing international recognition and allowing graduates to be eligible for membership of the ACS. Deakin's IT courses also give you the option to study units leading to CISCO certification as part of your normal course sequence.



Information Technology

Bachelor of Business Information Systems 3 B G

Deakin code	VTAC code	Indicative first year fee ¹	ATAR
M305	B 14211 (CSP) G 15371 (CSP)	\$7840 (CSP)	B 55.20 G 51.95
Year 12 prerequisites	VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		
Non-Year 12 requirements	VTAC Pi form.		

Deakin's Bachelor of Business Information Systems is a passport to a satisfying and professionally rewarding career. Almost all jobs use some form of information systems or information technology for business processes and management, creative output or communication.

In addition to specialist studies in information systems, you can also elect to complete a business major sequence. On completion of this course you will have satisfied requirements for professional membership of the Australian Computer Society.

An honours year is available upon the completion of this degree, which can provide you with a competitive edge in the job market or a pathway into a higher degree.

Career opportunities

Due to the constant need to develop, manage and use information strategically, business information systems professionals have access to employment in just about every Australian industry, including all levels of government. This course is designed to give you essential business skills, as well as develop expertise in information systems to achieve specialist career roles in corporate businesses and government.

Major sequences

Refer to the Bachelor of Business Information Systems entry on page 45 for major sequence listings.

Bachelor of Information Technology 3 B G X

Deakin code	VTAC code	Indicative first year fee ¹	ATAR
S326	B 14441 (CSP) G 15001 (CSP) X 14561 (CSP)	\$7560 (CSP)	B 51.65 G 51.10 X N/A
Year 12 prerequisites	VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		
Non-Year 12 requirements	VTAC Pi form.		

The Bachelor of Information Technology provides a thorough grounding in the basic skills of computing, such as networking, IT security, multimedia or software development. At the same time, the course provides the theoretical understanding and experience necessary to enable graduates to keep abreast of this rapidly changing field. You will not only develop a thorough knowledge of the discipline, its theoretical underpinnings and its technical skills, but also build useful systems and lead project teams. Through the study of a core set of IT units common to all IT degrees at Deakin, and the selection of a variety of IT majors and elective studies (both IT course-grouped and units from other areas of study), you can tailor your studies to your own interests and specific career aspirations.

An honours year is available upon the completion of this degree, which can provide you with a competitive edge in the job market or a pathway into a higher degree.

Career opportunities

You may find employment in roles such as object-oriented and procedural programmer, database and web designer and manager, network manager, component integrator, project manager, consultant or system analyst.

Major sequences

You must complete at least one 6-credit-point major sequence from the following areas:

- » Computer science B G X
- » Game development B G X
- » Interactive media design B
- » Mathematical modelling B G X
- » Networking B G
- » Security B G X
- » Software development B G X

Computer science B G X

This major sequence focuses on the theory of computing and information technology. The theoretical concepts provide the necessary rigor for software design and problem solving, enhancing students who are interested in possessing strong analytical skills necessary in managerial and consultancy positions.

Game development B G X

The game development major sequence provides you with the necessary foundation of skills and knowledge 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 cuts across traditional disciplines, allowing you to develop a package of complementary skills that extend the 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.

Mathematical modelling B G X

Studies in mathematics provide you with a strong critical knowledge base and develop powers of analysis, logical thinking and problem solving, as well as a high level of numerical ability. This major offers traditional subjects (calculus, algebra and discrete mathematics) and modern topics (information security and cryptography, operations research). It provides a solid background in the discipline and practical skills learned through applying mathematics in a variety of applications.

Networking B G

The networking major sequence focuses on the planning, design and management of modern day computer networks. Emphasis is on the provisioning of both local and wide area networks that carry converged data, voice and video traffic. The major 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

This critical aspect of IT is the focus of this major sequence. Emphasis is placed on issues such as computer security, cryptography, system security and security management.

Software development B G X

This major sequence will equip you with the hands-on skills required to implement a piece of 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 rapid changing environments.



KEY

- 3** Course duration
- B** Melbourne Campus at Burwood
- F** Geelong Waterfront Campus
- G** Geelong Campus at Warrn Ponds
- W** Warrnambool Campus
- X** Off campus

Bachelor of Information Technology (Honours) **4 B G**

Deakin code	VTAC code	Indicative first year fee ¹	ATAR
S325	B 14651 (CSP) G 15391 (CSP)	\$7760 (CSP)	B 81.65 G N/A
Year 12 prerequisites	VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English and a study score of at least 20 in mathematics (any). Minimum ATAR of 80.00.		
Non-Year 12 requirements	VTAC Pi form.		

The Bachelor of Information Technology (Honours) has been designed for high-achieving students with an interest in continuing on to a research degree in IT after completing their undergraduate studies. Successful completion of the Bachelor of Information Technology (Honours) will enable you to apply to undertake a PhD in the field. Only students with an ATAR of 80.00 and above will be considered, with admission through VTAC based on ATAR and successful completion of the published prerequisites. You will be required to maintain a 70 per cent average to progress to the honours year, otherwise you may exit with a Bachelor of Information Technology degree.

The course offers the option to either choose an honours project that is a continuation of your third year capstone project, or do a research project to prepare for postgraduate research, potentially leading to a career in research.

You will be assigned an academic mentor in IT for the duration of your study, to guide, enrich and extend your student experience. The course also provides the opportunity to attend research seminars to broaden your knowledge in IT and experience first-hand the cutting-edge IT research happening at Deakin and in the wider research community.

The advanced coursework and research skills gained during the course are attributes highly valued by organisations seeking to employ graduates in consultancy, management, research and academia.

Career opportunities

Depending on the chosen major sequence, you may find employment in such roles as IT consultant, business analyst, project manager, research assistant, scientist in a research organisation or an academic.

Major sequences

You must complete at least one 6-credit-point major sequence from the following areas:

- » Computer science **B G X**
- » Game development **B G X**
- » Interactive media design **B**
- » Mathematical Modelling **B G X**
- » Networking **B G**
- » Security **B G X**
- » Software development **B G X**

Bachelor of Information Technology (Computer Science and Software Development) **3 B X**

Deakin code	VTAC code	Indicative first year fee ¹	ATAR
S327	B 14241 (CSP) X 14151 (CSP)	\$7400 (CSP)	B 56.00 X N/A
Year 12 prerequisites	VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English and a study score of at least 20 mathematics (any).		
Non-Year 12 requirements	VTAC Pi form.		

Deakin's Bachelor of Information Technology (Computer Science and Software Development) will provide you with an understanding of the technology on which systems are built, as well as how to develop software systems and applications, and form an environment to acquire skills needed for software development.

The course supports students who wish to master software development in the industry and reasoning and data environments. You will learn to develop, implement and maintain information systems, databases and computer networks of considerable size and complexity in a commercial, industrial or administrative

environment. You will also be well-prepared to pursue research and development with the computer science foundation necessary for the development of new software products such as those found on modern smart phones and smart appliances.

The course is structured so that the intellectual material will remain current for a number of years despite the fact that computer languages and technology change rapidly.

The Bachelor of Information Technology (Computer Science and Software Development) is professionally accredited with the Australian Computer Society.

An honours year is available upon the completion of this degree, which can provide you with a competitive edge in the job market or a pathway into a higher degree.

Career opportunities

You may find employment as an object-oriented and procedural programmer, database and web designer and manager, network manager, component integrator, project manager, consultant or system analyst.

You will also be suited to employment in areas of systems programming, software development, data communications, management, maintenance of computer systems and development of information systems.

Bachelor of Information Technology (Games Design and Development) **3 B G X**

Deakin code	VTAC code	Indicative first year fee ¹	ATAR
S333	B 14501 (CSP) G 15441 (CSP) X 14531 (CSP)	\$7730 (CSP)	B 56.40 G 51.50 X N/A
Year 12 prerequisites	VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English and a study score of at least 20 mathematics (any).		
Non-Year 12 requirements	VTAC Pi form.		

Deakin's Bachelor of Information Technology (Games Design and Development) develops an understanding of software technology relevant to games, as well as scientific concepts from computer science, including game simulation and modelling, software engineering, human computer interaction, game production, graphic design, and music and sound effects.

You will be exposed to hands-on computer games design and development in a dynamic studio learning environment. You will have access to games lounges and games studios where you can interact and develop team-based projects or just chill out and test your skills on the latest gaming technology.

An honours year is available upon the completion of this degree, which can provide you with a competitive edge in the job market or a pathway into a higher degree.

Career opportunities

You will be qualified to work in a wide range of IT jobs, including game designer, game developer or game programmer, project manager, component integrator, multimedia system designer and developer or consultant.

Information Technology

Bachelor of Information Technology (IT Security) 3 B X

Deakin code	VTAC code	Indicative first year fee ¹	ATAR
S334	B 14201 (CSP) X 14541 (CSP)	\$7260 (CSP)	B 63.45 X N/A
Year 12 prerequisites	VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English and a study score of at least 20 in mathematics (any).		
Non-Year 12 requirements	VTAC Pi form.		

Deakin's Bachelor of Information Technology (IT Security) will provide you with a sound knowledge and understanding of general issues, concepts and practices in IT, particularly in the area of IT security.

You will learn in a leading-edge study environment, and graduate as a qualified IT professional. You will 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 – what they are and how they work – and an understanding of the business, ethical and legal implications of risk management. There is also an emphasis on analysis, investigation, problem-solving, development and technical skills related to IT security.

You will also be encouraged to develop generic skills, enabling you to be an effective and efficient employee.

The Bachelor of Information Technology (IT Security) is professionally accredited with the Australian Computer Society.

Career opportunities

Career options include work as a security analyst, project manager, security system manager, cryptographer, consultant, security system developer or programmer.

Bachelor of Information Technology (Multimedia Technology) 3 B

Deakin code	VTAC code	Indicative first year fee ¹	ATAR
S331	16671 (CSP)	\$7620 (CSP)	55.85
Year 12 prerequisites	VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English and a study score of at least 20 in mathematics (any).		
Non-Year 12 requirements	VTAC Pi form.		

Deakin's Bachelor of Information Technology (Multimedia Technology) will enable you to design and author multimedia information integrating images, video, sound, animation and text to create electronic products for a range of environments. The focus of this course is on the practical application of skills and concepts. Graduates are multiskilled people with a broad understanding of information technology with specialist expertise in the design and development of web systems, DVD authoring and information delivery.

The course will introduce you to fundamental principles, together with tools and techniques needed to design multimedia information and deploy multimedia systems. The course emphasises state-of-the-art standards and engages in significant hands-on experience with leading multimedia authoring packages. You may also take an elective stream in the area of animation, through the School of Communication and Creative Arts.

The course has been devised to provide a creative complement to the IT-focused units in this course.

An honours year is available upon the completion of this degree, which can provide you with a competitive edge in the job market or a pathway into a higher degree.

Career opportunities

This course will lead to career opportunities in multimedia design, web site development, interface design or interactive systems. A number of graduates have started their own web design businesses. The structure of the course also makes graduates suited to the IT industry in general with skills in software development, data communications and the development of information systems.

Bachelor of Information Technology (Professional Practice) 3 B G

Deakin code	VTAC code	Indicative first year fee ¹	ATAR
S329	B 14641 (CSP) G 15341 (CSP)	\$7330 (CSP)	B 91.85 G 82.20
Year 12 prerequisites	VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English and a study score of at least 20 in mathematics (any). Minimum ATAR of 80.00.		
Non-Year 12 requirements	VTAC Pi form.		

Deakin's Bachelor of Information Technology (Professional Practice) gives you the opportunity to experience full-time work in the IT industry as part of your degree – giving you real-life industry experience and an edge in the employment market. As part of your course you will spend between six months and a year in Deakin's Industry-Based Learning (IBL) Program. This will be credited as part of your degree.

Depending on the length of the placement you undertake, you can complete the course in three years, or for students taking the option to complete a longer industry placement, the course can be completed in four years.

Further opportunities for professional development, in the form of practical workshops and networking events, will be offered throughout the course to maximise your career outcomes.

You will be assigned an academic mentor from the School of Information Technology for the duration of your course to enrich and extend your student experience.

Career opportunities

Depending on your chosen major, you may gain employment in a wide range of IT related roles, such as software developer/programmer, business analyst, games designer, IT consultant, IT manager, security specialist, systems administrator, network manager, project manager, multimedia technology developer.

Major sequences

You must complete at least one 6-credit-point major sequence from the following areas:

- » Computer science B G X
- » Game development B G X
- » Interactive media design B
- » Mathematical modelling B G X
- » Networking B G
- » Security B G X
- » Software development B G X

Science and Technology (Dean's Scholars Program)

Students may apply for the Dean's Scholars Program. For more information, please see page 93.



KEY

- 3** Course duration
- B** Melbourne Campus at Burwood
- F** Geelong Waterfront Campus
- G** Geelong Campus at Waurn Ponds
- W** Warrnambool Campus
- X** Off campus

Combined course

Bachelor of Business Information Systems/ Bachelor of Information Technology **4 B G**

Deakin code	VTAC code	Indicative first year fee ¹	ATAR
D320	B 14221 (CSP) G 15061 (CSP)	\$7470 (CSP)	B 63.90 G 54.25
Year 12 prerequisites	VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English, and a study score of at least 20 in mathematics (any).		
Non-Year 12 requirements	VTAC Pi form.		

This combined course focuses on the areas of software development, e-systems, multimedia technology, games design and development, the use of systems analysis and design in a business context, systems management and risk and project management.

Career opportunities

In today's IT job market multiskilling, multi-tasking and cross-skilling are highly valued and graduates of this course are well placed for a successful career in management of IT in business, industry or government. As a graduate you will be qualified for a wide range of positions including IT manager, project manager, analyst/programmer, network manager, internet developer and administrator, information systems project leader, IT consultant, systems manager or business consultant.

For more information, including major sequences, please refer to individual degree listing on page 45 for Bachelor of Business Information Systems and page 72 for Bachelor of Information Technology or visit www.deakin.edu.au.



*Rebecca Kenny
Bachelor of Business Information
Systems/Bachelor of Information
Technology
Geelong Campus at Waurn Ponds*

Rebecca received the Deakin Target IT award and an IGNITED (Initiative for a Girls' Network in Information Technology and Engineering @ Deakin) scholarship after achieving an ATAR of 91.15.

As the recipient of the Deakin Target IT award she receives \$10 000 over two years and the opportunity to undertake work experience. She also receives \$10 000 over the duration of her course and academic mentoring as an IGNITED scholarship winner.

Rebecca gets to do work placements in IT at Target head office as part of her scholarship. 'It's exciting to be able to do work placements during my degree. I will gain experience working in the IT environment and industry, making me work ready. I will learn what areas of IT I enjoy and do well in which will give me a more defined career path.'

See also

Combined course

Bachelor of Engineering/Bachelor of Information Technology, page 57.

Related courses

Bachelor of Commerce, page 42.

Bachelor of Management, page 44.

More information on Information Technology



*2012 Undergraduate Information Technology
Career Booklet*

P 1300 DEGREE (1300 334 733)

E enquire@deakin.edu.au

www.deakin.edu.au/scitech/it

For the latest information about new courses at Deakin University, please visit www.deakin.edu.au.

¹ The indicative first year fee is an approximate indication of the cost of this course in the first year of full-time study for a Commonwealth Supported Place. We can't specify the exact figure, because fees are charged per unit, not per course, so the actual fees may vary depending on what units you choose to study.

The fees quoted in this book are for Australian students in 2011, and may change for 2012 and later years. You can find more information about fees on our web site www.deakin.edu.au or page 103. For information on fees for international students, please visit www.deakin.edu.au/international.

