


■ Undergraduate and TAFE

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SWINBURNE
UNIVERSITY OF
TECHNOLOGY

Information and Communication Technologies

swinburne.edu.au



BUSINESS INFORMATION
SYSTEMS
COMPUTER SYSTEMS
ENGINEERING
GAMES PROGRAMMING
IT
NETWORK DESIGN
AND SECURITY
SOFTWARE
DEVELOPMENT
SOFTWARE ENGINEERING
WEBSITE DEVELOPMENT

Work at the forefront of new technology

Dynamic and constantly evolving, the field of information and communication technologies provides exciting and challenging career opportunities. ICT is the backbone of many different industries – health, transport, finance, media, manufacturing and automotive – so the skills you'll learn will be highly valued by employers.

What's more, the skills and knowledge gained in Swinburne's ICT courses are transferable across countries and industries. This means that your studies can lead to work opportunities anywhere in the world.

If you're technologically minded, courses in telecommunications, network design and security or software development could be of interest.

If you prefer the analytical side of ICT and enjoy problem-solving, then business information systems or general information technology might be the study choice for you. Alternatively, if you like to use your technical abilities in a creative way, games development or digital media may be a good option.



You may enjoy a career in ICT if you're interested in:

- creating innovative technology
- developing software programs, models and processes to solve real-world problems
- software development for mobile or web applications
- coming up with creative solutions to problems
- working with people.

Study a course accredited by industry

Swinburne's ICT courses are developed in close consultation with key industry representatives. Most of our undergraduate ICT courses are accredited at the Professional Level with the Australian Computer Society (IT degrees) or Engineers Australia (telecommunication engineering degrees).

How we prepare you for your career

Swinburne works closely with industry groups to develop course content, which means we understand exactly what employers are looking for and can ensure the skills you learn are those employers want.

Our teachers are experienced in their industries and experts in their field, so you get the best possible chance to be skilled in the very qualities employers look for. What's more, our involvement with industry and constant monitoring of employment trends means our courses address skills shortage areas, meaning when you graduate you're likely to be highly employable.

A Swinburne ICT course can help you to build your skills in:

- developing strategies to overcome security threats and network issues
- understanding the technology directly associated with the internet, local and global digital networking, and wireless mobile communication systems
- evaluating and managing business information systems
- managing the vital information systems resource in organisations
- understanding the role of information systems in driving and enabling the achievement business goals and objectives
- critically analysing business problems and developing creative and innovative enterprise solutions
- designing, developing and implementing software
- understanding software architecture in an organisational context
- understanding intelligent systems and web development
- mobile app development
- project management
- team leadership
- understanding the complexities and methodologies of your specialised areas in ICT.

Study abroad

Swinburne offers an extensive range of international study opportunities for both TAFE and degree students.

For more information visit www.swinburne.edu.au/abroad

Courses at a glance

KEY								
ATAR		PREREQUISITES		CAMPUSES		DURATION		APPLY
RC	Range of criteria	MATH MATH METH SPEC MATH	Mathematics Mathematical Methods Specialist Mathematics	C H L W WP	Croydon Hawthorn Lilydale Wantirna Workplace	Courses are full-time or part-time in years, unless specified as months. m Months F Full-time P Part-time		V D VTAC Direct

STUDY AREA	COURSE	ATAR	PREREQUISITES	CAMPUS	DURATION	APPLY	PAGE
INFORMATION AND COMMUNICATION TECHNOLOGIES – UNIVERSITY DEGREES							
Business Information Systems	Bachelor of Business Information Systems	65.15	20 in English (any)	H	3F 6P	D or V	8
	Bachelor of Business Information Systems/ Bachelor of Commerce	65.15	20 in English (any)	H	4F 8P	D or V	8
Computer Science	Bachelor of Science (Computer Science)	70.60	20 in English (any) and MATH METH (either)	H	3F 6P	D or V	9
Games Development	Bachelor of Science (Games Development)	69.75	20 in English (any) and 1 and 2 MATH (any)	H	3F 6P	D or V	9
Information and Communication Technology	Bachelor of Applied Information and Communication Technology	52.10	20 in English (any)	L and H	3F 6P	D or V	10
	Bachelor of Applied Information and Communication Technology	53.90	20 in English (any)	W and H	3F 6P	D or V	10
	Bachelor of Information and Communication Technology	65.00	20 in English (any) and 1 and 2 MATH (any)	H	3F 6P	D or V	10
Information Technology – Scholarship Program	Bachelor of Information Technology	76.60	20 in English (any) and MATH (any)	H	3F 6P	D or V	11
Network Design and Security	Bachelor of Information and Communication Technology (Network Design and Security)	65.00	20 in English (any) and 1 and 2 MATH (any)	H	3F 6P	D or V	13
Software Development	Bachelor of Science (Professional Software Development)	66.15	20 in English (any) and 1 and 2 MATH (any)	H	3F 6P	D or V	14
Software Engineering	Bachelor of Engineering (Software Engineering)	New	20 in English and MATH METH or SPEC MATH	H	4F 8P	D or V	15
Telecommunication and Network Engineering	Bachelor of Engineering (Telecommunication and Network Engineering)	74.10	20 in English and MATH METH or SPEC MATH	H	4F 8P	D or V	16
	Bachelor of Engineering (Telecommunication and Network Engineering)/Bachelor of Science (Computer Science and Software Engineering)	77.70	20 in English and MATH METH or SPEC MATH	H	5F 10P	D or V	17
Vice-Chancellor's Scholarship	Vice-Chancellor's Scholarship – Information Technology/Science	–	Minimum ATAR of 97.00	H	Varies	D or V	18
INFORMATION AND COMMUNICATION TECHNOLOGIES – TAFE COURSES							
Computer Systems Engineering	Advanced Diploma of Computer Systems Engineering	RC	VCE or mature age	H	2F	D or V	9
Information Technology	Certificate I/II in Information Technology	RC	See course entry	C, L, W	1P	D	11
	Certificate III in Information Technology	RC	Year 11	L, W, WP	2P	D	11
	Certificate IV in Information Technology (General)	RC	VCE or mature age	H, L, W	1F	D or V	11
Multimedia	Certificate IV in Information Technology (Multimedia)	RC	VCE or mature age	H, L, W	1F	D or V	12
	Diploma of Information Technology (Multimedia)	RC	VCE or mature age	H, L, W	1.5–2F	D or V	12
Networking	Diploma of Information Technology (Networking) incorporating Certificate IV in Information Technology (General)	RC	VCE or mature age	H, L, W	2F	D or V	12
Network Security	Advanced Diploma of Information Technology (Network Security) incorporating Certificate IV in Information Technology (General)	RC	VCE or mature age	H	2F	D or V	13
Programming	Certificate IV in Information Technology (Programming)	RC	VCE or mature age	H, L, W	1F	D or V	14
Software Development	Diploma of Information Technology (Software Development) incorporating Certificate IV in Information Technology (Programming)	RC	VCE or mature age	H, L, W	2F	D or V	14
Systems Administration	Diploma of Information Technology (Systems Administration) incorporating Certificate IV in Information Technology (General)	RC	VCE or mature age	H, L, W	1.5–2F	D or V	16
Telecommunications Cabling	Certificate II in Telecommunications Cabling	RC	Diploma of Information Technology	H	6mF 1P	D	17
Website Design	Certificate IV in Information Technology (Websites)	RC	VCE or mature age	L, W	1F	D	18
Website Development	Diploma of Information Technology (Website Development) incorporating Certificate IV in Information Technology (Programming)	RC	VCE or mature age	H, L, W	2F	D or V	18

University

Swinburne's personalised approach to learning puts you at the heart of everything we do. Our degrees give you the skills you need – not just the theory – so you'll have first-hand knowledge of what's needed when you start work. Our flexible course structure lets you shape your education to suit your own aspirations.

Swinburne's Professional Learning Model

Our Professional Learning Model lets you learn by doing and prepares you for professional life after university. We give you strong career skills, up-to-date knowledge of your chosen profession and as much exposure to the real world as possible as you study for your degree.

Flexible course structure

Our flexible course structure allows you to add depth and breadth to your degree, by letting you choose from an extensive range of subjects from different disciplines.

Majors

Most three-year degrees at Swinburne comprise 24 units of study. You undertake the majority of these units in your primary area of study, which becomes your major.

Your major allows you to broaden your knowledge in a particular area. The number of subjects in a major may vary between courses.

Minors

A minor is a set of subjects (shorter than a major) studied throughout a degree. The number of subjects in a minor may vary between courses.

Studying a minor will allow you to expand your career options by adding another area of expertise. You can also add depth to your qualification by studying units related to your major.

Elective units

The remaining units that make up your degree are called elective units, which you can use to explore related or non-related areas of interest.

Depending on your course structure and timetable availability, you may be able to use these units to complete a double major, a major and a minor, or a major with two minors.

Please note that some four-year degrees may not offer the same flexibility.

Summer and Winter terms

Swinburne's Summer and Winter terms give you the flexibility to spread out your study load to fit around your work and life commitments or finish your course sooner. You can also*:

- add breadth or depth to your degree by completing a minor
- undertake single units of study to explore areas of interest
- take a study tour to Kuching, Malaysia, home to Swinburne's Sarawak campus.

www.swinburne.edu.au/summer-winter

** Some of these options may not be available for all programs.*

Industry-Based Learning

Swinburne's Industry-Based Learning (IBL) program gives you real-world experience during your undergraduate degree. IBL is a six- or 12-month paid work placement in the industry you're interested in pursuing as a career path. It is an opportunity to gain real-life experience in your chosen field.

IBL gives you a distinct advantage over other graduates. Combining tertiary qualifications with practical experience can better prepare you for the opportunities and challenges of professional life, and allow you to develop practical skills and an understanding of how your chosen industry works.

Please note: IBL is not available to international students due to student visa conditions.

Final-year Capstone Projects

Capstone Projects are professionally focused, real-world team projects normally completed in your final year of study.

Capstone Projects give you a chance to identify your strengths and develop the skills you will need to succeed once you graduate.

www.future.swinburne.edu.au/capstone

Careers in the Curriculum

Swinburne's free Careers in the Curriculum program helps you develop your career-planning skills. You will develop a personal study and career plan and explore available job options, while also getting invaluable practical advice on job applications, résumé preparation and interviews.

www.future.swinburne.edu.au/careers



TAFE

Whether you are a young person preparing for your first job or an older person looking to re-train or take the first step in a career change, TAFE could be the right choice for you. TAFE courses help you to build the practical skills and technical expertise that make you employable.

At Swinburne, we offer TAFE practicality with the support of a top-ranking university environment. And with flexible study options including online, blended learning programs (a combination of on- and off-campus study), workplace delivery and part-time study, our TAFE courses can fit in with your life and work.

Choosing the right qualification

The course you choose depends on your current level of knowledge and what you want to achieve. It is also possible to pathway between levels as your skills and knowledge grow.

Foundation level

If you left school before completing Year 12 or missed out on the basics, a foundation course may suit you.

Certificate I and II

Courses at this level provide basic training in a specific industry area. The courses aim to get you started in an industry or provide the specific skills your employer wants. Many Certificate I and II courses are pre-apprenticeships.

Certificate III and IV

Certificate III and IV courses provide entry into various trades, traineeships or other jobs that require skills and knowledge beyond a basic level.

Diploma and advanced diploma

Courses at this level help you to progress to a university degree or get started in a paraprofessional job. Or they might give you the skills to get a promotion, or the confidence to handle increased expectations at work.

Preparation for your career

Swinburne's TAFE graduates are in demand by employers because they are industry ready. During your course, you'll work to real-world expectations, using the equipment and technology you'll encounter once you start your job.

All of our programs have work-based elements, which can include work placements and projects, work scenarios and simulations to ensure you are work ready.



University study skills

If you decide to progress from a TAFE diploma or advanced diploma course to a university degree, to help you make a successful transition Swinburne offers a program in Advanced University Study Skills. The program is designed to help you familiarise yourself with the typical study skills needed to best manage the pressures and challenges of degree-level study.

For more information visit www.swinburne.edu.au/uniskills

Pathways from TAFE to degree courses

Offering both TAFE and bachelor degree courses, Swinburne makes it easy to pathway from TAFE to a degree course while ensuring that you get the maximum benefit from your previous studies.

Guaranteed Entry Scheme

The Guaranteed Entry Scheme (GES) gives Swinburne diploma and advanced diploma students guaranteed entry into a selected range of Swinburne undergraduate degree courses. You'll receive credit for your studies, fast-tracking you into later stages of the degree.

Depending on the TAFE program you complete, you can choose from a selected range of undergraduate degrees. For a guide to the available degrees, see the table below, or for a full listing refer to www.swinburne.edu.au/ges

Pathways Direct

If you meet the entry requirements, you may be eligible to pathway into university via the Pathways Direct Scheme, which opens up a greater number of courses and specialisations to you. The level of credit granted depends on the relevance of your TAFE qualification to the degree program you are enrolling in. Refer to the table below for a guide to the maximum credit exemptions you may receive. Preference for entry into a degree course is given to those with a credit grade average (65% or above) and no fails in their final year of study.

Credit transfer

If you have completed a qualification at another Australian or international institution, you may be eligible to receive credit and enter a degree with advanced standing. To find out if you are eligible, speak to an adviser on 1300 275 794.

KEY	
H	Hawthorn
L	Lilydale
W	Wantirna
GES	Guaranteed Entry Scheme
PD	Pathways Direct

TAFE COURSE	CAMPUS	UNIVERSITY DEGREE	CAMPUS	PATHWAY SCHEME	MAXIMUM UNIT EXEMPTION	MINIMUM TIME TO COMPLETE DEGREE
INFORMATION AND COMMUNICATION TECHNOLOGIES						
Advanced Diploma of Information Technology (Network Security)	H	Bachelor of Business	L	GES	12 units	1.5 yrs
		Bachelor of Business Information Systems	H	PD	4 units	2.5 yrs
		Bachelor of Engineering (Telecommunications and Network Engineering)	H	PD	9 units	3 yrs
		Bachelor of Engineering (Telecommunications and Network Engineering)/Bachelor of Science (Computer Science and Software Engineering)	H	PD	9 units	4 yrs
		Bachelor of Information and Communication Technology	H	PD	12 units	1.5 yrs
		Bachelor of Information and Communication Technology (Network Design and Security)	H	PD	8 units	2 yrs
		Bachelor of Science (Computer Science)	H	PD	8 units	3 yrs
		Bachelor of Science (Games Development)	H	PD	4 units	2.5 yrs
		Bachelor of Science (Professional Software Development)	H	PD	4 units	3 yrs
Bachelor of Social Science	L	GES	12 units	1.5 yrs		
Diploma of Information Technology (Networking)	H, L, W	Bachelor of Business	L	GES	8 units	2 yrs
		Bachelor of Business Information Systems	H	PD	8 units	2 yrs
		Bachelor of Commerce	H	GES	8 units	2 yrs
		Bachelor of Communication	L	GES	8 units	2 yrs
		Bachelor of Information and Communication Technology	H	GES	8 units	2 yrs
		Bachelor of Information and Communication Technology	H	PD	12 units	1.5 yrs
		Bachelor of Information and Communication Technology (Network Design and Security)	H	PD	8 units	2 yrs
		Bachelor of Science (Computer Science)	H	PD	8 units	3 yrs
		Bachelor of Science (Games Development)	H	PD	4 units	2.5 yrs
		Bachelor of Science (Professional Software Development)	H	PD	4 units	3 yrs
		Bachelor of Social Science	L	GES	8 units	2 yrs

TAFE COURSE	CAMPUS	UNIVERSITY DEGREE	CAMPUS	PATHWAY SCHEME	MAXIMUM UNIT EXEMPTION	MINIMUM TIME TO COMPLETE DEGREE
Diploma of Information Technology (Software Development)	H, L, W	Bachelor of Arts (Digital Media)	H	GES	8 units	2 yrs
		Bachelor of Arts (Games and Interactivity)	H	GES	8 units	2 yrs
		Bachelor of Business	L	GES	8 units	2 yrs
		Bachelor of Business Information Systems	H	PD	8 units	2 yrs
		Bachelor of Commerce	H	GES	8 units	2 yrs
		Bachelor of Communication	L	GES	8 units	2 yrs
		Bachelor of Information and Communication Technology	H	GES	8 units	2 yrs
		Bachelor of Information and Communication Technology	H	PD	12 units	1.5 yrs
		Bachelor of Information and Communication Technology (Network Design and Security)	H	PD	8 units	2 yrs
		Bachelor of Science (Computer Science)	H	PD	8 units	3 yrs
		Bachelor of Science (Games Development)	H	PD	4 units	2.5 yrs
		Bachelor of Science (Professional Software Development)	H	PD	4 units	3 yrs
Bachelor of Social Science	L	GES	8 units	2 yrs		
Diploma of Information Technology (Systems Administration)	H, L, W	Bachelor of Business	L	GES	8 units	2 yrs
		Bachelor of Business Information Systems	H	PD	8 units	2 yrs
		Bachelor of Commerce	H	GES	8 units	2 yrs
		Bachelor of Communication	L	GES	8 units	2 yrs
		Bachelor of Information and Communication Technology	H	PD	10 units	2 yrs
		Bachelor of Information and Communication Technology (Network Design and Security)	H	PD	6 units	2.5 yrs
		Bachelor of Science (Computer Science)	H	PD	8 units	3 yrs
		Bachelor of Science (Games Development)	H	PD	4 units	3 yrs
		Bachelor of Science (Professional Software Development)	H	PD	4 units	3 yrs
		Bachelor of Social Science	L	GES	8 units	2 yrs
Diploma of Information Technology (Website Development)	H, L, W	Bachelor of Business	L	GES	8 units	2 yrs
		Bachelor of Business Information Systems	H	PD	8 units	2 yrs
		Bachelor of Commerce	H	GES	8 units	2 yrs
		Bachelor of Communication	L	GES	8 units	2 yrs
		Bachelor of Information and Communication Technology	H	GES	8 units	2 yrs
		Bachelor of Information and Communication Technology	H	PD	10 units	2 yrs
		Bachelor of Information and Communication Technology (Network Design and Security)	H	PD	6 units	2.5 yrs
		Bachelor of Science (Computer Science)	H	PD	8 units	3 yrs
		Bachelor of Science (Games Development)	H	PD	4 units	2.5 yrs
		Bachelor of Science (Professional Software Development)	H	PD	4 units	3 yrs
		Bachelor of Social Science	L	GES	8 units	2 yrs

Note: This table is a guide only. Please see www.swinburne.edu.au/pathways for the most up-to-date information.

Course information

- T** TAFE course
- U** University degree

Business Information Systems

Bachelor of Business Information Systems **U**

Campus: Hawthorn

Duration: Three years full-time or equivalent part-time

Prerequisites: Units 3 and 4 – a study score of at least 20 in English (any)

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34641 (CSP), 34643 (IFP)

2011 Round 1 Clearly-in ATAR: 65.15

This course will prepare you for immediate entry into the management of business information systems in organisations. You will develop some technical skills, but more emphasis will be placed on business analysis and problem-solving, systems analysis, project management, the provision of IS services and the management of IS in organisations. You will learn how to source and implement information systems and redesign business processes. Information systems address how people, information, computers, networks and processes come together to create cohesive business solutions.

You also have the option of combining your studies with the Bachelor of Commerce.

Major study areas

This course covers core IS studies, including:

- Business analysis
- Database design, implementation and management
- Enterprise systems
- Business process modelling
- Information systems management
- Programming (.NET)
- Project management
- Risk and security
- Accounting and marketing
- Mobile business and connectivity

You can also select elective units and build your skills in ICT, business, social science or design.

Career opportunities

You can pursue a career in business analysis, business process analysis, business requirements analysis, project management, enterprise systems consultancy, business relationship management, business development, and – when you have gained experience – as an IT director or chief information officer.

Professional recognition

This course is accredited by the Australian Computer Society.

Business Information Systems/Commerce

Bachelor of Business Information Systems/Bachelor of Commerce **U**

Campus: Hawthorn

Duration: Four years full-time or equivalent part-time

Prerequisites: Units 3 and 4 – a study score of at least 20 in English (any)

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34561 (CSP), 34563 (IFP)

2011 Round 1 Clearly-in ATAR: 65.15

This double degree combines specialist studies in business information systems (IS) with a full commerce degree, leading to a choice of a generalist or specialist career using IS and ICT to solve business problems. You can choose to study a range of specialist IS units and a major from the commerce discipline. You will develop a core understanding of business analysis, project management, enterprise systems, IS management, databases and programming. You will learn how to critically analyse business problems and develop creative and innovative enterprise solutions.

Major study areas

You will choose a major in both IS and commerce. Units include:

- Business analysis
- Database design, implementation and management
- Database management systems
- Enterprise systems
- Business process modelling
- IS management
- Programming (.NET)
- Project management
- Marketing and accounting
- Risk and security

You will also choose one business major.

Career opportunities

Graduates will be well positioned to find employment in business analysis, business requirements analysis, project management solution design and delivery, business development management and IS/IT consultancy.

Professional recognition

This course is accredited by the Australian Computer Society.

James Searle Bachelor of Business Information Systems/Bachelor of Commerce

"I chose Swinburne primarily because of IBL and the close ties the university has with industry. I think Swinburne provides great opportunities to gain experience and make graduates more employable.

My favourite aspect of the course has been the interactive learning, being able to brainstorm ideas and work in teams.

I see my qualification giving me opportunities in both business and ICT. I would like to work in a technical area such as database or programming with a goal to move on to management."



Computer Science

Bachelor of Science (Computer Science)

Campus: Hawthorn

Duration: Three years full-time or equivalent part-time

Prerequisites: Units 3 and 4 – a study score of at least 20 in English (any) and in Mathematical Methods (either)

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34771 (CSP)

2011 Round 1 Clearly-in ATAR: 70.60

This specialist ICT program combines studies in general computing such as software development, databases, data communications and software engineering with specialist studies in advanced ICT. It emphasises practical problem-solving. You will gain a deep understanding of both the theory and practice of computing to enable you to develop innovative solutions to complex ICT problems such as web and mobile application creation, advanced software development platforms, networking and software engineering projects. This program also allows up to eight units in another discipline.

Major study areas

- Programming (C# and Java)
- Database
- Web technologies
- Data communication and security
- Usability
- Artificial intelligence
- Project management
- Enterprise programming
- Software engineering

Career opportunities

Graduates may find employment in organisations engaged in medium- to large-scale software development or scientific computing projects in areas such as defence, aerospace and medicine, where complex software and systems play a major role. Graduates are often initially employed in technical areas such as programming and systems analysis and design, and progress into project leadership and management positions.

Computer Systems Engineering

Advanced Diploma of Computer Systems Engineering*

Campus: Hawthorn

Duration: Two years full-time

Prerequisites: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: 77341 (VGF), 77344 (FTDP)

This course is suitable for people seeking to develop a career or undertake further studies in the computer and networking engineering industries. Students will gain solid understanding of the theoretical application of hardware and software components of modern computing systems.

Major study areas

- Analysis, diagnosis and fault-finding of computer systems and equipment
- Planning, analysis and design of complex computer systems related to the hardware and software and their inter-relationship
- Customer and client need analysis
- Commissioning advanced computer systems and equipment, including local area networks, wide area networks and the internet environment

Career opportunities

You may gain employment as an engineering officer performing design, manufacture, analysis, supervision and engineering liaison. Other opportunities include computer systems manager or support officer. Typical work functions include the design, selection, installation, commissioning and repair of computer systems, local and wide area networks and the supervision of others in this field.

Professional recognition

You may be eligible for admission to Engineers Australia as an engineering officer.

* *The title of this course may change in 2012.*

Games Development

Bachelor of Science (Games Development)

Campus: Hawthorn

Duration: Three years full-time or equivalent part-time

Prerequisites: Units 1 and 2 – Mathematics (any); units 3 and 4 – a study score of at least 20 in English (any)

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34331 (CSP), 34333 (IFP)

2011 Round 1 Clearly-in ATAR: 69.75

This specialist ICT program focuses on the design and programming of computer games and other interactive software. Major studies include software development using an object-oriented approach and specialist areas in games design and development. You will also learn about the creative and design aspects of multimedia and internet technologies, particularly as applied to games development. The program also includes units in database, networking and project management, and is good preparation for general software design and development careers, as well as specialist careers in the games industry.

Major study areas

- Programming (Java and C++)
- Games design
- Web technologies
- Software engineering
- Databases
- Usability
- Digital media
- Games and graphics programming
- Artificial intelligence
- Data communications and security

Career opportunities

Areas of initial employment include game design and development, multimedia development and general software design and development, with good opportunities to move into team leader and project management roles after gaining experience.

Professional recognition

This course is accredited by the Australian Computer Society.

Course information

- T** TAFE course
- U** University degree

Information and Communication Technology

Bachelor of Applied Information and Communication Technology **U**

Campus: Lilydale or Wantirna and Hawthorn
Duration: Three years full-time or equivalent part-time

VCE Prerequisites: Units 3 and 4 – a study score of at least 20 in English (any)

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34821 (CSP – Lilydale/Hawthorn), 34811 (CSP – Wantirna/Hawthorn)

2011 Round 1 Clearly-In ATAR: 52.10 (Lilydale/Hawthorn), 53.90 (Wantirna/Hawthorn)

This innovative new program is structured as an 'integrated' degree and provides an opportunity for students to receive a diploma in information technology while studying for a bachelor degree in information and communication technology. Year one is studied at either the Lilydale or Wantirna campus; years two and three at the Hawthorn campus. The first year of the program comprises selected TAFE subjects to make up the Diploma of Information Technology (General). Students will be awarded the diploma qualification on successful completion of the first-year units. The second and final years of the program comprise higher education subjects to form a major in applied information and communication technology, with a particular focus on web and mobile application development.

The VTAC code indicates the fee type.

VGf: VET government-funded place

FTDP: Fee type determined by provider

CSP: Commonwealth supported place

IFP: International fee place

To find out which fee type you're eligible for, visit www.vtac.edu.au

Major study areas

- Programming (Java)
- Databases
- Web development
- Data communications and security
- Usability
- Project management
- Mobile application development
- Software engineering

Career opportunities

There is a large number of roles available for students with ICT qualifications, particularly those with experience in web and mobile application development. Roles include applications developer, quality assurance analyst, project manager, multimedia developer, mobile application developer, systems architect, business requirements analyst, technical writer, application integration specialist and user interface analyst.

Bachelor of Information and Communication Technology **U**

Campus: Hawthorn

Duration: Three years full-time or equivalent part-time

Prerequisites: Units 1 and 2 – Mathematics (any); units 3 and 4 – a study score of at least 20 in English (any)

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34171 (CSP), 34173 (IFP)

2011 Round 1 Clearly-in ATAR: 65.00

This course has a flexible structure allowing you to choose from a set of specialisations comprising software technology, network design and security, games technology, business analysis and business systems. You can choose a co-major or two minor streams of study from many options available in business, social science and science disciplines, or you can choose to add additional advanced IT studies. This course is ideal if you are seeking a broad ICT course with flexible outcomes, or if you have not yet decided in which area of ICT to specialise.

Major study areas

- Business systems
- Business analysis
- Games programming
- Information technology
- Multimedia
- Network security
- Network technology
- Programming (.NET, C++ and Java)
- Software development
- IT security

Career opportunities

Graduates will be well prepared for a range of careers in ICT and may find employment in programming, games development, internet systems development, multimedia software development, business analysis, database administration or computer network support.

Professional recognition

This course is accredited by the Australian Computer Society.

Information Technology

Certificate I in Information Technology* **T**

Certificate II in Information Technology* **T**

Campus: Croydon, Lilydale, Wantirna

Duration: Up to one year part-time

Prerequisites: Certificate I – None

Certificate II – Certificate I in Information Technology or basic computer skills

Application: Direct

Certificate I provides basic training in word processing, spreadsheets, databases, PowerPoint and using the internet.

Certificate II is designed for those who use computer software packages in a business or at home. It is also suitable for people who lack formal qualifications required for entry into more advanced programs.

Major study areas

- Using the internet
- Using basic and advanced features of Microsoft Office programs

Career outcomes

Employment may be found as a receptionist, administrator or IT support professional.

* The title of this course may change in 2012.

Certificate III in Information Technology* **T**

Campus: Lilydale, Wantirna, workplace

Duration: Up to two years part-time (flexible delivery)

Prerequisites: Satisfactory completion of Year 11 or equivalent

Application: Direct

This course provides computing skills and knowledge needed to be an effective information technology user or employee.

Major study areas

- Running computer diagnostic tests
- Working with clients
- Installing optimised system software

Career opportunities

Graduates may find employment as a call centre support representative, client support officer, computer operator, customer liaison, customer service representative, helpdesk officer and helpdesk technician, ICT operations support, ICT users support or IT technician.

* The title of this course may change in 2012.

Certificate IV in Information Technology (General)* **T**

Campus: Hawthorn, Lilydale, Wantirna

Duration: One year full-time

Prerequisite: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: Hawthorn: 77071 (VGF), 77074 (FTDP); Lilydale: 70051 (VGF), 77054 (FTDP); Wantirna: 71051 (VGF), 71054 (FTDP)

This course is designed to enable students to work in the IT industry as client support officer, help desk operator, network support personnel and related roles. Students are provided with significant exposure to the major operating environment such as Microsoft server, Novell Netware server and Linux. The course may also include the IT essential content that can lead to the certification.

Major study areas

- Microsoft server administration
- Novell Netware server administration
- Linux administration
- Client support through IT essential content
- Process automation (networking focus) using Power Shell
- Basic database server handling (network focus)

Career opportunities

This course prepares students for employment in network administration, system management, helpdesk and IT support. Graduates can also continue to both the Diploma of Information Technology (Networking) and/or Diploma of Information Technology (Systems Administration).

* The title of this course may change in 2012.

Information Technology – Scholarship Program

Bachelor of Information Technology **U**

Campus: Hawthorn

Duration: Three years full-time or equivalent part-time

Prerequisites: Units 3 and 4 – a study score of at least 20 in English (any) and in Mathematics (any)

Application: Direct (all intakes) or VTAC

(Semester 1). Applicants must also submit a supplementary application form.

VTAC code: 34311 (CSP)

2011 Round 1 Clearly-in ATAR: 76.00

This course is one of Australia's most prestigious IT degrees. It has been designed in partnership with leading Australian companies to equip you with the knowledge and skills needed to move quickly into senior ICT positions after graduation. You will spend 40 weeks gaining direct experience in the ICT industry by working with Swinburne's industry partners. You will also receive a tax-free scholarship totalling approximately \$40,000, to be paid in fortnightly instalments over the three-year course. You will develop skills and knowledge in business and systems analysis, business process management, programming, database and management.

Major study areas

The major study areas include the following:

- Business information systems
- Database management
- Enterprise systems
- Business analysis and modelling
- Mobile business and security
- Information systems management
- Organisational behaviour
- Programming (.NET or C#)
- Project management
- Business intelligence
- Management, marketing and accounting

Many units are also designed to develop skills in interpersonal communication, teamwork and management.

Career opportunities

This degree has one of the highest employment rates of all ICT courses in Australia. Graduates may find employment in a range of ICT positions including systems analyst, software developer, ICT security analyst, business analyst, ICT policy and governance executive, IT/IS consultant or project manager.

Professional recognition

This course is accredited by the Australian Computer Society.

Course information

- T** TAFE course
- U** University degree

Multimedia

Certificate IV in Information Technology (Multimedia)* **T**

Campus: Hawthorn, Lilydale, Wantirna

Duration: One year full-time

Prerequisite: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: Hawthorn: 77161 (VGF), 77164 (FTDP); Lilydale: 70281 (VGF), 70284 (FTDP); Wantirna: 71141 (VGF), 71144 (FTDP)

This course has been developed with industry assistance to provide a broad range of skills required for entry into the multimedia industry. It covers all aspects of multimedia presentations, including web programming, 2D and 3D animation, digital video and multimedia management.

Major study areas

- Visual design using Adobe Illustrator
- 2D and 3D animation using Flash
- Video design
- Web programming

Career opportunities

This qualification prepares students for entry-level positions in the IT and multimedia industries.

** The title of this course may change in 2012.*

Diploma of Information Technology (Multimedia)

incorporating Certificate IV* **T**

Campus: Hawthorn, Lilydale, Wantirna

Duration: Eighteen months to two years full-time

Prerequisites: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: Hawthorn: 77161 (VGF), 77164 (FTDP); Lilydale: 70281 (VGF), 70284 (FTDP); Wantirna: 71141 (VGF), 71144 (FTDP)

This course has been developed with industry assistance to provide a broad range of skills required for entry into the IT and multimedia industries. Emphasis is placed on practical skills using a hands-on approach. The course includes units covering multimedia presentations, visual design, web design, web programming, database integration, 2D and 3D animation, and multimedia project management. In the final semester, student groups complete a major project for clients.

In the two-year (February intake) program students can qualify for a Certificate IV in Information Technology (Multimedia) after the first year, and complete the Diploma of Information Technology (Multimedia) in the second year.

The 18-month (July intake) program provides for the completion of the Diploma of Information Technology (Multimedia) without the Certificate IV in Information Technology (Multimedia).

Major study areas

- Visual design and imaging
- Video and visual effects design
- 2D and 3D animation
- Games design and multimedia programming
- Web programming and dynamic website development
- Database development
- Project management

Career opportunities

This qualification prepares students for entry-level positions in the IT, multimedia and web development industries, with specialisation in multimedia programming, video and animation authoring and dynamic website development.

** The title of this course may change in 2012.*

Networking

Diploma of Information Technology (Networking)

incorporating Certificate IV in Information Technology (General)* **T**

Campus: Hawthorn, Lilydale, Wantirna

Duration: Two years full-time (*Certificate IV* – one year full-time; *Diploma* – one year full-time)

Prerequisites: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: Hawthorn: 77071 (VGF), 77074 (FTDP); Lilydale: 70051 (VGF), 70053 (FTDP); Wantirna: 71051 (VGF), 71054 (FTDP)

This course provides the skills to build and manage network systems in a business environment. Emphasis is placed on practical skills using a hands-on approach, including an industry-based work placement. Students may also have the opportunity to study the IT Essentials and CISCO CCNA programs. In the final semester, student groups complete major projects.

Major study areas

- Network security implementation
- Network administration
- Process automation using scripts
- Routing and network design
- SQL database management
- Project management and client support
- Linux, Microsoft and Novell network operating systems

Career opportunities

This course prepares students for employment in network administration, system management, helpdesk and IT support.

A dual diploma with the Diploma of Information Technology (Systems Administration) is also available. For more information visit www.swinburne.edu.au/courses

** The title of this course may change in 2012.*

Nashvyn Dhillon
**Bachelor of Information and
Communication Technology
(Network Design and Security)**

"I enjoy dealing with computer and computer-related issues so this course was the perfect choice for me.

This course has been designed and structured to meet the growing demand for ICT network and security specialists.

I strongly believe that Swinburne will give me all the opportunities available to be successful, and strive to be at the top of the growing and demanding ICT industry.

I will use the knowledge and experiences gained while studying at Swinburne to further pursue my goals in the field."



Network Design and Security

Bachelor of Information and Communication Technology (Network Design and Security) **U**

Campus: Hawthorn

Duration: Three years full-time or equivalent part-time

Prerequisites: Units 1 and 2 – Mathematics (any); units 3 and 4 – a study score of at least 20 in English (any)

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34211 (CSP), 34213 (IFP)

2011 Round 1 Clearly-in ATAR: 65.00

This course has been designed to meet growing industry demand for graduates who are able to secure information and communication systems and are competent in, and knowledgeable about, computer network technologies and security. You will study programming, internet technologies, systems analysis and design, database technologies and software engineering, as well as advanced topics in computer networks and security. On completion, you will be confident in evaluating and managing computing networks and business information systems, and have the capacity to develop secure software applications including web, database and information management projects.

Major study areas

The major study areas include the following:

- Programming (C++ and Java)
- Databases
- Web technologies
- Data communications
- Network design and security
- Network administration
- Project management
- Software engineering
- Risk and security

Students can also choose an additional minor (four units) from a range of study areas that add depth and breadth to their degree.

Career opportunities

Employment may be found as an information security analyst, network security professional, information security professional, IT systems administrator, network administrator, systems administrator, programmer, web developer or database administrator.

Professional recognition

This course is accredited by the Australian Computer Society.

Network Security

Advanced Diploma of Information Technology (Network Security) incorporating Certificate IV in Information Technology (General)* **T**

Campus: Hawthorn

Duration: Two years full-time (Certificate IV – one year full-time; Diploma – one year full-time)

Prerequisites: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: 77101 (VGF), 77104 (FTDP)

This course will provide students with the skills and knowledge required to set up and administer the security of a computer network.

Major study areas

- Network security
- Virtual networking
- Linux networking
- Project management

Career outcomes

Graduates of this course may find employment in network design and implementation, network security, network administration or network system management.

* The title of this course may change in 2012.

Course information

- T** TAFE course
- U** University degree

Programming

Certificate IV in Information Technology (Programming)* **T**

Campus: Hawthorn, Lilydale, Wantirna

Duration: One year full-time

Prerequisites: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: Hawthorn: 77181 (VGF), 77184 (FTDP); Lilydale: 70081 (VGF), 70084 (FTDP); Wantirna: 71061 (VGF), 71064 (FTDP)

This course is designed to provide students with the skills needed to work in the IT industry as programmers, analysts or designers.

Major study areas

- Systems analysis and design
- Programming in VB.net, Java and PHP
- Project management skills
- Web design and construction

Career opportunities

Depending on the choice of electives, graduates could work in a number of junior programming or support roles, including analyst or programmer; applications analyst, engineer or programmer; digital programmer; games designer or programmer; and software support engineer.

Graduates can also continue to the Diploma of Information Technology (Software Development) and/or the Diploma of Information Technology (Website Development).

* The title of this course may change in 2012.

Software Development

Diploma of Information Technology (Software Development) incorporating Certificate IV in Information Technology (Programming)* **T**

Campus: Hawthorn, Lilydale, Wantirna

Duration: Two years full-time (*Certificate IV* – one year full-time; *Diploma* – one year full-time)

Prerequisites: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: Hawthorn: 77181 (VGF), 77184 (FTDP); Lilydale: 70081 (VGF), 70084 (FTDP); Wantirna: 71061 (VGF), 71064 (FTDP)

The Diploma of Information Technology (Software Development) is designed to provide students with the skills needed to work in the IT industry as a programmer, analyst or designer, and/or to continue to higher education courses in systems development and related courses. In the final semester student groups complete a major project for an industry client.

A dual diploma with the Diploma of Information Technology (Website Development) is also available. Students can choose to concurrently undertake the Diploma of Information Technology (Website Development) and gain both diploma qualifications at the end of the second year. Students may also be required to undertake additional units.

Major study areas

- Communication and business skills
- Object-oriented programming in a number of languages
- Object-oriented systems analysis and design
- Quality and project management
- Software testing
- Client-side and server-side programming

Career opportunities

This course prepares students for employment in software and website development, in roles such as programmer, analyst, web designer and Java developer.

* The title of this course may change in 2012.

Bachelor of Science (Professional Software Development) **U**

Campus: Hawthorn

Duration: Three years full-time or equivalent part-time

Prerequisites: Units 1 and 2 Mathematics (any); units 3 and 4 – a study score of at least 20 in English (any)

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34001 (CSP), 34003 (IFP)

2011 Round 1 Clearly-in ATAR: 66.15

This specialist ICT program covers all aspects of the design, development and improvement of software systems, including research, design and development, testing, implementation and deployment. The course covers advanced software development with an emphasis on problem-solving, practical software engineering including the critical skills of quality assurance, project management and the use of industry-standard development techniques and tools. You will develop solid technical skills with an understanding of software architecture and its role within an organisation.

Major study areas

- Programming (C# and Java)
- Database
- Web technologies
- Data communications and security
- Usability
- Artificial intelligence
- Project management
- Enterprise programming
- Software engineering

Career opportunities

Graduates are prepared for employment in a variety of roles, including software design and development, web development, games development and software testing. Employment opportunities exist in organisations engaged in medium- to large-scale software development projects in many areas such as banking and finance, manufacturing, retail, defence and aerospace.

Professional recognition

This course is accredited by the Australian Computer Society.

Bianca Rinaldi
Bachelor of Science (Professional Software Development)

“Swinburne is recognised as a leader in Australian universities, especially for ICT courses. It has a smaller campus with good class sizes compared to other universities. The Industry-Based Learning and overseas placement were also an advantage, as was Swinburne’s close industry relationships with leading IT companies.

I decided to undertake professional software development at Swinburne as it is recognised by the Australian Computer Society and there are many job opportunities available in software development.”



Software Engineering

Bachelor of Engineering (Software Engineering) **U** **NEW**

Campus: Hawthorn

Duration: Four years full-time or equivalent part-time

Prerequisites: Units 3 and 4 – a study score of at least 20 in English (any) and completion of Mathematical Methods or Specialist Mathematics

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34861 (CSP), 34863 (IFP)
2011 Round 1 Clearly-in ATAR: New

This course is designed to give students a fundamental grounding in engineering and a specialised education in software engineering, particularly software engineering for embedded, real-time and complex software systems, and mobile devices.

Students will gain a professional understanding of the science and engineering principles underlying software and systems engineering, in addition to a solid foundation in general engineering principles. The program covers both the fundamentals and more advanced topics in software and systems engineering, including design, quality assurance, implementation and deployment. The program also allows students to gain specialised skills in a variety of areas, including telecommunications, robotics and mechatronics, pervasive computing and mobile systems development.

Major study areas

- Programming (C# and Java)
- Data communications and security
- Usability
- Electronics
- Mathematics
- Software architecture
- Project management
- Engineering management
- Enterprise programming
- Software engineering

Career opportunities

Graduates are prepared for a variety of roles in the telecommunications, networks, banking and finance, manufacturing, internet technologies, defence and aerospace industries.

Industry-Based Learning is available in most degree programs.

Visit www.swinburne.edu.au/ibl for further information.

Course information

- T** TAFE course
- U** University degree

Systems Administration

Diploma of Information Technology (Systems Administration) incorporating Certificate IV in Information Technology (General)* **T**

Campus: Hawthorn, Lilydale, Wantirna
Duration: Eighteen months to two years full-time

Prerequisites: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: Hawthorn: 77111 (VGF), 77114 (FTDP); Lilydale: 70071 (VGF), 70074 (FTDP); Wantirna: 71031 (VGF), 71034 (FTDP)

This course provides the skills to build and manage network systems in a business environment. Emphasis is placed on practical skills using a hands-on approach, including an industry-based work placement. Students may also have the opportunity to study the IT Essentials and CISCO CCNA programs. In the final semester, student groups complete major projects.

Students commencing in February will complete a two-year program incorporating the Certificate IV. Students commencing mid year will complete an 18-month program and will graduate with only the diploma.

Major study areas

- Network installation and administration
- Network security and implementation
- Network testing
- Project management and client support
- Linux, Microsoft and Novell network operating systems

Career opportunities

This course prepares students for employment in network administration, system management, helpdesk and IT support.

A dual diploma with the Diploma of Information Technology (Networking) is also available.

*The title of this course may change in 2012.

Telecommunication and Network Engineering

Bachelor of Engineering (Telecommunication and Network Engineering) **U**

Campus: Hawthorn

Duration: Four years full-time or equivalent part-time

Prerequisites: Units 3 and 4 – a study score of at least 20 in English (any) and in Mathematical Methods (either) or Specialist Mathematics

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34231 (CSP), 34233 (IFP)

2011 Round 1 Clearly-in ATAR: 74.10

Telecommunication and network engineers design, implement and facilitate the communication infrastructure of today's businesses. They are capable of developing sophisticated systems such as cellular mobile communication networks, broadband multimedia computer networks, and radio and television broadcasting systems.

The continued growth in internet and multimedia services is fuelling employment opportunities for telecommunications professionals. The National Broadband Network rollout, expected to be Australia's biggest infrastructure project, will provide even more employment opportunities in this new and challenging field for skilled telecommunication and network engineers.

This degree provides you with a professional understanding of the science and engineering principles underlying telecommunication and network engineering, and an ability to apply that knowledge. You will also acquire thorough knowledge of appropriate engineering methods and techniques, and have competence in their application.

Detailed theoretical learning is coupled with extensive practical experience in various aspects of networking and signal analysis used in telecommunications and networking.

Major study areas

- Mathematics
- Communications theory and principles
- Electronics
- Engineering management
- Wireless communications
- Network design and security
- Programming (C)
- Network modelling and analysis
- Enterprise services and security

Career opportunities

Graduates may find challenging and lucrative employment in the ICT industry in a range of positions, including the design, installation and commissioning of telecommunications equipment; management of next generation telecommunications systems; management and optimisation of telecommunications performance; network design and security; network analysis; telecommunications and network product management; marketing; and senior sales management.

Professional recognition

This course is accredited by Engineers Australia. Graduates will be eligible to apply for graduate membership of Engineers Australia.

The VTAC code indicates the fee type.

VGF: VET government-funded place
FTDP: Fee type determined by provider
CSP: Commonwealth supported place
IFP: International fee place

To find out which fee type you're eligible for, visit www.vtac.edu.au

Telecommunication and Network Engineering/ Computer Science and Software Engineering

Bachelor of Engineering (Telecommunication and Network Engineering)/Bachelor of Science (Computer Science and Software Engineering)

Campus: Hawthorn

Duration: Five years full-time or equivalent part-time

Prerequisites: Units 3 and 4 – a study score of at least 20 in English (any) and in Mathematical Methods (either) or Specialist Mathematics

Application: Direct (all intakes) or VTAC (Semester 1)

VTAC code: 34231 (CSP), 34233 (IFP)

2010 Round 1 Clearly-in ATAR: 77.70

This double degree offers a comprehensive combination of studies in computer hardware, telecommunications and software engineering, producing graduates who become highly regarded technical experts in their field.

Telecommunication and network engineers design, implement and facilitate the communication infrastructure of today's businesses. They are capable of developing sophisticated systems such as cellular mobile communication networks, broadband multimedia computer networks, and radio and television broadcasting systems.

The continued growth in internet and multimedia services is fuelling employment opportunities for telecommunications professionals. The National Broadband Network rollout, expected to be Australia's biggest infrastructure project, will provide even more employment opportunities in this new and challenging field for skilled telecommunication and network engineers.

This degree provides you with a professional understanding of the science and engineering principles underlying telecommunication and network engineering, and an ability to apply that knowledge. You will also acquire thorough knowledge of appropriate engineering methods and techniques, and have competence in their application.

Detailed theoretical learning is coupled with extensive practical experience in various aspects of networking and signal analysis used in telecommunications and networking.

Major study areas

- Mathematics
- Communications theory and principles
- Electronics
- Engineering management
- Wireless communications
- Network design and security
- Programming (C)
- Network modelling and analysis
- Enterprise services and security

Career opportunities

Graduates may find challenging and lucrative employment in the ICT industry in a range of positions, including the design, installation and commissioning of telecommunications equipment; management of next-generation telecommunications systems; management and optimisation of telecommunications performance; network design and security; network analysis; telecommunications and network product management; marketing; and senior sales management.

Professional recognition

This course is accredited by the Australian Computer Society and Engineers Australia.

Telecommunications Cabling

Certificate II in Telecommunications Cabling*

Campus: Hawthorn

Duration: Six months full-time or equivalent part-time

Prerequisites: Successful completion of a diploma-level or bachelor degree course in IT, computer science, computer systems engineering or electronics engineering

Application: Direct

In this course you will be trained to administer and configure a network of computers. You will gain the skills needed to install, test and terminate cabling, and operate telecommunications equipment.

Together with appropriate prior learning and work placement, you will be able to sit for your Australian Media and Communications Authority (AMCA) licence. The course prepares you for the work of installing telecommunications and data cabling and cabling products on customers' premises under the auspices of the industry registration scheme.

Major study areas

- Installation and testing of cable support systems
- Installation, termination and testing of copper cable
- Installation of functional and protective telecommunications equipment

Career opportunities

Employment may be found as a cable installer, computer technician, IT technician and network specialist.

* The title of this course may change in 2012.

Course information

- T** TAFE course
- U** University degree

Website Design

Certificate IV in Information Technology (Websites)* **T**

Campus: Lilydale, Wantirna

Duration: One year full-time

Prerequisites: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct

This course provides students with the skills required to develop websites using client-side programming languages. These include XHTML mark-up language, cascading style sheets (CSS) for design layout and Java script for client-side validation.

Major study areas

- E-business solutions
- Systems analysis and designs
- Website development
- Project management
- Website security

Career opportunities

Employment may be found as a digital programmer, database administrator, web programmer or web developer.

* *The title of this course may change in 2012.*

Website Development

Diploma of Information Technology (Website Development) incorporating Certificate IV in Information Technology (Programming)*# **T**

Campus: Hawthorn, Lilydale, Wantirna

Duration: Eighteen months to two years full-time (*Certificate IV* – one year full-time; *Diploma* – one year full-time)

Prerequisites: Satisfactory completion of Year 12 or equivalent, or mature age

Application: Direct (all intakes) or VTAC (February start)

VTAC code: Hawthorn: 77251 (VGF), 77254 (FTDP); Lilydale: 70231 (VGF), 70234 (FTDP); Wantirna: 71121 (VGF), 71124 (FTDP)

This course is designed to provide you with the skills needed to work in the IT industry as a web programmer, designer or system architect, and/or to continue to higher education courses.

In the final semester you will work in a group to complete a major project for an industry client.

Major study areas

- Communication and business skills
- Markup languages
- Web page design
- Client-side and server-side programming
- Database integration
- Software and website testing
- Web security
- Systems analysis
- Project management

Career opportunities

You may find employment in website development, including the integration of internal business systems with internet interactivity, database programming and the integration and development of e-commerce applications. Possible roles include systems analyst, analyst programmer, web programmer and web designer. Alternatively, you may continue to degree studies in relevant areas of computing and information technology.

A dual diploma with the Diploma of Information Technology (Software Development) is also available.

* *The title of this course may change in 2012.*

Students commencing in February will complete a two-year program incorporating the Certificate IV. Students commencing mid year will complete an 18-month program and will graduate with only the Diploma.

Dr John Grundy Professor of Software Engineering and director of the Centre for Computing and Engineering Software Systems

"I chose to work at Swinburne because it has a good reputation internationally. I find that most of the students here have a practical focus and want to become leaders in the software field, and are well-motivated and eager to learn, which makes my role more enjoyable."



Vice-Chancellor's Scholarship

Vice-Chancellor's Scholarship – Information Technology/Science **U**

Campus: Hawthorn

Refer to individual course entries for duration and prerequisite information.

Application: Students must apply through VTAC
VTAC code: 34621

Minimum ATAR: 97.00

Under this program, students may select a single or double degree in the information technology and science areas and receive a waiver from student contribution amount payments for the duration of their course (subject to academic performance and other scholarship conditions).

■ KEY DATES

21 August 2011
Swinburne Open Day
Hawthorn, Lilydale and Prahran
swinburne.edu.au/openday

16–21 December 2011
Change of Preference period
swinburne.edu.au/cop

■ ANY QUESTIONS?

1300 275 794
study@swinburne.edu.au
swinburne.edu.au



swinburne.edu.au/facebook



swinburne.edu.au/twitter



swinburne.edu.au/youtube

■ CAMPUSES

Hawthorn campus
John Street, Hawthorn

Prahran campus
144 High Street, Prahran

Lilydale campus
Melba Avenue, Lilydale

Croydon campus
12–50 Norton Road, Croydon

Wantirna campus
369 Stud Road, Wantirna

Sarawak campus
Kuching, Sarawak, Malaysia



CRICOS Provider Code: 00111D

The information contained in this course guide was correct at the time of publication, July 2011.

The university reserves the right to alter or amend the material contained in this guide. The information in this guide does not apply to international students. For information about courses for international students please go to: www.international.swinburne.edu.au

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