



IT AND COMPUTER SYSTEMS ENGINEERING

Course	Intake details	Admission	Employment opportunities	Further study
<p>Computer Systems Engineering</p> <p>Advanced Diploma of Computer Systems Engineering</p> <p>CRICOS 065033J, Course UEE60407</p> <p>Duration includes Diploma of Computer Systems Engineering</p>	<p>2 Years Dandenong, Frankston, Berwick February/July</p> <p>\$10,400 Yr 1 + \$200 MF \$10,600 Yr 2 + \$112 MF</p> 	<p>Equivalent Academic IELTS 5.5 Equivalent Year 11</p>	<p>Graduates work in computer systems design, manufacturing, installation, commissioning, testing, servicing and technical sales within the computer industry.</p>	<p>Bachelor of Information Systems at La Trobe University Bachelor of Information Technology at Charles Sturt University Bachelor of Computer Science at La Trobe University Bachelor of Information Technology and Systems at Monash University Bachelor of Information and Communication Technology (major choices) at Swinburne University</p> <p>See page 18</p>
<p>Diploma of Computer Systems Engineering</p> <p>CRICOS 066601G, Course UEE50107</p>	<p>1.5 Years Dandenong, Frankston, Berwick February/July</p> <p>\$10,400 pa + \$260 MF</p> 	<p>Equivalent Academic IELTS 5.5 Equivalent Year 11</p>	<p>Computer systems design, manufacturing, installation networking, commissioning, testing servicing and technical sales.</p>	<p>Advanced Diploma of Computer Systems Engineering at Chisholm Bachelor of Computer Science at La Trobe University Bachelor of Information Technology and Systems (major choices) at Monash University Bachelor of Information and Communication Technology (major choices) at Swinburne University</p> <p>See page 18</p>
<p>Entry Level Computer Repair</p> <p>Certificate II in Computer Assembly and Repair</p> <p>CRICOS 065032K, Course UEE20507</p>	<p>6 Months Dandenong, Frankston, Berwick February/July</p> <p>\$5,200</p>	<p>Equivalent Academic IELTS 5.0 Equivalent Year 11</p>	<p>Computer repairs Computer assembly Computer installation Computer sales Computer technician Network support technician</p>	<p>Diploma of Computer Systems Engineering at Chisholm</p>
<p>Library</p> <p>Diploma of Library/Information Services</p> <p>CRICOS 071474M, Course CUL50104</p> <p>Duration includes Certificate IV in Library Information Services</p>	<p>2 Years Frankston, Cranbourne February/July</p> <p>\$10,400 pa + \$120 MF</p>	<p>Equivalent Academic IELTS 5.5 Equivalent Year 11</p>	<p>Librarian Library technician Library assistant</p> <p>Employment in schools, universities, institutes, public, state and national libraries.</p> <p>Other opportunities for employment are with publishing companies, booksellers, library supply agencies, government agencies and library software suppliers.</p>	<p>Relevant university degree studies</p>

*MF Materials fee



Overview

This advanced course provides students with the knowledge and skills for high-level management of computer systems, networks, internet/intranet infrastructure, design, programming and maintenance, building on the skills learnt in the Diploma of Computer Systems Engineering. Students are prepared for the internationally recognised CISCO Certified Network Associate (CCNA) certification, Comp TIA A+, Cisco Cabling, Microsoft MCTS Server 2008 and Adobe Dreamweaver Developer certifications. Graduates are highly sought after by employers in well paid and exciting careers.

- Develop design briefs for electrotechnology projects
- Manage electronics/computer systems projects
- Evaluate and modify programs written in object oriented code
- Develop object oriented code
- Design and manage enterprise networks

- Design and implement internetworking systems
- Set up and test biometric devices
- Set up and create content for a web server
- Set up and configure basic local area network
- Set up wireless capabilities
- Install a computer operating system and software
- Assemble, set up and test personal computers
- Support computer hardware and software
- Dismantle, assemble and fabricate electrotechnology components

- Solve problems in extra-low voltage single path circuits
- Set up and create content for a web server
- Develop basic web pages for engineering applications
- Install and administer Unix based computers
- Install and configure internetworking systems
- Integrate multiple computer operating systems on a client server network
- Manage workplace information systems
- Design and develop electronics/computer systems projects

This practical, hands-on course provides training in the design, installation, commissioning and management of computer systems and networks. It also provides specialist computer programming, hardware and software development and computer networking. Students gain the knowledge and skills to secure highly regarded industry certifications such as the CISCO Certified Network Associate (CCNA) certification, Comp TIA A+, Cisco Cabling, Microsoft MCTS Server 2008 and Adobe Dreamweaver Developer certifications.

- Set up and create content for a web server
- Develop basic web pages for engineering applications
- Use engineering applications software
- Set up and configure basic local area network
- Set up wireless capabilities
- Install and configure a computer operating system and software

- Assemble, set up and test personal computers
- Document occupational hazards and risks in computer systems
- Support computer hardware and software
- Dismantle, assemble and fabricate electrotechnology components
- Solve problems in extra-low voltage single path circuits
- Install and administer Unix based computers
- Install and configure internetworking systems
- Integrate multiple computer operating systems on a client server network

- Evaluate and modify programs written in object oriented code
- Develop object oriented code
- Contribute to risk management in electrotechnology systems
- Manage workplace information systems
- Administer user networks
- Develop network services
- Design and implement internetworking systems
- Commission computer systems
- Design and develop electronics/computer systems projects

This program provides a range of basic skills and knowledge required by the computer industry. The course provides students with skills necessary to be able to select components and assemble computers to customer specifications and carry out routine hardware repairs and networking tasks. Students are prepared to sit for the Comp TIA A+ certification and also commence preparation for the CISCO Certified Network Associate (CCNA) certification.

- Basic computer applications
- Assemble, setup and test personal computers
- Use engineering applications software
- Install and configure a computer operating system and software
- Set up and configure basic local area network

- Extra-low voltage single path circuits
- Document occupational hazards and risks in computer systems
- Participate in development and follow a personal competency development
- Set up wireless capabilities

Develop advanced skills and knowledge to become a public, corporate or school library technician with a strong information technology focus. Building on skills developed in the Certificate IV in Library Information Services, students will develop and apply knowledge of the library and information services industries. Library technicians act as support staff for librarians/information specialists and perform a variety of tasks requiring a combination of clerical, communication, computer and technical skills. The course also covers the library skills necessary to perform tasks such as referencing, cataloguing, circulation, database searching, copyright, multimedia and IT. An experienced library technician may also supervise, train and direct non-professional library staff. This course provides the skills and knowledge to do this effectively including how to lead work teams and train small groups of people.

- Undertake cataloguing activities
- Catalogue and classify material
- Obtain information from external and networked sources to meet customer needs
- Research and analyse information to meet customer needs
- Monitor and enhance information access
- Select and acquire information materials
- Facilitate group-based learning
- Integrate accessibility principles into work practices
- Deliver information, activities and events

- Promote the values and ethos of public service
- Develop and maintain community/stakeholder relationships
- Manage volunteers
- Manage diversity
- Create web pages with multimedia
- Use advanced features of computing applications
- Implement workplace health, safety and security procedures
- Establish effective workplace relationships
- Use, evaluate and extend own information literacy skills

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Certificate IV in Library/ Information Services CRICOS 071473A, Course CUL40104	1 Year Frankston, Cranbourne February/July \$10,400 + \$120 MF	Equivalent Academic IELTS 5.5 Equivalent Year 12	Library assistant Employment is available in a wide variety of schools, universities, institutes, public, state and national libraries.	Diploma of Library Information Services at Chisholm
Networking Advanced Diploma of IT (Network Security) CRICOS 072452J, Course ICA60208 Duration includes Diploma of IT (Networking)/Diploma of IT (Systems Administration)	2.5 Years Berwick February/July \$10,400 pa	Equivalent Academic IELTS 5.5 Equivalent Year 12	Internal computer audit specialist IT security administrator IT security analyst/ engineer IT security specialist Network systems manager Network engineer Security administrator computing para- professional specialising in Network security Firewall internet security	Bachelor of Computer Science at La Trobe University Bachelor of Information Systems at La Trobe University Bachelor of Information Technology at University of Ballarat Bachelor of Information Technology (Business Systems) at University of Ballarat Bachelor of Networking at MIT Institute See page 18
Diploma of IT (Networking)/ Diploma of IT (Systems Administration) CRICOS 056875G, Course ICA50405 CRICOS Pending	2 Years Berwick February \$10,400 pa	Equivalent Academic IELTS 5.5 Equivalent Year 12	Network administration Network management Network support User support Technical support specialist	Advanced Diploma of IT (Network Security) Bachelor of Computer Science at La Trobe University Bachelor of Information Systems at La Trobe University
Certificate IV in IT (Networking)/ Certificate IV in IT (Support) Duration includes Certificate III in Information, Digital Media and Technology CRICOS ICA40405, Course 056879D CRICOS Pending, Course ICA 40211 CRICOS Pending, Course ICA30111	1 Year Berwick February \$10,400	Equivalent Academic IELTS 5.5 Equivalent Year 12	Customer support Help desk Network administrator Network technician PC support	Diploma of IT (Networking)/ Diploma of IT (Systems Administration)



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Overview

This course provides essential training for students wishing to start a career as a library technician, working as part of a library or information services team. This course covers the foundation library skills in referencing, cataloguing, circulation, database searching, copyright, multimedia and IT. Students also develop skills in client interaction, managing effective working relationships and work priorities. The course ensures a well-rounded employee, teaching client interaction skills and how to manage effective working relationships, managing work priorities and professional development.

- Develop and apply knowledge of the library/information services industry
- Implement workplace health, safety and security procedures

This course prepares students to meet the many challenges of securing and managing computer systems and networks. The qualification provides the skills and knowledge to plan and implement security requirements of information technology infrastructure, which has become an important function for organisations. Graduates are able to identify security risks and implement counter measures against these threats. Information technology infrastructure includes the associated systems and services such as computers, cabling, network hardware, operating systems applications software as well as management and utilisation procedures.

- Security management
- Direct complex project activities
- Network infrastructure

This course will allow students to develop skills and knowledge in the installation and management of simple and high level networks for effective in network management. Students also have the opportunity to study the internationally recognised vendor program CISCO and Red Hat Linux, which have been embedded into the program.

- Project planning
- Translate business needs into technical requirements
- Advanced networking
- Build an internet infrastructure
- Install high-end switches in multi-switched local area networks

This course has been designed to develop core skills in networking, systems support and operating systems. Students are taught these skills in a practical environment with the use of industry vendor programs, such as CISCO (CCNA and IT Essentials), Microsoft and Red Hat Linux. Embedded into these courses is a virtual enterprise program supported by our industry sponsor – Network Neighbourhood. This program simulates a real IT business environment, exposing the students to sought after employability skills. These skills are further enhanced through placing the students in our work placement project.

- Networking
- Install hardware to network
- Install, configure and test an internet protocol network
- Install, configure and test a router
- Operating systems

- Promote team effectiveness
- Use, evaluate and extend own information literacy skills
- Assist customers to access information
- Operate computing packages
- Use cataloguing tools
- Undertake cataloguing activities
- Obtain information from external and networked sources to meet customer needs
- Search databases
- Update web pages

- Develop system infrastructure design
- Undertake a complex design brief
- Network e-business strategies
- Identify and implement e-business innovation
- Maintain website performance
- Create dynamic web pages
- System security
- Design system security and control
- Install and configure routers
- Identify technical security requirements
- IT security management
- Design an IT security framework

- Produce network architecture design
- Install and manage complex networks
- Identify best-fit topology for a wide area network
- Security fundamentals
- Prepare disaster recovery and contingency plans
- Build a security shield for a network
- Match IT needs with the strategic direction of the enterprise
- Ensure privacy for users

- Install and configure virtual machines for sustainable ICT
- Configure and troubleshoot operating system software
- Deploy software to networked computers
- Install and manage a server
- Scripting for networks
- Automate Processes
- Create scripts for networking
- Service desk
- Manage network and data integrity
- Support users and troubleshoot desktop applications
- Locate and troubleshoot equipment, system and software faults

- Create a simple mark up language document to specification
- Use development software and IT tools to build a basic website
- Produce and prepare photo images
- Maintain business technology
- Develop and use complex databases
- Address copyright requirements
- Plan and organise group based delivery

- Install and maintain valid authentication processes
- Security operations
- Prepare security risk management plan
- Implement risk management process
- Build a highly secure firewall
- Internet security
- Manage business websites and servers
- Integrate database within a website

- Manage network security
- Gather data to identify business requirements
- Advanced operating systems
- Design a server
- Perform systems test
- Manage the testing process
- Build and configure a server
- Configure an internet gateway
- Service desk solutions and testing

- Hardware support
- Run standard diagnostic tests
- Connect internal hardware components
- Install and optimise operating system software
- Virtual Enterprise (simulated business environment)
- Determine and confirm client business requirements
- Build simple websites using commercial programs
- Coordinate and maintain IT work teams
- Produce digital images for the web



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Course	Intake details	Admission	Employment opportunities	Further study
<p>Multimedia</p> <p>Diploma of IT (Multimedia)/ Diploma of IT (Website Development)</p> <p>CRICOS 056876G Course ICA50905, ICA50605 Duration includes Certificate IV in IT (Websites)/Certificate IV in IT (Multimedia)</p> <p>Our IT courses are under review. Chisholm will run a similar course - Diploma of Digital Media Technologies/Diploma of Digital and Interactive Games from 2012. Details: www.chisholm.edu.au/international</p>	<p>2 Years Cranbourne February</p> <p>\$10,400 pa + \$240 MF</p>	<p>Equivalent Academic IELTS 5.5 Equivalent Year 12</p>	<p>Entertainment package developer Training product designer Web designer Multimedia programmer Concept designer Creative specialist Multimedia/product developer Web applications developer Web designer Webmaster/assistant Website co-ordinator Training product designer</p>	<p>Relevant university degree studies</p>
<p>Certificate IV in IT (Multimedia)/ Certificate IV in IT (Websites)</p> <p>CRICOS 056880M Course ICA40805, ICA40305</p> <p>Our IT courses are under review. Chisholm will run a similar course - Certificate IV in Digital Media Technologies/Certificate IV in Digital and Interactive Games from 2012. Details: www.chisholm.edu.au/international</p>	<p>1 Year Cranbourne February</p> <p>\$10,400 + \$120 MF</p>	<p>Equivalent Academic IELTS 5.5 Equivalent Year 12</p>	<p>Entertainment package developers Training product designer Web designer</p>	<p>Diploma of IT (Multimedia)/ Diploma of IT (Website Development) at Chisholm</p>
<p>Website Development</p> <p>Diploma of IT (Website Development)/Diploma of IT (Networking)</p> <p>CRICOS 056873K Course ICA50605, ICA50405 Duration includes Certificate IV in IT (Websites)/Certificate IV in IT (Networking)</p> <p>Our IT courses are under review. Chisholm will run a similar course - Advanced Diploma of Computer Systems Technology/ Diploma of Website Development/Diploma of IT Networking from 2012. Details: www.chisholm.edu.au/international</p>	<p>2 Years Frankston February</p> <p>\$10,400 pa + \$240 MF</p>	<p>Equivalent Academic IELTS 5.5 Equivalent Year 12</p>	<p>Help desk operator Systems designer Network/systems administrator Website administrator Web manager Network manager Network support technician Website development Website coordinator</p>	<p>Bachelor of Networking at MIT Institute Bachelor of Information Technology (Business Systems) at University of Ballarat Bachelor of Information Technology at University of Ballarat Bachelor of Information Technology at Charles Sturt University</p> <p>See page 18</p>
<p>Certificate IV in IT (Websites)/ Certificate IV in IT (Networking)</p> <p>CRICOS 056877F Course ICA40305, ICA40405</p> <p>Our IT courses are under review. Chisholm will run a similar course - Certificate IV in Web Based Technologies/Certificate IV in Networking from 2012. Details: www.chisholm.edu.au/international</p>	<p>1 Year Frankston February</p> <p>\$10,400 + \$120 MF</p>	<p>Equivalent Academic IELTS 5.5 Equivalent Year 12</p>	<p>Web administration Help desk operator Systems support website developer Internet/intranet administrator Network administrator Network technician</p>	<p>Diploma of IT (Website Development)/Diploma of IT (Networking) at Chisholm Bachelor of Networking at MIT Institute Bachelor of Information Technology at Charles Sturt University</p> <p>See page 18</p>

*MF Materials fee



Overview

This course will provide students with the knowledge and skills required for entry into the e-business and multimedia industries. Skills include project management, logo design and corporate image, video production, web programming, internet technologies, website development, website performance, database integration and acceptance testing.

Depending on the level of responsibility and the particular job role, future employment duties may include integration of internal business systems with a browser interface, designing the processes and architecture of enterprise internet presence, aligning the client's web presence, IT business strategy and specifying e-business application system requirements.

- Develop website information architecture
- Analyse information and assign meta tags
- Conduct operational acceptance tests of websites
- Create a website testing procedure

- Develop and conduct client acceptance test
- Design and develop dynamic website to meet technical requirements
- Integrate database within a website
- Prepare disaster recovery and contingency plans
- Perform systems test
- Run standard diagnostic tests
- Create 3D digital models and images
- Create 3D digital animation
- Create dynamic web pages
- Research and review hardware technology options for organisations
- Set up and operate a basic video camera

- Compose camera shots and operate a camera
- Incorporate, design and edit digital video
- Incorporate video into multimedia presentations
- Manipulate and incorporate audio into multimedia presentations
- Apply advanced object oriented language skills
- Manage multimedia production
- Manage multimedia projects
- Undertake a complex design brief

This course will provide a breadth of knowledge and skills in website development, design and performance monitoring, project management as well as all aspects of multimedia including 2D and 3D animation, interactive presentations, web programming and network security. Students will use a variety of Adobe software including Photoshop, Illustrator, Flash and Dreamweaver, as well as Microsoft.Net. Web languages such as HTML, CSS, JavaScript/Jquery and PHP are also covered.

- Management
- Web publishing
- Games programming
- Visual design

- Animation
- Intermediate programming
- Interactive design
- Animation games

This program has been designed to enable students to acquire high level skills and knowledge in website administration and management as well as networking and systems support. The qualification has a networking base, with a focus on website performance and database integration.

- Network design
- Intranetwork installation
- Network security
- Network testing
- Advanced website techniques

- Network database techniques
- IT planning
- Project development
- Multimedia techniques

This course enables students to gain foundation skills and knowledge to work in website design, web development and programming. Students will also develop knowledge and skills in the installation and management of simple networks.

- Website fundamentals
- Programming
- Documentation
- Operating systems
- Computer applications

- Hardware and software fundamentals
- Networking
- Website administration
- Personal development

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<p>Software Development</p> <p>Advanced Diploma of IT/Diploma of IT (Software Development)</p> <p>CRICOS 060939G, Course ICA60105 CRICOS 061257C, Course ICA50705</p> <p>Duration includes Certificate IV in IT (Websites)</p> <p>Our IT courses are under review. Chisholm will run a similar course - Diploma of Software Development/Advanced Diploma of Business Analysis from 2012. Details: www.chisholm.edu.au/international</p>	<p>2 Years Dandenong February/July</p> <p>\$10,400 pa + \$240 MF</p>	<p>Equivalent Academic IELTS 5.5 Equivalent Year 12</p>	<p>Analyst programmer Application programmer Applications consultant Systems analyst Software developer Systems designer</p>	<p>Bachelor of Networking at MIT Institute Bachelor of Information Technology at Deakin University Bachelor of Information and Communication Technology (Software Technology) at Swinburne University Bachelor of Networking at MIT Institute Bachelor of Information Technology at Charles Sturt University Bachelor of Information Technology at University of Ballarat Bachelor of Information Technology (Business Systems) at University of Ballarat</p> <p>See page 18</p>
<p>Games Development</p> <p>Diploma of Digital and Interactive Games</p> <p>CRICOS Pending, Course ICA50211</p> <p>Duration includes Certificate IV in Digital and Interactive Games</p>	<p>2 Years Dandenong February/July</p> <p>\$10,400 pa + \$240 MF</p>	<p>Equivalent Year 12 Equivalent IELTS 5.5</p>	<p>2D/3D artist Animator Designer Games developer Graphic/media designer Interactive digital media developer PC games programmer Mobile games programmer Web designer</p>	<p>Relevant university degree studies</p>
<p>Certificate IV in Digital and Interactive Games</p> <p>CRICOS Pending Course ICA40911</p>	<p>1 Year Dandenong February/July</p> <p>\$10,400 + \$120 MF</p>	<p>Equivalent Year 12 Equivalent IELTS 5.5</p>	<p>Junior games developer Support 2D/3D artist Assistant animator Assistant designer Support games developer Assistant graphic/media designer Interactive media developer/assistant Support digital media developer Assistant PC games programmer Support web designer</p>	<p>Diploma of Digital and Interactive Games</p>

*MF Materials fee



Overview

This course provides a broad range of skills and knowledge in software design, programming, computer applications, business applications and business websites. Students will apply these skills and knowledge to design, develop and maintain modern commercial applications including games, simulation, web and database applications. The qualification also provides high level ICT, process improvement and business skills.

- Design an e-business
- Implement an e-business strategy
- Research and review hardware technology options
- Design dynamic websites to meet technical requirements
- Develop website information architecture
- Direct complex project activities
- Develop and conduct client acceptance tests
- Integrate databases within a website
- Create dynamic web pages
- Develop technical requirements for business solutions
- Design a database
- Prepare disaster recovery and contingency plans
- Model data objects and processes
- Translate business needs into technical requirements
- Build using rapid application development
- Build Java applets
- Apply intermediate object orientated language skills
- Manage complex projects
- Perform integration tests
- Perform systems tests
- Create 2D digital animation
- Apply advanced program skills in another area

The Diploma of Digital and Interactive Games is designed to engage enthusiastic and passionate students who would like to build a career in the games Industry. It provides an opportunity to develop the design, graphic/digital media and programming skills required in the development of digital games briefs, either as a small independent specialist or as part of a larger team. The qualification also provides opportunities to work in new and emerging game genres, such as online game development, mobile device gaming, interactive internet and TV game development. The course includes animation and video editing, multimedia, web development, action script, C++ programming, project management and sustainability. There are three main roles in developing games. A games designer comes up with the game play ideas, perhaps story line etc. A games programmer actually constructs the game code. This is a full time programming job, normally using C++ and involves the programming of games' key systems including graphics, world simulation and game play. Lastly, a games artist creates all the art assets for the game. Art assets can include 2D art for 2D games and User Interface (UI) elements, and 3D modelling for 3D games.

- Create design concepts for digital games and 3D media
- Create a complex 3D interactive computer game
- Collaborate in the design of 3D game levels and environments
- Work effectively in the digital media industry
- Create and implement designs for a 3D games environment
- Design and create models for a 3D and digital effects environment
- Design and create advanced particles, fluids and bodies for 3D digital effects
- Animate a 3D character for digital games
- Produce a digital animation sequence
- Animate physical attributes of models and elements
- Manage technical art and rigging in 3D animation
- Create and combine 3D digital games and components
- Create complex 3D characters for games
- Create interactive 3D environments for digital games
- Apply digital texturing for the 3D environment in digital games
- Contribute to the implementation of the occupational health and safety

This qualification provides students with the skills and knowledge to support the design, development and programming of basic digital game briefs as part of a larger development team. The course includes animation and video editing, multimedia web development, action script, C++ programming, project management and sustainability.

- Produce an interactive game
- Contribute to copyright, ethics and privacy in an IT environment
- Work effectively in the digital media industry
- Build a graphical user interface
- Apply introductory programming techniques
- Automate processes
- Apply introductory object-oriented language skills
- Use a library or pre-existing components
- Create 3D digital animations
- Create 3D digital models
- Produce and edit digital images
- Apply simple modelling techniques
- Design and apply simple textures to digital art
- Use simple modelling for animation
- Create storyboards