

ICA30105

Certificate III in Information Technology

Course information and vocational outcomes

This national qualification provides the skills and knowledge for an individual to be competent in introductory ICT 'technical' functions and is designed to support information activities in the workplace and to achieve a degree of self sufficiency as an advanced ICT 'user'. The will give employers a degree of confidence in an individual's usefulness in the workplace as it has a strong suite of six common core ICT units building on the pre-requisite knowledge and skills from the eight Certificate II in IT core units.

The qualification provides for a number of electives at Certificate IV in IT level thus offering a degree of stretch in learning plus potential pathways into higher level qualifications. A small number of electives can be chosen beyond the ICT Training Package and it is possible to achieve this qualification during the final years of secondary school education, subject to the demonstration of competency to a standard expected in the workplace.

It has three specialist streams with direct relevance to workplace roles:

- **Applications Stream**
This stream provides skills in advanced use of applications and could provide basic application software support within an organisation. This stream may provide for natural progression into several Certificate IV in IT qualifications including Multimedia or Programming.
- **Network Administration Stream**
This stream develops skills in the administration and maintenance of the user environment for a computer network. Graduates could work as a network administrator within an organisation. There are several vendor courses that may be integrated in this qualification. This stream may provide for natural progression into several Certificate IV in IT qualifications including Networking or Websites.
- **Support Stream**
This stream provides skills in basic use of a range of technologies to provide first level diagnostic support to people using ICT. This stream may provide for natural progression into several Certificate IV in IT qualifications including Support or Websites.

Depending on the stream selected, graduates from this qualification could work in basic personal computer (PC) support, basic network/system administration or in first level help desk roles. Additionally, using a selection of retail or sales units from other Training Packages, people could work in ICT retailing or vendor product support. Small to medium enterprises (SMEs) will find the outcomes of this qualification useful at advanced ICT user or introductory technical support levels. Possible job titles include: call centre support representative; client support officer; computer operator; customer liaison; customer service representative; help desk officer; help desk technician; ICT operations support; ICT user support; IT technician; maintenance technician; PC support; PC support specialist; sales support technician; support technician; technical support; and/or user support specialist

The pathway into this qualification is ICA20105 - Certificate II in Information Technology. The pathway from this qualification could be one of the following options: ICA40105 - Certificate IV in

Information Technology (General); ICA40205 - Certificate IV in Information Technology (Support); ICA40305 - Certificate IV in Information Technology (Websites); ICA40405 - Certificate IV in Information Technology (Networking); ICA40505 - Certificate IV in Information Technology (Programming); ICA40605 - Certificate IV in Information Technology (Testing); ICA40705 - Certificate IV in Information Technology (Systems Analysis and Design); ICA40805 - Certificate IV in Information Technology (Multimedia).

The following units contain the basic fundamentals of ICT knowledge and skills for all qualifications at Certificate III in IT and above. These units or demonstrated equivalence are required for entry into this qualification:

- BSBCMN106A Follow workplace safety procedures
- ICAD2012B Design organisational documents using computing packages
- ICAU1128B Operate a personal computer
- ICAU2005B Operate computer hardware
- ICAU2006B Operate computing packages
- ICAU2013B Integrate commercial computing packages
- ICAU2231B Use computer operating system
- ICAW2001B Work effectively in an IT environment
- ICAW2002B Communicate in the workplace

To be competent in this course each participant will need to undertake and complete fourteen to sixteen units. These consist of:

- Six core units
- Four units from Group A Applications electives, or
- Six units from Group B Network Administration electives, or
- Five units from Group C Support electives
- Four electives
 - Two elective units chosen from the following sources (listed in recommended order)
 - other ICA30105 - Certificate III in Information Technology streams not already selected; and/or
 - ICA30105 Group D units list below; and/or
 - elsewhere in this training package (at Certificate III or Certificate IV) ; and
 - The remaining two elective units chosen from the following sources (listed in recommended order)
 - any of the above core or Group A - D units ; and/or
 - preferred Training Packages (at Certificate III or Certificate IV) (BSB07 Business Services; ICT02 Telecommunications; CUF07 Screen and Media ICP05 Printing and Graphic Arts; SIR07 Retail Services; CUV03 Visual Arts, Craft and Design); and/or
 - any other Training Package (at Certificate III or Certificate IV) based on documented industry or enterprise need; and/or
 - any accredited course.

Elective units chosen must be relevant to the work outcome, local industry requirements and the qualification level.

The nominal hours for this course are between 335-580 hours depending on the elective units selected. Successful completion of this course carries with it a Nationally Recognised Certificate.

There is no direct link between this qualification and licensing, legislative and/or regulatory requirements. However, where required, a unit of competency will specify relevant licensing, legislative and/or regulatory requirements that impact on the unit.

Pre-requisite units:

Unit code and title	Pre-requisite unit required (<i>co-requisites in italics</i>)
ICA13110C – Implement system software changes	ICA13020B – Install and optimise operating system software
ICAU3028B - Customise packaged software applications for clients	ICAU3126B - Use advanced features of computer applications
ICAS3032B – Provide network systems administration	ICA13101B – Install and manage network protocols ICAS3024B – Provide basic system administration
ICAS3034B – Determine and action network problems	ICAS3024B – Provide basic system administration ICAT3025B – Run standard diagnostic tests
ICSA3120C – Configure and administer a network operating system	ICA13020B - Install and optimise operating system software ICAS3032B - Provide network systems administration ICA13101B - Install and manage network protocols ICAS3024B - Provide basic system administration

Employability skills:

The following is a summary of the employability skills for this qualification. It should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on the packaging options.

Communication

- Communicating with clients to determine requirements and ensuring that requirements are met
- Interpreting software manual instructions

Teamwork

- Contacting operating system vendors to obtain technical specifications and system requirements
- Submitting developed user documentation to the target audience for review

Problem solving

- Determining the uses and audience of a simple mark-up language document
- Troubleshooting the operation of macros

Initiative and enterprise

- Assessing and recording information from various sources
- Identifying and applying skills and knowledge to a wide variety of contexts
- Investigating and documenting solutions to client problems

Planning and organising

- Planning for the implementation of software changes by seeking technical and client information and organising the process

Self management

- Taking responsibility for own and others' outputs in working and learning

Learning

- Adopting and transferring skills and knowledge to new environments providing one-to-one instruction for clients about operating system software
- Reviewing client feedback and identifying areas for improvement

Technology

- Selecting, installing and using computer software and hardware

The nominal hours for this qualification are 335-580 depending on the streams selected.

This course carries with it a Nationally Recognised Certificate.

Course content

Core units:

- **ICAD3218B - Create user documentation (20 nominal hours)**

(This unit defines the competency required to create user documentation that is clear to the target audience and is easy to navigate. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

1. Determine documentation standards and requirements
2. Produce user documentation
3. Review and obtain sign off

- **ICAI3020B - Install and optimise operating system software (20 nominal hours)**

(This unit defines the competency required to install operating system software and to make adjustments as a means of optimising the system to accommodate business and client needs. The following units are linked and form an appropriate cluster: ICAS3024B 'Provide basic system administration'; ICAT3025B 'Run standard diagnostic tests'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

1. Determine function of operating systems
2. Obtain operating system
3. Install, configure and optimise operating system
4. Provide instruction to meet new software requirements

- **ICAS3031B - Provide advice to clients (40 nominal hours)**

(This unit defines the competency required to provide advice and support to clients including the communication of comprehensive technical information. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

1. Analyse client support issues
2. Provide advice on software, hardware or network
3. Obtain client feedback

- **ICAS3234B - Care for computer hardware (20 nominal hours)**

(This unit defines the competency required to manage the selection, maintenance and siting of hardware. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

1. Analyse client support issues
2. Provide advice on software, hardware or network
3. Obtain client feedback

- **ICAT3025B - Run standard diagnostic tests (20 nominal hours)**

(This unit defines the competency required to conduct diagnostic tests on a range of platforms. There may be benefit in concurrent learning with the following unit: ICAS3234B 'Care for computer hardware'. The following units are linked and form an appropriate cluster: ICAI3020B 'Install and optimise operating system software'; ICAS3024B 'Provide basic system administration'; ICAU3019B 'Migrate to new technology'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

1. Operate system diagnostics
2. Scan system for viruses

- **ICAU3004B - Apply occupational health and safety procedures (20 nominal hours)**
(This unit defines the competency required to support the organisation's occupational health and safety (OH&S) principles and practices. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)
 1. Determine OH&S issues relating to immediate work environment
 2. Document and disseminate OH&S requirements
 3. Provide basic ergonomic advice

Group A Applications electives:

- **ICAU3019B - Migrate to new technology (20 nominal hours)**
(This unit defines the competency required to apply skills and knowledge in using new or upgraded technology. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)
 1. Apply existing knowledge and techniques to technology and transfer
 2. Apply functions of technology to assist in solving organisational problems
 3. Evaluate new or upgraded technology performance
- **ICAU3028B - Customise packaged software applications for clients (60 nominal hours)**
*(This unit defines the competency required to analyse, design, implement and review the customisation of packaged software applications, using simple programming constructs. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements. **Pre-requisite unit:** ICAU3126B 'Use advanced features of computer applications'.)*
 1. Analyse customisation requirements
 2. Develop customisation
 3. Provide support for customised application
- **ICAU3126B - Use advanced features of computer applications (40 nominal hours)**
(This unit defines the competency required to use computer applications employing advanced features. These units are linked and form an appropriate cluster: ICAB3018B 'Develop macros and templates for clients using standard products'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)
 1. Manipulate data
 2. Access and use support resources
- **ICA3110C - Implement system software changes (20 nominal hours)**
*(This unit defines the competency required to implement system software changes and to handover the modified system to the client's operational area. The following units are linked and form an appropriate cluster: ICAI4029C 'Install network hardware to a network'; ICAS3034B 'Determine and action network problems'; ICAS3121B 'Administer network peripherals'. This unit contains employability skills. **Pre-requisite unit:** ICAI3020B Install and optimise operating system software.)*
 1. Determine system changes required
 2. Carry out system changes
 3. Present changes to client
 4. Perform handover to client's operational

Group B Network Administration electives:

- **ICAI3101B - Install and manage network protocols (40 nominal hours)**
(This unit defines the competency required to install and manage network protocols in a networking environment. These units are linked and form an appropriate cluster: ICAS3121B 'Administer network peripherals'; ICAS3031B 'Provide advice to clients'; ICAS3024B 'Provide basic system administration; ICAS3032B 'Provide network systems administration'; ICAS3120B 'Configure and administer a network operating system'; ICAT3025B 'Run standard diagnostic tests'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

 1. Install and manage network protocols
 2. Identify network protocol applications

- **ICAS3024B - Provide basic system administration (20 nominal hours)**
(This unit defines the competency required to implement components of systems back-up, restore, security and licensing in a standalone or client server environment. These units are linked and form an appropriate cluster: ICAI3020B 'Install and optimise operating system software'; ICAT3025B 'Run standard diagnostic tests' ICAS3031B 'Provide advice to clients'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements)

 1. Record security access
 2. Record software licences
 3. Carry out system back up
 4. Restore system back up
 5. Apply security access controls

- **ICAS3032B - Provide network systems administration (20 nominal hours)**
*(This unit defines the competency required to technically manage elements of a network including contribution to disaster recovery plan. These units are linked and form an appropriate cluster: ICAI3020B 'Install and optimise operating system software'; ICAS3120B 'Configure and administer a network operating system'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements. **Pre-requisite units:** ICAI3101B 'Install and manage network protocols'; ICAS3024B 'Provide basic system administration'.)*

 1. Provide client access and security
 2. Input into and disseminate disaster recovery plan
 3. Monitor network performance

- **ICAS3034B - Determine and action network problems (30 nominal hours)**
*(This unit defines the competency required to document network-related problems, determine the resources required, solve the client problem or escalate the problem to a new support level. The following units are linked and form an appropriate cluster: ICAD3218B 'Create user documentation'; ICAD4217B 'Create technical documentation'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements. **Pre-requisite units:** ICAS3024B 'Provide basic system administration'; ICAT3025B 'Run standard diagnostic tests'.)*

 1. Determine client requirements and ascertain if problem exists
 2. Determine whether problem is covered by policy
 3. Carry out maintenance support on identified problem
 4. Prepare maintenance report and verify solution

- **ICAS3120C - Configure and administer a network operating system (50 nominal hours)**
(This unit defines the competency required to create the network configuration required by a client and to set up and use administrative tools to manage the network. Prerequisite units: ICAI3020B 'Install and optimise operating system software'; ICAS3024B 'Provide basic system administration'; ICAS3032B 'Provide network systems administration'. The following unit is linked and form an appropriate cluster: ICAT3025B 'Run standard diagnostic test'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)
 1. Review network policies
 2. Create an interface with existing system
 3. Set up and manage the network file system
 4. Manage user services
 5. Monitor user accounts
 6. Provide and support back up security

- **ICAS3121B - Administer network peripherals (20 nominal hours)**
(This unit defines the competency required to manage an environment of networked peripheral devices, in order to provide services to client users. The following units are linked and form an appropriate cluster: ICAI3020B 'Install and optimise operating system software', ICAI4029B 'Install network hardware to a network'; ICAS3034B 'Determine and action network problems'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements)
 1. Install peripherals to a network
 2. Configure peripheral services to manage peripherals
 3. Administer and support peripheral services
 4. Maintain peripherals and fix common problems

Group C Support electives:

- **ICA3021B - Connect internal hardware components (20 nominal hours)**
(This unit defines the competency required to modify and connect system hardware components according to client and user requirements. The following units are linked and form an appropriate cluster: ICAS3115B 'Maintain equipment and software in working order'; ICAT3025B 'Run standard diagnostic tests'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)
 1. Determine new components required
 2. Obtain components
 3. Install components
 4. Provide instruction on use of modified system
 5. Evaluate modified system

- **ICAS3024B - Provide basic system administration (20 nominal hours)**
(This unit defines the competency required to implement components of systems back-up, restore, security and licensing in a standalone or client server environment. These units are linked and form an appropriate cluster: ICAI3020B – ‘Install and optimise operating system software’; ICAT3025B ‘Run standard diagnostic tests’; ICAS3031B ‘Provide advice to clients’. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

 1. Record security access
 2. Record software licences
 3. Carry out system back up
 4. Restore system back up
 5. Apply security access controls

- **ICAS3115B - Maintain equipment and software in working order (20 nominal hours)**
(This unit defines the competency required to carry out maintenance and fault repair according to organisational procedures, in order to keep equipment and software operating. The following units are linked and form an appropriate cluster: ICAT3025B ‘Run standard diagnostic tests’, ICAS3034B ‘Determine and action network problems’, ICAI3021B ‘Connect internal hardware components’; ICAU3019B ‘Migrate to new technology’. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements)

 1. Determine and undertake required equipment maintenance
 2. Diagnose and repair faults
 3. Update documentation and make recommendations for future maintenance

- **ICAU3019B - Migrate to new technology (20 nominal hours)**
(This unit defines the competency required to apply skills and knowledge in using new or upgraded technology. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

 1. Apply existing knowledge and techniques to technology and transfer
 2. Apply functions of technology to assist in solving organisational problems
 3. Evaluate new or upgraded technology performance

- **ICTCC330B - Manage customer relationships (35 nominal hours)**
(This unit defines the competency required to protect and secure standalone or client server environments. The following units are linked and form an appropriate cluster: ICAS2008B ‘Maintain inventories for equipment, software and documentation’; ICAU2005B ‘Operate computer hardware’; ICAU1131B ‘Operate a database application’. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

 1. Contribute to the meeting of customer needs
 2. Obtain feedback from customers
 3. Use customer feedback to enhance customer relationships

Group D electives:

- **ICAB3018B - Develop macros and templates for clients using standard products (60 nominal hours)**
*(This unit defines the competency required to develop macros and templates for clients using industry-recognised software applications. The following unit is linked and form an appropriate cluster: ICAU3028B 'Customise packaged software applications for clients'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements. **Pre-requisite unit:** ICAU3126B 'Use advanced features of computer applications'.)*
 1. Determine macro or template requirement
 2. Develop macro or template for client
 3. Provide client support for macro or template

- **ICAB4135B - Create a simple mark-up language document to specification (20 nominal hours)**
(This unit defines the competency required to design, create and save a simple mark-up language document to a given specification using a text editor rather than an authoring tool. The following unit is linked and form an appropriate cluster: ICAB4137B 'Produce basic client side script for dynamic web pages'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)
 1. Analyse specification
 2. Create document structure to specification
 3. Format document to specification
 4. Create tables, hyperlinks and graphics
 5. Validate documents

- **ICAB4169B - Use development software and IT tools to build a basic website (20 nominal hours)**
(This unit defines the competency required to build a basic website that is consistent with design and technical requirements, and business expectations. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)
 1. Select and analyse website
 2. Begin site construction
 3. Complete and validate website construct and content

- **ICAB4225B - Automate processes (40 nominal hours)**
(This unit defines the competency required to automate solutions by using basic scripting processes and application-specific scripting options. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)
 1. Develop algorithms to represent solution to a given problem
 2. Describe structures of algorithms
 3. Design and write script
 4. Verify and review script
 5. Document script

- **ICAD4190B - Maintain information standards (20 nominal hours)**

*(This unit defines the competency required to establish and maintain information standards in the context of information stored on client websites. The primary focus of this unit relates to the merchant/customer e-commerce relationship and the accuracy and usability of the organisation's website information and processes. These units are linked and form an appropriate cluster: ICAB4135B 'Create a simple mark-up language document to specification', ICAS4201B 'Transfer content to a website using commercial packages', ICAT4184B 'Ensure site usability for full range of users' and ICAT4194B 'Ensure basic website security'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements. **Pre-requisite unit:** ICAD4217B 'Create technical documentation'.)*

1. Ensure that organisational website content is approved for display and made accessible on website
2. Ensure access to information and payment options
3. Ensure disclosure of policies and services
4. Communicate product/service conditions and notifications
5. Ensure customer service support

- **ICAD4217B - Create technical documentation (20 nominal hours)**

(This unit defines the competency required to create technical documentation that is clear to the target audience and easy to navigate. These units are linked and form an appropriate cluster: ICAA4041B 'Determine and confirm client business expectations and needs'; ICAW4027B 'Relate to clients on a business level'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

1. Identify and analyse documentation needs
2. Design documentation
3. Develop documentation
4. Evaluate and edit documentation
5. Prepare documentation for publication

- **ICAI3021B - Connect internal hardware components (20 nominal hours)**

(This unit defines the competency required to modify and connect system hardware components according to client and user requirements. The following units are linked and form an appropriate cluster: ICAS3115B 'Maintain equipment and software in working order; ICAT3025B 'Run standard diagnostic tests'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

1. Determine new components required
2. Obtain components
3. Install components
4. Provide instruction on use of modified system
5. Evaluate modified system

- **ICAI3110C - Implement system software changes (20 nominal hours)**

*(This unit defines the competency required to implement system software changes and to handover the modified system to the client's operational area. The following units are linked and form an appropriate cluster: ICAI4029C 'Install network hardware to a network'; ICAS3034B 'Determine and action network problems'; ICAS3121B 'Administer network peripherals'. This unit contains employability skills. **Pre-requisite unit:** ICAI3020B Install and optimise operating system software.)*

1. Determine system changes required
2. Carry out system changes
3. Present changes to client
4. Perform handover to client's operational

- **ICAI4029B - Install network hardware to a network (40 nominal hours)**
(This unit defines the competency required to plan, manage and install new hardware components in a network. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

 1. Determine hardware requirements
 2. Obtain hardware
 3. Install network hardware
 4. Provide support for installed products
 5. Determine and provide instruction and support

- **ICAI4030B - Install software to networked computers (40 nominal hours)**
(This unit defines the competency required to plan, manage and support the installation of new or upgrade software to networked computers according to vendor and organisation specifications. These units are linked and form an appropriate cluster: ICAA4041B 'Determine and confirm client business expectations and needs'; ICAD4043B 'Develop and present a feasibility report, ICAS4023B 'Provide one-to-one instruction'; ICAS4127B 'Support system software'; ICAS4108B 'Complete database back-up and recovery'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

 1. Determine software requirements
 2. Obtain software
 3. Install software
 4. Determine and provide instruction and support

- **ICAI4097B - Install and configure a network (40 nominal hours)**
*(This unit defines the competency required to plan and carry out the installation of network hardware and software and initial configuration according to organisational guidelines. These units are linked and form an appropriate cluster: ICAI3021B 'Connect internal hardware components' and ICAS4127B 'Support system software'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements. **Pre-requisite unit:** ICAI3101B 'Install and manage network protocols'.)*

 1. Confirm client requirements and network equipment required
 2. Install hardware
 3. Install software
 4. Configure and test modified network
 5. Document and sign off

- **ICAS4108B - Complete database back up and recovery (30 nominal hours)**
(This unit defines the competency required to back-up and recover a database. The following units are linked and form an appropriate cluster: ICAB4060B 'Identify physical database requirements'; ICAB4061B 'Monitor physical database implementation'; ICAB4136B 'Use structured query language to create database structures and manipulate data'; ICAS4113B 'Identify and resolve common database performance problems'; ICAS4114B 'Implement maintenance procedures'; ICAS4125B 'Monitor and administer a database'; ICAS4127B 'Support system software'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

 1. Review database architecture
 2. Determine back up methods appropriate to database requirements
 3. Establish recovery points and disaster recovery procedures
 4. Create and deploy standby database

- **ICAS4127B - Support system software (50 nominal hours)**
*(This unit defines the competency required to operate and support system software. The following units are linked and form an appropriate cluster: ICAS4107B 'Rectify system faults on a live system'; ICAS4119B 'Monitor and administer systems security'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements. **Pre-requisite unit:** ICAI3020B 'Install and optimise operating system software'.)*

 1. Maintain system software
 2. Set up and manage the system files
 3. Monitor and manage system usage and security
 4. Carry out system back up
 5. Restore system back up

- **ICAS4134C - Provide first-level remote help desk support (30 nominal hours)**
*(This unit defines the competency required to resolve first-level user support difficulties remotely. The following units are linked and form an appropriate cluster: ICAS4022B 'Determine client computing problems and action'; ICAS4107B 'Rectify system faults on a live system'; ICAS4114B 'Implement maintenance procedures'; ICAS4119B 'Monitor and administer systems security'; ICAS4127B 'Support system software'; ICAW4027B 'Relate to clients on a business level'. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. This unit contains employability skills. **Pre-requisite unit:** ICAS3031B 'Provide advice to clients'.)*

 1. Determine the user support issue
 2. Identify the hardware or software being used by the customer/client
 3. Confirm resolution of user support issue
 4. Maintain communication link

- **ICAS4191B - Maintain website performance (30 nominal hours)**
(This unit defines the competency required to ensure that a website maintains its performance levels during peak traffic times and during full utilisation access. The following unit is linked and form an appropriate cluster: ICAS4124B 'Monitor and administer network security'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

 1. Benchmark website performance
 2. Track website performance
 3. Tune performance
 4. Initiate and monitor performance improvement

- **ICAS4201B - Transfer content to a website using commercial packages (20 nominal hours)**
(This unit defines the competency required to transfer content from a remote location to a web server using a range of commercial IT products. The end objective is the successful upload of new or revised information on a website. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

 1. Configure the file transfer protocol client
 2. Plan and prepare for data transfer
 3. Establish connection to server
 4. Transfer data to remote server

- **ICAT4185B - Create a website testing procedure (20 nominal hours)**

(This unit defines the competency required to design and implement procedures that measure the performance of a website and compare them to the initial design specifications. These units are linked and form an appropriate cluster: ICAA4142B 'Design a website to meet technical requirements'; ICAB4135B 'Create a simple mark-up language document to specification'; ICAB4171B 'Develop cascading style sheets'; ICAD4209B 'Write content for web pages'; ICAI4189B 'Ensure website content meets technical protocols and standards'; ICAT4183B 'Confirm accessibility of website for people with special needs'; ICAT4184B 'Ensure site usability for full range of users'; ICAT4186B 'Conduct operational acceptance tests of websites'. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

1. Document and define performance criteria
2. Validate performance measures
3. Obtain sign off

- **ICAU4207B - Apply web authoring tool to convert client data for websites (20 nominal hours)**

(This unit defines the competency required to use web development software to create website content. The unit is designed to use a web authoring tool to convert text and images to appropriate web protocols. The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary for the qualification in which this unit of competency is packaged, will assist in identifying employability skills requirements.)

1. Create files
2. Create formatting templates
3. Define library items
4. Develop templates
5. Identify authoring requirements
6. Create simple forms
7. Create simple navigation