

# Certificate IV in Information Technology (General)

## ICA40105

### Course Description

This qualification provides the skills and knowledge for an individual to be competent in a range of ICT fields at Certificate IV level. The qualification has a strong core ICT base sharing the same core competencies as several other IT qualifications of the same level. Depending on the stream chosen, this qualification offers pathways into a number of IT qualifications at Diploma level.

It is a broad and flexible qualification with multiple internal pathways. It should be noted however, where the combination of core and elective units selected matches another Certificate IV of Information Technology equivalent, the latter award must be issued in preference to this more general qualification. This is to ensure that there is a clear identification of the work-related area of specialisation that has been undertaken.

Small to Medium Enterprises (SMEs) will find the contents of this qualification useful at a technical specialist support level.

Certificate IV of Information Technology (General) has 7 specialist streams (both core and elective) which enable maximum choice and flexibility to suit enterprise needs. Selection of units from at least 3 of the 7 specialist streams are required to complete this qualification. The 7 streams are:

- Software
- Networking
- Client Support
- Hardware/Operating Systems
- Communications/Documentation
- Analysis/Management
- Multimedia

### Course Duration

Depending on your choice of delivery method you may have up to 24 months to complete this course.

### Delivery Methods

Fundamental changes to the Australian workforce in recent years have resulted in employers demanding increased flexibility in the skill sets of their employees. At the same time, more individuals are taking greater responsibility for the development and extension of their own skills and knowledge. Prime Learning endeavours to accommodate those needs with its flexible delivery and qualifications structure allowing enterprises and individuals to progressively build relevant industry skills and have these recognised.

The following delivery methods are available for this course:

- **Classroom** (Classes are set with calendar and also rolling intake)
- **Workplace** (Trainer delivers on site with client)

- **Distance Learning** (All workbooks sent to client)
- **Blended Learning** (Periodic Workshops and Distance Learning)
- **RPL** - Recognised Prior Learning

For further customisation, or more information, please contact one of our course advisors on **1800 22 99 33**.

## Pre-requisites

There are prerequisites that contain the basic fundamentals of ICT knowledge and skills for all the qualifications at Certificate III in IT and above, which are the 9 core competencies required for the Certificate II in Information Technology (ICA20105). These competencies may be incorporated free of charge into the certificate of your choice.

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

A number of units within this qualification also have prerequisites. These are detailed below in *Course Units*.

## Course Requirements

Throughout the program you will need to have access to a PC or laptop with the following requirements:

- Microsoft Windows (98, Me, 2000, 2003, XP or Vista )
- Microsoft Word 97 or later
- Adobe Acrobat Reader\*
- Access to Internet and Email
- CD-Rom Drive

\* Can be downloaded free of charge from [www.adobe.com](http://www.adobe.com)

## Resources Included

All of the learning materials and text books required to complete this course will be provided.

## Course Units

23 units – 8 common core unit plus 9 specialist stream core stream units plus 6 elective units

A total of 8 common core units plus completion of 6 specialist core stream units (3 units chosen from any 3 specialist core streams - Software, Networking, Client Support, Hardware/Operating Systems, Communications/Documentation, Analysis/Management, Multimedia) plus 6 elective units - achieve 3 Elective Units Chosen from the Following Sources (Listed in Recommended Order)

- any of the above core or elective streams; and/or
- elsewhere in the ICA05 Information and Communications Technology Training Package (at Certificate III [maximum 2 units], Certificate IV or Diploma); and/or
- any other Training Package (at Certificate IV or Diploma) based on documented industry or enterprise needs

### Common Core Units

Code	Description
BSBCM304A	Contribute to personal skill development and learning
ICAA4041C	Determine and confirm client business expectations and needs
ICAB4225B	Automate processes
ICAD4043B	Develop and present a feasibility report
ICAD4217B	Create technical documentation
ICAT4221B	Locate equipment, system and software faults
ICAW4214B	Maintain ethical conduct
PSPPM402B	Manage simple projects

### Specialist Core Stream Units – Software

Code	Description	Pre-requisites
ICAA4051B	Develop client user interface	
ICAA4058B	Apply skills in object-oriented design	
ICAA4233B	Determine and apply appropriate development methodologies	
ICAB4075B	Use a library or pre-existing components	
ICAB4135B	Create a simple mark-up language document to specification	
ICAB4136B	Use structured query language to create database structures and manipulate data	ICAB4225B Automate processes
ICAB4137B	Produce basic client side script for dynamic web pages	
ICAB4169B	Use development software and IT tools to build a basic website	
ICAB4178B	Build a graphical user interface	
ICAB4219B	Apply introductory object-oriented language skills	ICAB4225B Automate processes
ICAB4222B	Apply introductory programming skills in another language	ICAB4225B Automate processes
ICAI4189B	Ensure website content meets technical protocols and standards	
ICAS4125B	Monitor and administer a database	ICAS3024B Provide basic system administration
ICAS4201B	Transfer content to a website using commercial packages	
ICAT4242B	Perform unit test for a class	

## Specialist Core Stream Units – Client Support

Code	Description
ICAS4022B	Determine and action client computing problems
ICAS4033B	Assist with policy development for client support procedures
ICAS4106B	Action and complete change requests
ICAW4027B	Relate to clients on a business level

## Specialist Core Stream Units – Hardware/Operating Systems

Code	Description	Pre-requisites
ICAI4188B	Install and maintain a server	
ICAS4109B	Evaluate system status	ICAT3025B Run standard diagnostic tests
ICAS4114B	Implement maintenance procedures	ICAT3025B Run standard diagnostic tests
ICAS4127B	Support system software	ICAI3020B Install and optimise operating system software

## Specialist Core Stream Units – Communications/Documentation

Code	Description	Pre-requisites
ICAD4190B	Maintain information standards	ICAD4217B Create technical documentation
ICAD4198B	Develop guidelines for uploading information to a website	ICAD3218B Create user documentation
ICAD4209B	Write content for web pages	
ICAS4023B	Provide one-to-one instruction	
ICAW4026B	Coordinate and maintain work teams	
ICAW4027B	Relate to clients on a business level	

## Specialist Core Stream Units – Analysis Management

Code	Description	Pre-requisites
ICAA4047B	Determine project specifications and secure client agreement	ICAA4041C Determine and confirm client business expectations and needs
ICAA4051B	Develop client user interface	ICAA4233B Determine and apply appropriate development methodologies
ICAA4058B	Apply skills in object-oriented design	
ICAA4233B	Determine and apply appropriate development methodologies	
ICAB4076B	Implement configuration management	
ICAP4037B	Contribute to the development of a strategy plan	ICAA4041C Determine and confirm client business expectations and needs

## Specialist Core Stream Units – Multimedia Stream

Code	Description
CUFWRT601A	Write scripts
CUFANM403A	Create titles for screen production
ICPPP325B	Create graphics using a graphics application
ICPMM321B	Capture a digital image
ICPMM344B	Manipulate and incorporate audio into multimedia presentations
CUFIMA05A	Create 3D digital models and images
CUFDIG201A	Maintain interactive content
CUFMEM10A	Design and create a multimedia interface

## Specialist Core Stream Units – Networking

Code	Description	Pre-requisites
ICAB4220B	Create scripts for networking	ICAB4225B Automate processes
ICAB4235B	Build basic perimeter security into a network	
ICAB4236B	Build security into a virtual private network	
ICAB4239C	Build a small wireless local area network	
ICAB4240C	Build an enterprise wireless network	
ICAI4029C	Install network hardware to a network	
ICAI4030B	Install software to networked computers	
ICAI4097C	Install and configure a network	ICAI3101B Install and manage network protocols
ICAI4175C	Select and install a router	ICAI3101B Install and manage network protocols
ICAI4188B	Install and maintain a server	ICAI3101B Install and manage network protocols ICAI3020B Install and optimise operating system software # ICAS3120C Configure and administer a network operating system #
ICAS4107B	Manage resolution of system faults on a live system	ICAS3024B Provide basic system administration ICAT3025B Run standard diagnostic tests ICAT4221B Locate equipment, system and software faults
ICAS4108B	Complete database back-up and recovery	
ICAS4112B	Optimise system performance	ICAI3110C Implement system software changes #
ICAS4113C	Identify and resolve common database performance problems	

ICAS4119B	Monitor and administer system security	
ICAS4124B	Monitor and administer network security	ICAI3020B Install and optimise operating system software ICAS3024B Provide basic system administration
ICAS4191B	Maintain website performance	
ICAS4200B	Monitor traffic and compile website traffic reports	

### Specialist Elective Stream – Software

Code	Description
ICAB4057B	Manage a reuse library
ICAB4224B	Apply mathematical techniques for software development
ICAB5067B	Prepare for software development using rapid application development
ICAB5068B	Build using rapid application development
ICAB5165B	Create dynamic web pages
ICAB5177B	Build Java applets
ICAB5180C	Integrate database with a website
ICAB5228B	Maintain functionality of legacy code programs
ICAB4229B	Apply intermediate programming skills in another language
ICAT5079B	Perform integration test
ICAT5081B	Perform systems test
ICAT5083B	Develop and conduct client acceptance test

### Specialist Elective Stream – Client Support

Code	Description
ICAI5088B	Evaluate and negotiate vendor offerings
ICAS5102B	Establish and maintain client user liaison
ICAS5103B	Establish and maintain client user liaison during support activity
ICAS5105B	Coordinate change requests

### Specialist Elective Stream – Hardware/Operating Systems

Code	Description
ICAB4163B	Create a common gateway interface script
ICAA5150C	Evaluate vendor products and equipment
ICAI5087B	Acquire system components
ICAS5104B	Determine maintenance strategy

### Specialist Elective Stream – Communications/Documentation

Code	Description
ICAD5092B	Update and document operational procedures

### Specialist Elective Stream – Analysis/Management

Code	Description
ICAA5049B	Develop high-level object-oriented class specifications
ICAA5050B	Develop detailed component specifications from project specifications
ICAB4064B	Prepare software development review
ICAI5089B	Implement and hand over system components
ICAI5090B	Conduct pre-installation audit for software installation

### Specialist Elective Stream – Multimedia Stream

Code	Description
ICPKN315B	Apply knowledge and requirements of the multimedia sector
ICPMM581B	Manage multimedia production
ICPMM582B	Manage multimedia projects

### Specialist Elective Stream – Networking Stream

Code	Description	Pre-requisites
ICAA5045C	Produce network architecture design	
ICAB4247A	Link an RFID system to a database	ICAB4136B Use structured query language to create database structures and manipulate data
ICAI4244A	Install and maintain an RFID system	ICAI3101B Install and manage network protocols ICAI4029B Install network hardware to a network
ICAI4249A	Implement and evaluate data security	ICAS3024B Provide basic system administration ICAS4124B Monitor and administer network security #
CAI4251A	Implement and evaluate network and telecommunication security	ICAS4119B Monitor and administer system security # ICAS4124B Monitor and administer network security #
ICAI5085B	Review site in preparation for implementation	

## Knowledge and Skills Gained

*(This summary of employability skills that are typical of this qualification and should not be interpreted as definitive.)*

- Being able to undertake open ended questioning techniques and to exercise active listening skills in relation to dealing with clients and team members (e.g. eliciting information for network troubleshooting)
- Consulting with end users and clients before, during and after development of services to determine their issues and ensure that their needs are met
- Consulting with the work team to review proposed changes against current and future business requirements
- Establishing and improving work teams in an IT environment
- Debugging code
- Determining criteria for writing script for web pages for example, criteria such as dynamic functionality and appropriate language
- Developing new criteria and procedures for performing current practices
- Identifying, analysing and evaluating information from a variety of sources
- Providing input into the disaster recovery plan
- Creating project plans to guide the development of systems methodologies
- Developing installation plans
- Preparing feasibility reports taking into account the scope, time, cost, quality, communications and risk management
- Creating project plans to guide the development of systems methodologies
- Developing installation plans
- Preparing feasibility reports taking into account the scope, time, cost, quality, communications and risk management
- Taking responsibility for own output in relation to specified quality standards
- Working within the Australian Computer Society code of ethics regarding security, legal, moral and ethical issues
- Gathering and organising feedback on draft documentation and client satisfaction
- Maintaining knowledge of tools and software applications that may be useful and the goods and services provided
- Selecting, sourcing and using appropriate software and tools based on analysis of technical needs

## Career Outcomes

It is difficult to identify one specific vocational outcome for this qualification because of the 'general' nature of this qualification and the diverse array of unit choices and streams available. Graduates exiting this qualification will be likely to secure employment in an ICT 'generalist' role with useful skills and knowledge across several of the specialist streams. The judicious choice of stream and electives units would provide for more specialist vocational outcomes associated with the streams. Job titles listed for other ICA05 Certificate IV qualifications that in part match the above streams could provide some guidance.

## Pathways

Individuals who successfully complete the Prime Learning Certificate IV in Information Technology (General) may undertake further studies within Information Technology qualifications, as well as being a pathway towards a Diploma of Information Technology.

For more details contact one of our course advisors on **1800 22 99 33**.

## **Assessment Information**

Assessment is ongoing throughout the learning process to both gather data on attainment of competencies, and to provide learners with feedback on how they are progressing. For more details contact one of our course advisors on **1800 22 99 33**.

## **Enrolment Form**

For further information contact one of our course advisors on **1800 22 99 33**, or visit our website for more details [www.primelarning.com.au](http://www.primelarning.com.au)

## **Contact Information**

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