



Australian Government

ICT40115 Certificate IV in Information Technology

Release: 2

ICT40115 Certificate IV in Information Technology

Modification History

Release	Comments
Release 2	This version released with ICT Information and Communications Technology Training Package version 2.0. Release 2 created to update unit codes.
Release 1	This version first released with ICT Information and Communications Technology Training Package version 1.0.

Qualification Description

This qualification provides the skills and knowledge for an individual to be competent in a wide range of general information and communications technology (ICT) technologies and to support small to medium enterprises (SMEs) that require broader rather than more specialised ICT support.

Persons working at this level apply a wide range of knowledge and skills in basic networking, ICT support, database development, programming and web development support; working safely and ethically in a sustainable work environment.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 20

5 core units plus

15 elective units

The elective units consist of:

- up to 15 from the specialist elective groups below, with a maximum of 5 units from any one group:
 - Group A Networking
 - Group B Programming
 - Group C IT support
 - Group D Web design and development
 - Group E Digital games
 - Group F Digital media technologies
 - Group G Project management
- up to 5 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Certificate IV or Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

BSBWHS304 Participate effectively in WHS communication and consultation processes

BSBSUS401 Implement and monitor environmentally sustainable work practices

ICTICT202 Work and communicate effectively in an ICT environment

ICTICT401 Determine and confirm client business requirements

ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

Elective units

Specialist elective units

Group A Networking

ICTICT423 Select cloud storage strategies

ICTNWK401 Install and manage a server

ICTNWK402 Install and configure virtual machines for sustainable ICT

ICTNWK403 Manage network and data integrity

ICTNWK404 Install, operate and troubleshoot a small enterprise branch network

ICTNWK405 Build a small wireless local area network

ICTNWK406 Install, configure and test network security

ICTNWK407 Install and configure client-server applications and services

ICTNWK408 Configure a desktop environment

ICTNWK409 Create scripts for networking

ICTNWK410 Install hardware to a network

ICTNWK411 Deploy software to networked computers

ICTNWK412 Create network documentation

ICTNWK414 Create a common gateway interface script

ICTNWK416 Build security into virtual private networks
ICTNWK417 Build an enterprise wireless network
ICTNWK418 Implement backbone technologies in a local area network
ICTNWK419 Identify and use current virtualisation technologies
ICTSAS307 Install, configure and secure a small office or home office network

Group B Programming

ICTICT410 Conduct post-implementation ICT system reviews
ICTICT420 Develop client user interface
ICTPRG401 Maintain open-source code programs
ICTPRG402 Apply query language
ICTPRG403 Develop data-driven applications
ICTPRG404 Test applications
ICTPRG405 Automate processes
ICTPRG406 Apply introductory object-oriented language skills
ICTPRG407 Write script for software applications
ICTPRG409 Develop mobile applications
ICTPRG410 Build a user interface
ICTPRG412 Configure and maintain databases
ICTPRG413 Use a library or pre-existing components
ICTPRG414 Apply introductory programming skills in another language
ICTPRG415 Apply skills in object-oriented design
ICTPRG416 Manage a software component reuse library
ICTPRG417 Apply mathematical techniques for software development
ICTPRG418 Apply intermediate programming skills in another language
ICTPRG419 Analyse software requirements
ICTPRG425 Use structured query language
ICTPRG426 Prepare software development review
ICTPRG427 Use XML effectively
ICTPRG428 Use regular expressions in programming languages

Group C ICT support

ICTDBS403 Create basic databases
ICTDBS407 Monitor physical database implementation
ICTDBS408 Link an RFID system to a database
ICTDBS503 Create a data warehouse
ICTICT402 Determine project specifications and secure client agreement
ICTICT403 Apply software development methodologies
ICTICT404 Use online learning tools
ICTICT405 Develop detailed technical design
ICTICT406 Build a graphical user interface
ICTICT408 Create technical documentation
ICTICT411 Select and employ software and hardware testing tools
ICTICT412 Coordinate and maintain ICT work teams
ICTICT413 Relate to clients on a business level
ICTICT415 Provide one-to-one instruction
ICTICT416 Contribute to the development of strategic plans

ICTICT417 Identify, evaluate and apply current industry specific technologies to meet industry standards

ICTSAD401 Develop and present feasibility reports

ICTSAS402 Implement configuration management strategies

ICTSAS403 Review site environmental factors prior to ICT system implementation

ICTSAS404 Acquire ICT system components

ICTSAS405 Identify and evaluate ICT industry vendor technologies

ICTSAS407 Conduct pre-installation audit for software installation

ICTSAS408 Complete data transition in data migration process

ICTSAS409 Manage risks involving ICT systems and technology

ICTSAS410 Identify and resolve client ICT problems

ICTSAS411 Assist with policy development for client support procedures

ICTSAS412 Action change requests

ICTSAS413 Manage resolution of system faults on a live system

ICTSAS414 Evaluate system status

ICTSAS415 Optimise ICT system performance

ICTSAS416 Implement maintenance procedures

ICTSAS417 Undertake ICT system capacity planning

ICTSAS418 Monitor and administer security of an ICT system

ICTSAS419 Support system software

ICTSAS420 Provide first-level remote help-desk support

ICTSAS421 Support users and troubleshoot desktop applications

ICTSAS424 Support different operating systems

Group D Web design and development

ICTICT407 Maintain website information standards

ICTWEB401 Design a website to meet technical requirements

ICTWEB402 Confirm accessibility of websites for people with special needs

ICTWEB403 Transfer content to a website using commercial packages

ICTWEB404 Maintain website performance

ICTWEB405 Monitor traffic and compile website traffic reports

ICTWEB406 Create website testing procedures

ICTWEB407 Conduct operational acceptance tests of websites

ICTWEB408 Ensure basic website security

ICTWEB409 Develop cascading style sheets

ICTWEB410 Apply web authoring tool to convert client data for websites

ICTWEB411 Produce basic client-side script for dynamic web pages

ICTWEB412 Produce interactive web animation

ICTWEB413 Optimise search engines

ICTWEB414 Design simple web page layouts

ICTWEB415 Produce server-side script for dynamic web pages

ICTWEB416 Customise content management system

ICTWEB417 Integrate social web technologies

ICTWEB418 Use development software and ICT tools to build a basic website

ICTWEB419 Develop guidelines for uploading information to a website

ICTWEB420 Write content for web pages

ICTWEB421 Ensure website content meets technical protocols and standards

ICTWEB422 Ensure website access and useability

ICTWEB423 Ensure dynamic website security
ICTWEB424 Evaluate and select a web hosting service
ICTWEB425 Apply structured query language to extract and manipulate data
ICTWEB429 Create a markup language document to specification

Group E Digital games

ICTGAM401 Produce an interactive game
ICTGAM402 Identify and apply principles of games design and game playing
ICTGAM403 Create design documents for interactive games
ICTGAM405 Write story and content for digital games
ICTGAM406 Create visual design components for interactive games
ICTGAM407 Write scripts for interactive games
ICTGAM408 Use 3-D animation interface and toolsets
ICTGAM409 Create 3-D characters for interactive games
ICTGAM410 Develop 3-D components for interactive games
ICTGAM412 Design interactive media
ICTGAM413 Design and create 3-D digital models
ICTGAM414 Create audio for digital games
ICTGAM415 Develop simple environments for 3-D games
ICTGAM416 Prepare and complete image rendering processes
ICTGAM417 Apply digital effects to interactive products
ICTICT419 Work effectively in the digital media industry

Group F Digital media technologies

BSBCRT401 Articulate, present and debate ideas
CUAANM301 Create 2D digital animations
CUAANM302 Create 3D digital animations
CUAANM402 Create digital visual effects
CUADIG401 Author interactive media
CUAPPM407 Create storyboards
CUASOU202 Perform basic sound editing
CUASOU304 Prepare audio assets
ICTDMT401 Create visual design components for digital media
ICTDMT402 Produce interactive animation
ICTDMT403 Produce and edit digital images

Group G Project management

ICTPMG401 Support small scale ICT projects

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICT40115 Certificate IV in Information Technology (Release 2)	ICT40115 Certificate IV in Information Technology (Release 1)	Updated unit codes.	Equivalent qualification

Links

Companion volumes available from the IBSA website:

http://www.ibsa.org.au/companion_volumes -

http://companion_volumes.vetnet.education.gov.au/Pages/TrainingPackage.aspx?pid=18