



Australian Government

ICA40411 Certificate IV in Information Technology Networking

Release 2

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Modification History

Release	Comments
Release 2	<i>This version first released with ICA11 Information and Communications Technology Training Package Version 2.</i> Addition of two new units of competency to electives.
Release 1	<i>This Qualification first released with ICA11 Information and Communications Technology Training Package version 1.0</i>

Description

This qualification provides the skills and knowledge for an individual to install and manage small scale networks, either as an independent network support technician or as part of a team.

Job roles

Possible job titles relevant to this qualification include:

- network support
- network operations support
- network operations technician
- network technician
- network support technician.

Pathways Information

Pathways into the qualification

Preferred pathways for candidates considering this qualification include:

- after achieving ICA30111 Certificate III in Information, Digital Media and Technology, or other relevant qualifications or units equivalent to the core of ICA30111

OR

- with demonstrated vocational experience in a range of work environments in a network support role, including administrator, manager, operations analyst, operations engineer/technician, or technician.

Pathways from the qualification

ICA50411 Diploma of Information Technology Networking, or a range of other ICA Diploma qualifications.

Licensing/Regulatory Information

There is no link between this qualification and licensing, legislative or regulatory requirements. However users should confirm requirements with the relevant federal, state or territory authority. There may be some alignment with industry standard certification competencies.

Entry Requirements

There are no entry requirements for this qualification.

Employability Skills Summary

The following table contains a summary of the employability skills required by industry for this qualification. The employability skills facets described here are broad industry requirements that may vary depending on qualification packaging options.

Employability skill	Industry/enterprise requirements for this qualification
Communication	<ul style="list-style-type: none"> • writing for business, requiring depth in some areas and analysis and evaluation of information in a defined range of areas • presenting to teams and conducting meetings with clients
Teamwork	<ul style="list-style-type: none"> • consulting with work team to review proposed changes against current and future business requirements • establishing and improving work teams in an IT environment
Problem-solving	<ul style="list-style-type: none"> • debugging code • solving network problems related to the installation of hardware, software and networks
Initiative and enterprise	<ul style="list-style-type: none"> • developing new criteria and procedures for performing current practices • identifying, analysing and evaluating information from a variety of sources
Planning and organising	<ul style="list-style-type: none"> • creating project plans to guide the development of systems methodologies • planning and designing different networking configurations
Self-management	<ul style="list-style-type: none"> • taking responsibility for own output in relation to specified quality standards • meeting ethical standards in the areas of security, legal, moral and ethical practice
Learning	<ul style="list-style-type: none"> • maintaining knowledge of tools and software applications and the goods and services provided • obtaining client evaluation and feedback • providing instruction to clients and users
Technology	<ul style="list-style-type: none"> • selecting and using software, hardware and networking components and diagnostic tools in a wide range of different environments

Packaging Rules

Total number of units = 17

8 core units plus

9 elective units, of which:

- 6 units must be from the elective units listed below
- the remaining units may be from the elective units below or from elsewhere in ICA11 or any other Training Package or accredited course at Certificate III, IV or Diploma level.

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

Core units

BSBWHS304A Participate effectively in WHS communication and consultative processes

ICAICT401A Determine and confirm client business requirements

ICAICT418A Contribute to copyright, ethics and privacy in an IT environment

ICANWK401A Install and manage a server

ICANWK402A Install and configure virtual machines for sustainable ICT

ICANWK403A Manage network and data integrity

ICANWK404A Install, operate and troubleshoot a small enterprise branch network

ICTTEN4198A Install, configure and test an internet protocol network

Elective units

BSBCRT401A Articulate, present and debate ideas

BSBWOR404B Develop work priorities

ICAICT403A Apply software development methodologies

ICAICT408A Create technical documentation

ICAICT417A Identify, evaluate and apply current industry-specific technologies to meet industry standards

ICAICT423A Select cloud storage strategies

ICANWK405A Build a small wireless local area network

ICANWK406A Install, configure and test network security

ICANWK407A Install and configure client-server applications and services

ICANWK408A Configure a desktop environment

ICANWK409A Create scripts for networking

ICANWK410A Install hardware to a network

ICANWK411A Deploy software to networked computers

ICANWK412A Create network documentation

ICANWK419A Identify and use current virtualisation technologies

ICAPMG401A Support small scale IT projects

ICAPRG425A Use structured query language

ICASAS426A Locate and troubleshoot IT equipment, system and software faults

ICTOPN4116A Use advanced optical test equipment

ICTSUS4183A Install and test renewable energy system for ICT networks

ICTSUS4184A Install and test power saving hardware

ICTSUS4185A Install and test power management software

ICTSUS4186A Install thin client applications for power over ethernet

ICTTEN4199A Install, configure and test a router

ICTTEN4202A Install and test a radio frequency identification system
ICTTEN4210A Implement and troubleshoot enterprise routers and switches
ICTTEN4211A Design, install and configure an internetwork
ICTTEN5200A Install, configure and test a local area network switch

Selecting elective units for different outcomes

The following examples are designed to assist in the selection of appropriate electives for particular outcomes at this level, but are in no way prescriptive.

Certified networking technician

Core units plus:

ICANWK404A Install, operate and troubleshoot a small enterprise branch network
ICANWK405A Build a small wireless local area network
ICTTEN4199A Install, configure and test a router

Certified technology specialist – graphical user interfaces (GUI)

Core units plus:

ICANWK403A Manage network and data integrity
ICANWK408A Configure a desktop environment

Certified technician or technology specialist – small server configuration

Core units plus:

ICANWK401A Install and manage a server

Certified IT enterprise, security or server administrator

Core units plus:

ICANWK406A Install, configure and test network security
ICANWK403A Manage network and data integrity

Certified SQL associate or specialist

Core units plus:

ICAPRG425A Use structured query language