



Australian Government

ICT30515 Certificate III in Telecommunications Technology

Release 3

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Modification History

Release	Comments
Release 3	This version released with ICT Information and Communications Technology Training Package version 4.0. Release 3 created to update the elective list unit codes and titles.
Release 2	This version first released with ICT Information and Communications Technology Training Package Version 3.1. Update to correct typographical error in unit title.
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Qualification Description

This qualification prepares an individual for entry into the telecommunications industry and its convergent technologies, including radio, optical, data and internet protocol (IP) networks.

This qualification reflects the role of an operator in the telecommunications industry who can apply a broad range of competencies using a defined range of skills where some discretion and judgement is required in the selection, installation and configuration of equipment in convergence technologies that integrate radio, optical and internet protocol (IP) based applications.

This role includes assessing installation requirements, planning and performing installations, testing installed equipment and fault finding. It involves a degree of autonomy and may include some supervision of others. Work is performed according to known routines and procedures and there is some accountability for the quality of outcomes.

The following specialisations can be achieved through selection of specific units of competency:

- Optical Networks
- Wireless Networks
- Cabling Networks
- Telecommunications Networking
- Radio Communications.

Licensing/Regulatory Information

Work functions in the occupational areas where this qualification may be used are subject to regulatory requirements. Refer to the ICT Implementation Guide Companion Volume or the relevant regulator for details of licensing, legislative or certification requirements.

Cabling at the customer premises must be carried out according to requirements of the Australian Communications and Media Authority (ACMA) and relevant industry registration bodies, and in line with the specifications of the access network owner. Refer to ‘Pathways to ACMA Cabling Provider Rules - Cabling registration’ and the mandatory industry practical hours required for registration.

Entry Requirements

Nil

Packaging Rules

Total number of units = 16

7 core units, plus

9 elective units

The elective units consist of:

- 1 elective unit from Group A workplace units
- up to 8 elective units from any of the elective groups below
- up to 2 units of competency may be selected from any currently endorsed Training Package or accredited course at AQF Level 3 or 4.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the Australian Qualifications Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome.

Units selected from other Training Packages or accredited courses must not duplicate units selected from or available within the ICT Information and Communications Technology Training Package.

Refer to the *Specialisations* information below, and to the Companion Volume Implementation Guide, for advice about choosing electives to support specialisations in particular sectors of the information and communications industry.

CORE UNITS

ICTCBL306 Locate and identify cable system faults
ICTTEN201 Use electrical skills in telecommunications work
ICTTEN202 Use hand and power tools
ICTTEN207 Install and test internet protocol devices in convergence networks
ICTTEN302 Install telecommunications network equipment
ICTWHS204 Follow work health and safety and environmental policy and procedures
ICTWOR201 Work effectively in telecommunications technology

ELECTIVE UNITS

Group A - Workplace units

BSBSMB305 Comply with regulatory, taxation and insurance requirements for the micro business

BSBSMB306 Plan a home based business

BSBSUS401 Implement and monitor environmentally sustainable work practises
ICTEDU301 Train customers in new technology
ICTSAS305 Provide ICT advice to clients
ICTWOR301 Organise resources
ICTWOR302 Organise material supply
ICTWOR303 Schedule resources
ICTWOR304 Manage spare parts
ICTWOR305 Supervise worksite activities
ICTWOR306 Resolve technical enquiries using multiple information systems
ICTWOR307 Collect and analyse technical information

General Electives

Group B Optical networks

ICTBWN301 Perform tests on optical communication system and components
ICTBWN302 Install optical fibre splitters in fibre distribution hubs
ICTBWN303 Install lead-in module and cable for fibre to the premises
ICTBWN304 Work safely with live fibre to test and commission a fibre to the x installation*
ICTBWN305 Use optical and radio frequency measuring instruments

Group C Cabling

ICTCBL201 Install customer cable support systems, and
ICTCBL202 Place and secure customer cable, and
ICTCBL203 Terminate metallic conductor customer cable
ICTCBL208 Splice and terminate optical fibre cable for carriers and service providers

ICTCBL236 Install, maintain and modify customer premises communications cabling:
ACMA Restricted Rule*

ICTCBL215 Joint metallic conductor cable in access network

ICTCBL237 Install, maintain and modify customer premises communications cabling:
ACMA Open Rule*

ICTCBL219 Apply safe technical work practices for cabling registration when configuring an ADSL circuit

ICTCBL220 Install a cable lead-in

ICTCBL301 Install, terminate and certify structured cabling installation
ICTCBL302 Install and terminate optical fibre cable on customer premises
ICTCBL303 Install and terminate coaxial cable
ICTCBL304 Perform cable and system test on customer premises
ICTCBL305 Hand over cable systems and equipment
ICTCBL307 Install underground enclosures and conduit
ICTCBL308 Install underground cable
ICTCBL309 Construct aerial cable supports
ICTCBL310 Install aerial cable
ICTCBL311 Install systems and equipment on customer premises
ICTCBL312 Cutover new systems and equipment on customer premises
ICTCBL313 Modify and cutover cable
ICTCBL314 Install network cable equipment
ICTCBL315 Maintain cable network
ICTCBL316 Install ribbon fibre cable in the FTTX distribution network
ICTCMP201 Organise and monitor cabling to ensure compliance with regulatory and industry standards

ICTCMP202 Perform restricted customer premises broadband cabling work: ACMA Restricted Rule*

Group D Digital reception technology

ICTDRE301 Install digital reception equipment
ICTDRE302 Locate and rectify digital reception equipment faults
ICTDRE303 Install a complex digital reception system

Group E ICT use

ICTICT302 Install and optimise operating system software
ICTICT303 Connect internal hardware components
ICTICT304 Implement system software changes
ICTICT306 Migrate to new technology
ICTNWK305 Install and manage network protocols
ICTSAS303 Care for computer hardware
ICTSAS304 Provide basic system administration
ICTSAS308 Run standard diagnostic tests

Group F Work health and safety

CPCCCM2007B Use explosive power tools*
CPCCDE3014A Remove non-friable asbestos*
CPCCOHS1001A Work safely in the construction industry
CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry (*Note: CPCCOHS2001A is a prerequisite unit for CPCCCM2007B. It is not to be selected without CPCCCM2007B.*)

ICTWHS201 Provide telecommunications services safely on roofs

ICTWHS203 Work safely near power infrastructure
RIIWHS204D Work safely at heights

Group G Radio frequency networks

ICTBWN305 Use optical and radio frequency measuring instruments
ICTRFN301 Install a radio communications antenna and feedline
ICTRFN303 Install WiMAX customer premises equipment broadband wireless access equipment
ICTRFN305 Operate and maintain radio communications technical instruments and field equipment

ICTRFN401 Conduct radio frequency measurements

ICTRFN406 Maintain hybrid fibre coaxial broadband cable network

ICTRFN302 Install mobile telecommunications in motor vehicles

ICTRFN304 Construct and test a radio communications device

Group H Telecommunications network

ICTTEN301 Provide infrastructure for telecommunications network equipment

ICTTEN303 Locate, identify and rectify recurrent network faults

ICTTEN304 Recover customer premises equipment

ICTTEN305 Refurbish customer premises equipment

ICTTEN306 Commission an electronic unit

ICTTEN307 Repair and replace telecommunications network hardware

ICTTEN308 Maintain an electronic system

ICTTEN309 Provide infrastructure for telecommunications network customer equipment

ICTTEN416 Install, configure and test an internet protocol network

Specialisations

The use of specialist streams is appropriate for this qualification in accordance with the AQF, Standards for Training Packages and the packaging rules. Where a specialist stream is achieved, testamurs must show the appropriate specialisation in brackets. Refer to the Companion Volume Implementation Guide for further advice about specialisations.

Minimum elective units required for the specific specialisations are described below.

Optical Networks

At least 4 of the 8 electives must be selected from the following list:

- ICTBWN301 Perform tests on optical communication system and components
- ICTBWN302 Install optical fibre splitters in fibre distribution hubs
- ICTBWN303 Install lead-in module and cable for fibre to the premises
- ICTBWN304 Work safely with live fibre to test and commission a fibre to the x installation*
- ICTBWN305 Use optical and radio frequency measuring instruments.

Wireless Networks

At least 4 of the 8 electives must be selected from the following list:

- ICTRFN301 Install a radio communications antenna and feedline
- ICTRFN303 Install WiMAX customer premises equipment broadband wireless access equipment
- ICTRFN305 Operate and maintain radio communications technical instruments and field equipment
- ICTRFN401 Conduct radio frequency measurements
- ICTRFN406 Maintain hybrid fibre coaxial broadband cable network.

Cabling Networks

The following unit must be selected:

- ICTTEN309 Provide infrastructure for telecommunications network customer equipment.

At least 3 of the 7 remaining electives must be selected from Group C Cabling.

Radio Communications

The following unit must be selected:

- ICTWOR307 Collect and analyse technical information.

At least 3 of the 7 remaining electives must be selected from Group G Radio frequency networks.

Telecommunications Networking

The following unit must be selected:

- ICTWOR307 Collect and analyse technical information.

At least 3 of the 7 remaining electives must be selected from Group H Telecommunications network.

*Note the following prerequisite unit requirements:

Unit in this qualification	Prerequisite unit
CPCCCM2007B Use explosive power tools	CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry
CPCCDE3014A Remove non-friable asbestos	CPCCOHS1001A Work safely in the construction industry
ICTBWN304 Work safely with live fibre to test and commission a fibre to the x installation	ICTWHS201 Follow work health and safety and environmental policies and procedures
ICTCBL236 Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule	ICTWHS204 Follow work health and safety and environmental policy and procedures ICTTEN201 Use electrical skills in telecommunications work

ICTCBL237 Install, maintain and modify customer premises communications cabling: ACMA Open Rule	ICTCBL236 Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule
ICTCMP202 Perform restricted customer premises broadband cabling work: ACMA Restricted Rule	ICTCBL236 Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule OR ICTCBL201 Install customer cable support systems, and ICTCBL202 Place and secure customer cable, and ICTCBL203 Terminate metallic conductor customer cable and ICTCMP201 Organise and monitor cabling to ensure compliance with regulatory and industry standards

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICT30515 Certificate III in Telecommunications Technology	ICT30113 Certificate III in Broadband and Wireless Networks Technology ICT30213 Certificate III in Telecommunications ICT30313 Certificate III in Telecommunications Cabling ICT30613 Certificate III in Broadband and Wireless Networks ICT30813 Certificate	Updated to meet Standards for Training Packages. Changed packaging rules. Changed core units.	No equivalent qualification

Code and title current version	Code and title previous version	Comments	Equivalence status
	III in Telecommunications Fixed Wireless Installation		

Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>