Australian Government

ICT30419 Certificate III in Telecommunications Network Build and Operation

Release 1

ICT30419 Certificate III in Telecommunications Network Build and Operation

Modification History

Release	Comments
Release 1	This version released with ICT Information and Communications Technology Training Package Version 5.0.

Qualification Description

This qualification is for telecommunications operators working on the construction and maintenance of high-speed national broadband network (NBN) infrastructure, and on required technology.

Telecommunications technology operators may:

- perform equipment and system installation work on a customer network to enable efficient access and interconnection to the NBN services, including connecting and jointing of copper cable, diagnosing and rectifying copper cable system faults, and migrating, remediating and augmentation of copper services to maximise benefits of the high-speed broadband connection
- splice, test and fault-find on live fibre cable in the NBN fibre distribution network
- perform equipment and system installation work on a customer network to enable efficient access and interconnection to the NBN services, including diagnosing and rectifying fibre system faults, working with active equipment, and performing integration and commissioning activities to maximise benefits of the high-speed broadband connection
- perform underground and aerial equipment and system installations from the tap to the optical node to enable efficient access and interconnection to the NBN services, including connecting and terminating hybrid fibre coaxial (HFC) cabling, diagnosing and rectifying HFC system faults
- install, activate and assure HFC equipment and systems from the last connection point of the network to the customer premises – tap to network termination device (NTD) – to enable efficient access and interconnection to the NBN services.

Licensing/Regulatory Information

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

Cabling at the customer premises downstream of the NTD 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.

Entry Requirements

Nil

Packaging Rules

Total number of units = 14

6 core units, plus
8 elective units

The elective units selected may consist of:

- up to 8 units from Group A Copper Cabling, or Group B Fibre Cabling, and/or Group C HFC Cabling
- up to 5 units from Group D General
- up to 2 units from this or any currently endorsed Training Package or accredited course where the units are packaged in an Australian Qualification Framework (AQF) Level 3 or 4 qualification.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the 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.

Core units

ICTTEN202 Use hand and power tools

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ICTTEN208 Use electrical skills when working with telecommunications
networks
ICTTEN315 Determine and apply technologies within a telecommunications
system
ICTTEN317 Locate, identify and rectify telecommunications network faults
ICTWHS204 Follow work health and safety and environmental policy and
procedures
ICTWOR308 Provide customer service to telecommunications customers
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Elective units

Group A Copper Cabling

ICTCBL254 Joint metallic conductor cable in access network

ICTCBL313 Modify and cutover cable

ICTCBL319 Rearrange large size copper cable

ICTCBL320 Jumper metallic conductor cable in the access network

ICTCBL326 Cut over metallic conductor cable in the access network

ICTCBL332 Locate, identify and rectify copper cable faults

ICTCBL336 Install and cut over metallic conductor cable to access network cabinet

Group B Fibre Cabling

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ICTBWN302 Install optical fibre splitters in fibre distribution hubs
ICTBWN309 Perform tests on optical communication system and components
ICTCBL316 Install ribbon fibre cable in the FTTX distribution network*
ICTCBL322 Install, test and terminate optical fibre cable on customer
premises
ICTCBL330 Splice and terminate optical fibre cable for
telecommunications projects
ICTTEN318 Inspect, clean and handle optical fibre cable and connectors
ICTTEN409 Commission an electronic system
ICTTEN416 Install, configure and test an internet protocol network
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Group C HFC Cabling

ICTCBL248 Install and terminate hard-line coaxial cable

ICTCBL251 Install aerial and underground cable lead-ins

ICTCBL303 Install and terminate coaxial cable

ICTCBL306 Locate and identify cable system faults

ICTCBL333 Install aerial cable for communications applications

ICTCBL335 Construct aerial cable supports

ICTDRE303 Install a complex digital reception system

ICTDRE308 Install a cable broadband multi-dwelling unit system

ICTDRE314 Design communications wiring systems for customer premises*

ICTRFN406 Maintain hybrid fibre coaxial broadband cable network

Group D General

BSBSUS201 Participate in environmentally sustainable work practices

BSBSUS401 Implement and monitor environmentally sustainable work practices

CPCCCM2007 Use explosive power tools*

CPCCDE3014A Remove non-friable asbestos*

CPCCOHS1001A Work safely in the construction industry

CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry

CPCPCM2043A Carry out WHS requirements

ICTBWN308 Work safely on live optical fibre installations*

ICTBWN303 Install lead-in module and cable for fibre to the premises

ICTBWN306 Use radio frequency measuring instruments

ICTBWN307 Use optical measuring instruments

HLTAID001 Provide cardiopulmonary resuscitation

ICTCBL246 Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule*

ICTCBL247 Install maintain and modify customer premises communications cabling: ACMA Open Rule*

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ICTCBL249 Haul underground cable for installation and maintenance work
ICTCBL254 Joint metallic conductor cable in access network
ICTCBL329 Install underground cable for communications applications
ICTCBL334 Install underground enclosures and conduit
ICTTEN207 Install and test internet protocol devices in convergence
networks
ICTTEN310 Remove and replace electronic circuit boards in carrier
equipment
ICTTEN312 Install telecommunications network equipment
ICTTEN313 Work on and resolve recurrent network faults
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ICTWHS201 Provide telecommunications services safely on roofs

OR

RIIWHS204D Work safely at heights


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ICTWHS205 Work safely near power infrastructure at a telecommunications
workplace
OR
UETTDREL14A Working safely near live electrical apparatus as a
non-electrical worker
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ICTWOR202 Work effectively in the digital and telecommunications industry

ICTWOR305 Supervise worksite activities

RIICCM202D Identify, locate and protect underground services

RIIWHS202D Enter and work in confined spaces

RIIWHS205D Control traffic with stop-slow bat

RIIWHS302D Implement traffic management plan

TLID2010 Operate a forklift

*Note the following prerequisite unit requirements:

Prerequisite unit requirements in this qualification	
Unit in this qualification	Prerequisite unit
CPCCCM2007 Use explosive power tools	CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry

Prerequisite unit requirements in this qualification	
Unit in this qualification	**Prerequisite unit**
CPCCDE3014A Remove non-friable asbestos	CPCCOHS1001A Work safely in the construction industry
ICTBWN308 Work safely on live optical fibre installations	ICTBWN307 Use optical measuring instruments ICTWHS204 Follow work health and safety and environmental policy and procedures
ICTCBL246 Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule	ICTTEN208 Use electrical skills when working with telecommunications networks ICTWHS204 Follow work health and safety and environmental policy and procedures
ICTCBL247 Install, maintain and modify customer premises communications cabling: ACMA Open Rule	ICTTEN208 Use electrical skills when working with telecommunications networks ICTWHS204 Follow work health and safety and environmental policy and procedures
ICTCBL316 Install ribbon fibre cable in the FTTX distribution network	ICTCBL330 Splice and terminate optical fibre cable for telecommunications projects
ICTDRE314 Design communications wiring systems for customer premises	ICTCBL247 Install, maintain and modify customer premises communications cabling: ACMA Open Rule

Specialisations

Where relevant, specialisations can be used for this qualification in:

- copper cable jointer
- fibre splicer
- fibre technician
- HFC technician
- telecommunications customer service technician – HFC technician.

The achievement of a specialisation will be identified on testamurs as follows:

- ICT30419 Certificate III in Telecommunications Network Build and Operation (Copper Cable Jointer)

- ICT30419 Certificate III in Telecommunications Network Build and Operation (Fibre Splicer)
- ICT30419 Certificate III in Telecommunications Network Build and Operation (Fibre Technician)
- ICT30419 Certificate III in Telecommunications Network Build and Operation (HFC Technician)
- ICT30419 Certificate III in Telecommunications Network Build and Operation (Telecommunications Customer Service Technician – HFC Technician).

Copper Cable Jointer

Select the following 6 elective units:

- ICTCBL254 Joint metallic conductor cable in access network
- ICTCBL319 Rearrange large size copper cable
- ICTCBL326 Cut over metallic conductor cable in the access network
- ICTCBL332 Locate, identify and rectify copper cable faults
- ICTCBL336 Install and cut over metallic conductor cable to access network cabinet
- ICTTEN312 Install telecommunications network equipment

Fibre Splicer

Select the following 6 elective units:

- ICTBWN302 Install optical fibre splitters in fibre distribution hubs
- ICTBWN307 Use optical measuring instruments
- ICTBWN308 Work safely on live optical fibre installations*
- ICTCBL316 Install ribbon fibre cable in the FTTX distribution network*
- ICTCBL330 Splice and terminate optical fibre cable for carriers and service projects
- ICTTEN318 Inspect, clean and handle optical fibre cable and connectors

Technician Fibre

Select the following 7 elective units:

- ICTBWN307 Use optical measuring instruments
- ICTBWN308 Work safely on live optical fibre installations*
- ICTCBL322 Install, test and terminate optical fibre cable on customer premises
- ICTTEN310 Remove and replace electronic circuit boards in carrier equipment
- ICTTEN318 Inspect, clean and handle optical fibre cable and connectors
- ICTTEN409 Commission an electronic system
- ICTTEN416 Install, configure and test an internet protocol network

Technician Hybrid Fibre Coaxial (HFC)

Select the following 5 elective units:

- ICTBWN306 Use radio frequency measuring instruments
- ICTCBL248 Install and terminate hard-line coaxial cable
- ICTCBL333 Install aerial cable for communications applications
- ICTTEN312 Install telecommunications network equipment

Plus

ICTWHS201 Provide telecommunications services safely on roofs or

- RIIWHS204D Work safely at heights

Telecommunications Customer Service Technician – HFC Technician

Select the following 8 elective units:

- ICTBWN306 Use radio frequency measuring instruments
- ICTCBL251 Install aerial and underground cable lead-ins
- ICTCBL303 Install and terminate coaxial cable
- ICTCBL306 Locate and identify cable system faults
- ICTDRE308 Install a cable broadband multi-dwelling unit system
- ICTDRE314 Design communications wiring systems for customer premises*
- ICTTEN207 Install and test internet protocol devices in convergence networks
- ICTTEN312 Install telecommunications network equipment

Qualification Mapping Information

No equivalent qualification. Supersedes and is not equivalent to ICT30415 Certificate III in Telecommunications Network Build and Operate.

Links

Companion Volume Implementation Guides are available from VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e 9d6aff2