



**Australian Government**

# **ICT30415 Certificate III in Telecommunications Network Build and Operate**

**Release 3**

## ICT30415 Certificate III in Telecommunications Network Build and Operate

### Modification History

Release	Comments
Release 3	This version released with ICT Information and Communications Technology Training Package Version 3.1. Updates to packaging rules. Addition of ICTTEN409 to Elective Group B and to the Technician Fibre specialist elective stream.
Release 2	This version released with ICT Information and Communications Technology Training Package Version 3.0.
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

## Qualification Description

This qualification has been designed as a pathway for specialised work across the occupation and technology streams as outlined below, on the National Broadband Network (NBN).

This qualification, which may be undertaken as part of a traineeship, provides individuals with skills and knowledge in a range of specialised NBN broadband industry occupations specifically for the national rollout of the high speed broadband infrastructure.

In conjunction with safe working practices, one of four specialist streams is to be undertaken as described below.

### **Copper Cable Joints**

This stream reflects the role of operators in performing equipment and system installation work on customer network to enable efficient access and interconnection to the NBN broadband services. This includes connection and jointing of copper cable, diagnosing and rectifying copper cable system faults, and migration, remediation and augmentation of copper services to maximise benefits of the high speed broadband connection.

### **Technician Fibre**

This stream reflects the role of operators in performing equipment and system installation work on customer network to enable efficient access and interconnection to the NBN broadband services. This includes 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.

### **Fibre Splicer**

This stream reflects the role of operators in applying optical fibre handling skills to splicing, testing and fault finding on live fibre cable in the fibre distribution network for NBN broadband networks.

### **Technician Hybrid fibre coaxial (HFC)**

This stream reflects the role of operators in performing equipment and system installation work on customer network to enable efficient access and interconnection to the NBN broadband services. This includes connection and termination of HFC cabling, diagnosing and rectifying complex HFC system faults, and performing commissioning activities to maximise benefits of the high speed broadband connection.

### *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 = 14**

**5 core plus**

**9 elective units**

The elective units consist of:

- up to 9 units may be selected from Group A Copper cabling, or Group B Fibre cabling or Group C HFC cabling
- up to 6 units may be selected from Group D General or from elsewhere in this Training Package
- 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, 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.

### Core units

BSBSUS401 Implement and monitor environmentally sustainable work practices

ICTTEN201 Use electrical skills in telecommunications work

ICTTEN202 Use hand and power tools

ICTWHS204 Follow work health and safety and environmental policy and procedures

ICTWOR305 Supervise worksite activities

### Elective units

#### Group A Copper cabling

ICTCBL215 Joint metallic conductor cable in access network

ICTCBL313 Modify and cutover cable

ICTCBL317 Cut over metallic conductor cable in the access network

ICTCBL318 Install and cut over metallic conductor cable to access network cabinet

ICTCBL319 Rearrange large size copper cable

ICTCBL320 Jumper metallic conductor cable in the access network

ICTTEN303 Locate, identify and rectify recurrent network faults

#### Group B Fibre cabling

ICTBWN301 Perform tests on optical communication system and components

ICTBWN302 Install optical fibre splitters in fibre distribution hubs

ICTCBL208 Splice and terminate optical fibre cable for carriers and service providers

ICTCBL302 Install and terminate optical fibre cable on customer premises

ICTCBL316 Install ribbon fibre cable in the FTTX distribution network

ICTTEN409 Commission an electronic system

ICTTEN416 Install, configure and test an internet protocol network

### **Group C HFC cabling**

ICTRFN406 Maintain hybrid fibre coaxial broadband cable network

ICTCBL303 Install and terminate coaxial cable

ICTCBL310 Install aerial cable

ICTCBL309 Construct aerial cable supports

### **Group D General**

CPCCOHS1001A Work safely in the construction industry

CPCCCM2007B\* Use explosive power tools

CPCUDE3014A\* Remove non-friable asbestos

CPCPCM2043A Carry out WHS requirements

CPCPCM2055A\* Work safely on roofs

ICTBWN304\* Work safely with live fibre to test and commission a fibre to the x installation

ICTBWN305 Use optical and radio frequency measuring instruments

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

ICTCBL307 Install underground enclosures and conduit

ICTCBL308 Install underground cable

ICTCBL236\* Install, maintain and modify customer premises communications cabling:

ACMA Restricted Rule

ICTCBL237\* Install maintain and modify customer premises communications cabling:

ACMA Open Rule

ICTTEN302 Install telecommunications network equipment

ICTTEN310 Remove and replace electronic circuit boards in carrier equipment

ICTTEN311 Inspect, clean and handle optical fibre cable and connectors

HLTAID001 Provide cardiopulmonary resuscitation

ICTTEN207 Install and test internet protocol devices in convergence networks

ICTWHS203 Work safely near power infrastructure

TLID2010A Operate a forklift

ICTWHS201 Provide telecommunications services safely on roofs

RIIWHS204D Work safely at heights

### **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.

### **Copper Cable Jointer**

The following 7 electives must be selected:

- CPCCOHS1001A Work safely in the construction industry
- ICTCBL215 Joint metallic conductor cable in access network
- ICTCBL317 Cut over metallic conductor cable in the access network

- ICTCBL318 Install and cut over metallic conductor cable to access network cabinet
- ICTCBL319 Rearrange large size copper cable
- ICTTEN302 Install telecommunications network equipment
- ICTTEN303 Locate, identify and rectify recurrent network faults.

### **Technician Fibre**

The following 8 electives must be selected:

- CPCCOHS1001A Work safely in the construction industry
- ICTBWN304\* Work safely with live fibre to test and commission a fibre to the x installation
- ICTCBL302 Install and terminate optical fibre cable on customer premises
- ICTTEN302 Install telecommunications network equipment
- ICTTEN310 Remove and replace electronic circuit boards in carrier equipment
- ICTTEN311 Inspect, clean and handle optical fibre cable and connectors
- ICTTEN409 Commission an electronic system
- ICTTEN416 Install, configure and test an internet protocol network.

### **Fibre Splicer**

The following 7 electives must be selected:

- CPCCOHS1001A Work safely in the construction industry
- ICTBWN302 Install optical fibre splitters in fibre distribution hubs
- ICTBWN304\* Work safely with live fibre to test and commission a fibre to the x installation
- ICTBWN305 Use optical and radio frequency measuring instruments
- ICTCBL208 Splice and terminate optical fibre cable for carriers and service providers
- ICTCBL316 Install ribbon fibre cable in the FTTX distribution network
- ICTTEN311 Inspect, clean and handle optical fibre cable and connectors.

### **Technician HFC**

The following 6 electives must be selected:

- CPCCOHS1001A Work safely in the construction industry
- ICTBWN305 Use optical and radio frequency measuring instruments
- ICTCBL303 Install and terminate coaxial cable
- ICTRFN406 Maintain hybrid fibre coaxial broadband cable network
- ICTTEN302 Install telecommunications network equipment
- ICTCBL310 Install aerial cable

Plus:

- CPCPCM2055A\* Work safely on roofs and CPCPCM2043A Carry out WHS requirements

or

- ICTWHS201 Provide telecommunications services safely on roofs

or

- RIIWHS204D Work safely at heights.

\*Note the following prerequisite unit requirements:

<b>Unit in this qualification</b>	<b>Prerequisite unit</b>
CPCCCM2007B Use explosive power tools	CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry
CPCCCDE3014A Remove non-friable asbestos	CPCCOHS1001A Work safely in the construction industry
CPCPCM2055A Work safely on roofs	CPCPCM2043A Carry out WHS requirements
ICTBWN304 Work safely with live fibre to test and commission a fibre to the x installation	ICTBWN305 Use optical and radio frequency measuring instruments ICTWHS204 Follow work health and safety and environmental policy and procedures
ICTCBL236 Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule	ICTTEN201 Use electrical skills in telecommunications work ICTWHS204 Follow work health and safety and environmental policy and procedures
ICTCBL237 Install, maintain and modify customer premises communications cabling: ACMA Open Rule	ICTCBL236 Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule



## Qualification Mapping Information

<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
ICT30415 Certificate III in Telecommunications Network Build and Operate (Release 3)	ICT30415 Certificate III in Telecommunications Network Build and Operate (Release 2)	Amendments to elective bank groups.  Occupational outcomes and specialisations clarified.	Equivalent qualification

## Links

Companion volumes are available from the VETnet website -  
<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>