



**Australian Government**

**ICT30519 Certificate III in  
Telecommunications Technology**

**Release 4**

## ICT30519 Certificate III in Telecommunications Technology

### Modification History

| Release   | Comments  |
|-----------|---|
| Release 4 | <p>This version released with ICT Information and Communications Technology Training Package Version 8.0.</p> <p>21 units of competency have been replaced with their relevant superseding unit.</p>  |
| Release 3 | <p>This version released with ICT Information and Communications Technology Training Package Version 7.2.</p> <p>The following elective units of competency have been reinstated as directed by the AISC:</p> <ul style="list-style-type: none"> <li>• ICTDRE305 Develop integrated digital reception systems.</li> </ul>   |
| Release 2 | <p>This version released with ICT Information and Communications Technology Training Package Version 7.1.</p> <p>The following elective units of competency have been deleted as directed by the AISC:</p> <ul style="list-style-type: none"> <li>• ICTDRE305 Develop integrated digital reception systems</li> <li>• ICTRFN302 Install mobile telecommunications in motor vehicles</li> <li>• ICTRFN303 Install WiMAX customer premises equipment broadband wireless access equipment</li> <li>• ICTTCR201 Use rigging practices and systems on telecommunications network structures</li> <li>• ICTTCR202 Use operational safety in a telecommunications rigging environment</li> <li>• ICTTCR301 Build a telecommunications radio structure</li> <li>• ICTTCR302 Install radio plant and equipment on telecommunications structures</li> <li>• ICTTCR303 Protect against electromagnetic radiation and systems hazards when working on telecomms radio sites</li> <li>• ICTTEN307 Repair and replace telecommunications network hardware</li> <li>• ICTTEN319 Recover customer premises equipment.</li> </ul> <p>The above training products were identified as having zero enrolments over a three year period.</p> |
| Release 1 | <p>This version released with ICT Information and Communications Technology Training Package Version 5.0.</p>   |

## Qualification Description

This qualification is for telecommunications technology operators who assess installation requirements, plan and perform installations, test installed equipment, and fault-find when issues arise with installed equipment.

Telecommunications technology operators may work on:

- customer cabling networks
- digital reception technology
- optical networks
- premises cabling
- radio communications
- rigging, which also involves installing and maintaining radio antennas on high structures such as radio towers, and building and mounting sections of radio masts for a complete radio structure
- telecommunications networking
- wireless networks.

## 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 must be carried out according to requirements of the Australian Communications and Media Authority (ACMA) and relevant industry registration bodies, in line with the specifications of the access network owner.

High risk work (HRW) licences are required for dogging work and rigging as outlined on the Safe Work Australia website.

The model WHS Regulations require people performing high risk work to be over 18 years of age and to hold the right HRW licence. HRW licences are issued by state/territory governments: refer to the relevant body to ensure compliance with regulations.

## Entry Requirements

Nil

## Packaging Rules

**Total number of units = 16**

**6 core units, plus**

**10 elective units**

The elective units selected must consist of:

- at least 1 elective unit from Group A Workplace Technical Practice.

The remaining required elective units selected may consist of:

- up to 2 elective units from Group B General Workplace
- up to 8 elective units from any of the elective groups with no more than 2 of these units from Group G Work Health and Safety
- up to 3 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, not duplicate the outcome of another unit chosen for 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.

### **Core units**

ICTTEN202 Use hand and power tools

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

### **Elective units**

#### **Group A Workplace Technical Practice**

ICTTEN207 Install and test internet protocol devices in convergence networks

ICTTEN312 Install telecommunications network equipment

ICTTEN313 Work on and resolve recurrent network faults

ICTTEN322 Provide infrastructure for telecommunications network customer equipment

#### **Group B General Workplace**

BSBESB301 Investigate business opportunities

BSBESB305 Address compliance requirements for new business ventures

BSBSUS411 Implement and monitor environmentally sustainable work practices

CPCCB4004 Identify and produce estimated costs for building and construction projects

ICTEDU301 Train customers in new technology

ICTSAS305 Provide ICT advice to clients

ICTWOR202 Work effectively in the digital and telecommunications industry

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

### **Group C Telecommunications Cabling**

ICTCBL238 Install, maintain and modify customer premises communications cabling:  
ACMA Lift Rule

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

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

ICTCBL301 Install, terminate and certify structured cabling installation

ICTCBL303 Install and terminate coaxial cable

ICTCBL305 Hand over cable systems and equipment

ICTCBL306 Locate and identify cable system faults

ICTCBL311 Install systems and equipment on customer premises

ICTCBL313 Modify and cutover cable

ICTCBL314 Install network cable equipment

ICTCBL316 Install ribbon fibre cable in the FTTX distribution network\*

ICTCBL322 Install, test and terminate optical fibre cable on customer premises

ICTCBL323 Test cables and systems on customer premises

ICTCBL324 Cut over new systems and equipment on customer premises

ICTCBL325 Maintain cable network

ICTCBL329 Install underground cable for communications applications

ICTCBL330 Splice and terminate optical fibre cable for telecommunications projects

ICTCBL333 Install aerial cable for communications applications

ICTCBL334 Install underground enclosures and conduit

ICTCBL335 Construct aerial cable supports

### **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

ICTDRE305 Develop integrated digital reception systems

ICTDRE314 Design communications wiring systems for customer premises\*

ICTTEN402 Estimate and quote for customer telecommunications equipment installation

ICTTEN415 Install and configure internet protocol TV in a home network

ICTTEN432 Identify requirements for customer telecommunications equipment

### **Group E ICT Use**

ICTICT314 Connect internal hardware components

ICTICT315 Implement system software changes  
ICTICT316 Implement new technology  
ICTICT317 Maintain standard operating environments  
ICTNWK311 Install and test network protocols  
ICTNWK428 Create scripts for networking  
ICTPRG302 Apply introductory programming techniques  
ICTSAS308 Run standard diagnostic tests  
ICTSAS311 Maintain computer hardware  
ICTSAS312 Provide basic system administration

### **Group F Optical Networks**

ICTBWN302 Install optical fibre splitters in fibre distribution hubs  
ICTBWN303 Install lead-in module and cable for fibre to the premises  
ICTBWN307 Use optical measuring instruments  
ICTBWN308 Work safely on live optical fibre installations\*  
ICTBWN309 Perform tests on optical communication system and components  
ICTTEN318 Inspect, clean and handle optical fibre cable and connectors

### **Group G Work Health and Safety**

CPCCE3014 Remove non-friable asbestos\*  
CPCWHS1001 Prepare to work safely in the construction industry  
ICTWHS201 Provide telecommunications services safely on roofs  
ICTWHS205 Work safely near power infrastructure at a telecommunications workplace  
OR  
RIICCM202E Identify, locate and protect underground services  
RIIWHS202E Enter and work in confined spaces  
RIIWHS204E Work safely at heights  
RIIWHS205E Control traffic with stop-slow bat  
RIIWHS302E Implement traffic management plans  
UETDREL006 Work safely in the vicinity of live electrical apparatus as a non-electrical worker

### **Group H Radio Communications**

ICTBWN306 Use radio frequency measuring instruments  
ICTRFN301 Install a radio communications antenna and feedline  
ICTRFN304 Construct and test a radio communications device  
ICTRFN305 Operate and maintain radio communications technical instruments and field equipment  
ICTRFN406 Maintain hybrid fibre coaxial broadband cable network  
ICTRFN407 Conduct radio frequency measurements

### **Group I Telecommunications Network**

ICTCBL331 Conduct basic identification and fault-finding within cabling networks and customer equipment

ICTTEN301 Provide infrastructure for telecommunications network equipment

ICTTEN312 Install telecommunications network equipment

ICTTEN316 Conduct basic tests and analyses of telecommunications copper cabling

ICTTEN320 Commission an electronic unit

ICTTEN321 Maintain an electronic system

ICTTEN322 Provide infrastructure for telecommunications network customer equipment

ICTTEN434 Install, configure and test internet protocol networks

### Group J Telecommunications Rigging

ICTTCR203 Use safe rigging practices to climb and perform rescues on telecommunications network structures

\*Note the following prerequisite unit requirements:

| <b>Prerequisite unit requirements in this qualification</b>   |  |
|---|--|
| <b>Unit in this qualification</b>   | <b>Prerequisite unit</b>   |
| CPCCE3014 Remove non-friable asbestos   | CPCCWHS1001 Prepare to work safely in the construction industry  |
| ICTBWN308 Work safely on live optical fibre installations   | ICTBWN307 Use optical measuring instruments<br>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<br>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<br>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:

- digital reception technology
- optical networks
- radio communications
- telecommunications cabling
- telecommunications networks
- telecommunications rigging
- wireless networks.

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

- ICT30519 Certificate III in Telecommunications Technology (Digital Reception Technology)
- ICT30519 Certificate III in Telecommunications Technology (Optical Networks)
- ICT30519 Certificate III in Telecommunications Technology (Radio Communications)
- ICT30519 Certificate III in Telecommunications Technology (Telecommunications Cabling)
- ICT30519 Certificate III in Telecommunications Technology (Telecommunications Networks)
- ICT30519 Certificate III in Telecommunications Technology (Telecommunications Rigging)
- ICT30519 Certificate III in Telecommunications Technology (Wireless Networks).

### Digital Reception Technology

Select the following 4 elective units from Group D Digital Reception Technology:

- ICTDRE301 Install digital reception equipment
- ICTDRE303 Install a complex digital reception system
- ICTDRE401 Integrate customer digital reception equipment
- ICTRFN407 Conduct radio frequency measurements

### Optical Networks

Select the following 5 elective units from Group F Optical Networks:

- ICTBWN302 Install optical fibre splitters in fibre distribution hubs
- ICTBWN303 Install lead-in module and cable for fibre to the premises
- ICTBWN307 Use optical measuring instruments
- ICTBWN308 Work safely on live optical fibre installations\*
- ICTBWN309 Perform tests on optical communication system and components



### Radio Communications

Select at least 4 elective units from Group H Radio Communications.

### Telecommunications Cabling

Select the following 4 elective units from Group C Telecommunications Cabling:

- ICTCBL247 Install, maintain and modify customer premises communications cabling: ACMA Open Rule\*
- ICTCBL301 Install, terminate and certify structured cabling installation
- ICTCBL303 Install and terminate coaxial cable
- ICTCBL322 Install, test and terminate optical fibre cable on customer premises

### Telecommunications Networking

Select the following 3 elective units from Group A Workplace Technical:

- ICTTEN312 Install telecommunications network equipment
- ICTTEN313 Work on and resolve recurrent network faults
- ICTTEN322 Provide infrastructure for telecommunications network customer equipment

### Telecommunications Rigging

Select the 3 elective units in Group J Telecommunications Rigging.

### Wireless Networks

Select the following 3 elective units from Group H Radio Communications:

- ICTRFN301 Install a radio communications antenna and feedline
- ICTRFN305 Operate and maintain radio communications technical instruments and field equipment
- ICTRFN407 Conduct radio frequency measurements
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## Qualification Mapping Information

No equivalent qualification. Supersedes and is not equivalent to ICT30515 Certificate III in Telecommunications Technology.

## Links

Companion Volume Implementation Guides are available from VETNet -

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