



Australian Government

ICT30213 Certificate III in Telecommunications

Release 1

ICT30213 Certificate III in Telecommunications

Modification History

Release	Comments
Release 2	<p>This version first released with <i>ICT10 Integrated Telecommunications Training Package Version 3.0</i>.</p> <p>Change in WHS core unit. Additional elective units included.</p>
Release 1	<p>This version first released with <i>ICT10 Integrated Telecommunications Training Package Version 1.0</i>.</p>

Description

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 involving known routines and procedures and some accountability for the quality of outcomes.

This qualification prepares an individual for entry to the industry into the mainstream of telecommunications convergence technologies of radio, optical, data and IP networks.

Job Roles

Job roles and titles vary across different sectors of the industry. Possible job titles relevant to this qualification include:

- telecommunications network equipment installer
- telecommunications voice and data equipment installer
- IP-based security alarms installer
- telecommunications equipment operator
- telecommunications tradesperson.
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Prerequisite units

The following units within this qualification have prerequisites. This is detailed as follows:

Code and title	Prerequisite unit required
ICTCBL2137B Install, maintain and modify customer premises communications cabling: ACMA Open Rule	ICTCBL2136B Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule
ICAICT304A Implement system software changes	ICAICT302A Install and optimise operating system software

Pathways Information

Pathways into the qualification

Preferred pathways for candidates considering this qualification include:

- after achieving a Certificate II qualification from this or another accredited Training Package or accredited course

or

- with substantial vocational experience but without a formal qualification.

Pathways from the qualification

After achieving ICT30213 Certificate III in Telecommunications, candidates seeking to develop more specialised technical skills and knowledge, may select from a range of Certificate IV qualifications in the ICT10 Integrated Telecommunications Training Package.

Licensing/Regulatory Information

All training programs must be undertaken with reference to the regulatory regime of the prevailing statutory authority (currently ACMA).

National Code of Practice for Induction for Construction Work

Some cabling and installation work may fall within the definition of construction work. If so, people entering the construction site are required to complete the general induction training program specified by the National Code of Practice for Induction Training for Construction Work (Australian Safety Compensation Council, May 2007).

Achievement of the unit CPCCOHS1001A Work safely in the construction industry from the CPC08 Construction, Plumbing and Services Training Package fulfils this requirement.

Entry Requirements

There are no entry requirements for this qualification.

Employability Skills Summary

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> conveying information to clients, colleagues and other site personnel completing job reports and compliance forms communicating with customers to arrange time and access for the installation of systems and equipment documenting and communicating work-related information, including reporting of faults and problems providing feedback to customers on operating the equipment
Teamwork	<ul style="list-style-type: none"> participating in a team structure by identifying team members, tasks and goals and recognising and responding positively to conflict working with team members to work with clients and install equipment relating personal role to the industry applying interpersonal skills with clients, employer, supervisors, work associates, team members and other contractors giving and receiving feedback to assist in meeting team and organisational goals
Problem solving	<ul style="list-style-type: none"> identifying barriers to installation and developing strategies to overcome them within time and budget restrictions identifying faults or optimisation options rectifying faults and adjusting system to optimal operation determining cable routes taking into account building services, safety, industry codes and practices, and customer requirements following up promptly on difficulties and known problem areas ranking likely causes of fault in order of probability to ensure a methodical approach to fault identification
Initiative and enterprise	<ul style="list-style-type: none"> identifying barriers to installation and developing strategies to overcome them within time and budget restrictions adapting plan to suit specific features of site identifying issues and possible solutions within established guidelines
Planning and organising	<ul style="list-style-type: none"> gathering data for the installation of systems and equipment developing a plan for the recovery of equipment from customer premises planning the installation of cable, taking into account

Employability Skill	Industry/enterprise requirements for this qualification include:
	<ul style="list-style-type: none">technical, scheduling and financial considerations• interpreting design and relating to site characteristics• prioritising work according to organisation guidelines
Self-management	<ul style="list-style-type: none">• developing installation plans to ensure minimal disruption to the workplace• checking that tools and equipment are in safe working order and adjusted to manufacturer specification• applying all related WHS requirements and work practices, including job safety analysis (JSA), protective clothing and personal safety items• relating own role to the industry and establishing own work schedule• using strategies to present a professional image to customers• interpreting and applying relevant regulations and standards
Learning	<ul style="list-style-type: none">• assessing customer's expertise and training needs and conducting training in the use of systems and equipment• making clients aware of opportunities that exist for system upgrades, additional services and training• seeking assistance from team members when necessary• giving and receiving feedback• providing suitable training and assessment opportunities for work team members• providing training to customers on system, product, product features and facilities
Technology	<ul style="list-style-type: none">• installing and operating telecommunications broadband equipment and products• installing and operating CPE equipment and products• installing and configuring access network devices• checking tools and test equipment for accuracy• identifying, replacing or repairing faulty parts and equipment

Packaging Rules

Total number of units = 12

6 core units, plus

1 elective unit from Group A workplace units, plus

5 elective units from Group B general units

Elective units must be relevant to the work outcome, local industry requirements and the qualification level.

A maximum of two units from Group B general elective units may be substituted with two units of competency from any endorsed Training Package or accredited course at Certificate III or Certificate IV level. One of those two units from Group B general elective units may be substituted from Group A workplace elective units where required by a specific job role.

Units selected from other Training Packages or accredited courses must not duplicate units selected from or available within the ICT10 Integrated Telecommunications Training Package.

CORE UNITS

BSBSUS301A Implement and monitor environmentally sustainable work practices

ICTCBL3015A Locate and identify cable system faults

ICTTEN2008A Use electrical skills in telecommunications work

ICTTEN2140B Use hand and power tools

ICTTEN3056A Install telecommunications network equipment

ICTWHS2170B Follow work health and safety and environmental policies and procedures

ELECTIVE UNITS

Group A - Workplace elective units

BSBSMB305A Comply with regulatory, taxation and insurance requirements for the micro business

BSBSMB306A Plan a home based business

ICASAS305A Provide IT advice to clients

ICTEDU3053A Train customers in new technology

ICTSMB4160A Set up and operate a contractor business

ICTSMB4161A Operate a contractor business with employees

ICTWOR3028A Organise resources

ICTWOR3035A Organise material supply

ICTWOR3041A Schedule resources

ICTWOR3093A Manage spare parts

ICTWOR3127A Supervise worksite activities

ICTWOR3231A Resolve technical enquiries using multiple information systems

ICTWOR3232A Collect and analyse technical information

Group B - General elective units

Broadband and wireless networks

ICTBWN3082B Perform tests on optical communication system and components
ICTBWN3088B Install optical fibre splitters in fibre distribution hubs
ICTBWN3090B Install lead-in module and cable for fibre to the premises
ICTBWN3100B Work safely with live fibre to test and commission a fibre to the x installation
ICTBWN3205B Use optical and radio frequency measuring instruments

Cabling

ICTCBL2064A Haul underground cable
ICTCBL2065B Splice and terminate optical fibre cable for carriers and service providers
ICTCBL2136B Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule (where ACMA Restricted Registration is necessary)
ICTCBL2137B Install, maintain and modify customer premises communications cabling: ACMA Open Rule
ICTCBL2139B Apply safe technical work practices for cabling registration when configuring ADSL circuits
ICTCBL3009B Install, terminate and certify structured cabling installation
ICTCBL3010B Install and terminate optical fibre cable on customer premises
ICTCBL3011B Install and terminate coaxial cable
ICTCBL3013A Perform cable and system test on customer premises
ICTCBL3014A Hand over systems and equipment
ICTCBL3018A Install underground enclosures and conduit
ICTCBL3019A Install underground cable
ICTCBL3020A Construct aerial cable supports
ICTCBL3021A Install aerial cable
ICTCBL3049A Install systems and equipment on customer premises
ICTCBL3052A Cut over new systems and equipment on customer premises
ICTCBL3067A Modify and cut over cable
ICTCBL3069A Install network cable equipment
ICTCBL3103A Maintain cable network

Digital reception technology

ICTDRE3156B Install digital reception equipment
ICTDRE3157B Locate and rectify digital reception equipment faults
ICTDRE3165A Install a complex digital reception system

ICT use

ICAICT302A Install and optimise operating system software
ICAICT303A Connect internal hardware components
ICAICT304A Implement system software changes
ICAICT306A Migrate to new technology
ICANWK305A Install and manage network protocols

ICASAS303A Care for computer hardware
ICASAS304A Provide basic system administration
ICASAS301A Run standard diagnostic tests

Occupational health and safety

CPCCOHS1001A Work safely in the construction industry
ICTOHS2153B Work safely near power infrastructure
ICTOHS2080A Provide telecommunications services safely on roofs

Radio frequency networks

ICTRFN3055A Install a radio communications antenna and feedline
ICTRFN3070A Install mobile telecommunications in motor vehicles
ICTRFN3146A Install WiMAX customer premises equipment broadband wireless access equipment
ICTRFN3155A Construct and test a radio communications device
ICTRFN3175A Operate and maintain radio communications technical instruments and field equipment

Telecommunications engineering networks

ICTTEN2219A Install and test internet protocol devices in convergence networks
ICTTEN3054B Provide infrastructure for telecommunications network equipment
ICTTEN3063A Locate, identify and rectify recurrent network faults
ICTTEN3074A Recover customer premises equipment
ICTTEN3075A Refurbish customer premises equipment
ICTTEN3077B Commission an electronic unit
ICTTEN3089A Repair and replace telecommunications network hardware
ICTTEN3104A Maintain an electronic system
ICTTEN4198A Install, configure and test an internet protocol network

Selecting electives for different outcomes

The context of this qualification varies and this must guide the selection of elective units.

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

Broadband optical network installer

Core units plus one Group A workplace elective unit plus:

- ICTBWN3082B Perform tests on optical communication system and components
- ICTBWN3088B Install optical fibre splitters in fibre distribution hubs
- ICTBWN3090B Install lead-in module and cable for fibre to the premises
- ICTBWN3100B Work safely with live fibre to test and commission a fibre to the x installation

- one additional unit from Group B general elective units or Group A workplace elective units as appropriate to the specific job role

Broadband wireless network installer

Core units plus one Group A workplace elective unit plus:

- ICTRFN3055A Install a radio communications antenna and feedline
- ICTRFN3146A Install WiMAX customer premises equipment broadband wireless access equipment
- ICTRFN3175A Operate and maintain radio communications technical instruments and field equipment
- two additional units from Group B general elective units, with a maximum of one of those additional units from Group A workplace elective units as appropriate to the specific job role

Home network installer

Core units plus one Group A workplace elective unit plus:

- ICTDRE3156B Install digital reception equipment
- ICTDRE3157B Locate and rectify digital reception equipment faults
- ICTDRE3165A Install a complex digital reception system
- ICTTEN4198A Install, configure and test an internet protocol network
- one additional unit from Group B general elective units or Group A workplace elective units as appropriate to the specific job role

IP equipment installer

Core units plus one Group A workplace elective unit plus:

- ICAICT302A Install and optimise operating system software
- ICAICT304A Implement system software changes
- ICANWK305A Install and manage network protocols
- ICASAS301A Run standard diagnostic tests
- ICTTEN4198A Install, configure and test an internet protocol network

Network infrastructure installer

Core units plus one Group A workplace elective unit plus:

- ICTCBL3009B Install, terminate and certify structured cabling installation
- ICTCBL3011B Install and terminate coaxial cable
- ICTCBL3069A Install network cable equipment

- two additional units from Group B general elective units, with a maximum of one those additional units from Group A workplace elective units as appropriate to the specific job role

Technical support

Core units plus one Group A workplace elective unit plus:

- ICASAS304A Provide basic system administration
- ICASAS305A Provide IT advice to clients
- ICTWOR3231A Resolve technical enquiries using multiple information systems
- ICTWOR3232A Collect and analyse technical information
- one additional unit from Group B general elective units or Group A workplace elective units as appropriate to the specific job role

Voice and data installer

Core units plus one Group A workplace elective unit plus:

- ICTCBL3009B Install, terminate and certify structured cabling installation
- ICTCBL3010B Install and terminate optical fibre cable on customer premises
- ICTCBL3011B Install and terminate coaxial cable
- two additional units from Group B general elective units, with a maximum of one of those additional units from Group A workplace elective units as appropriate to the specific job role