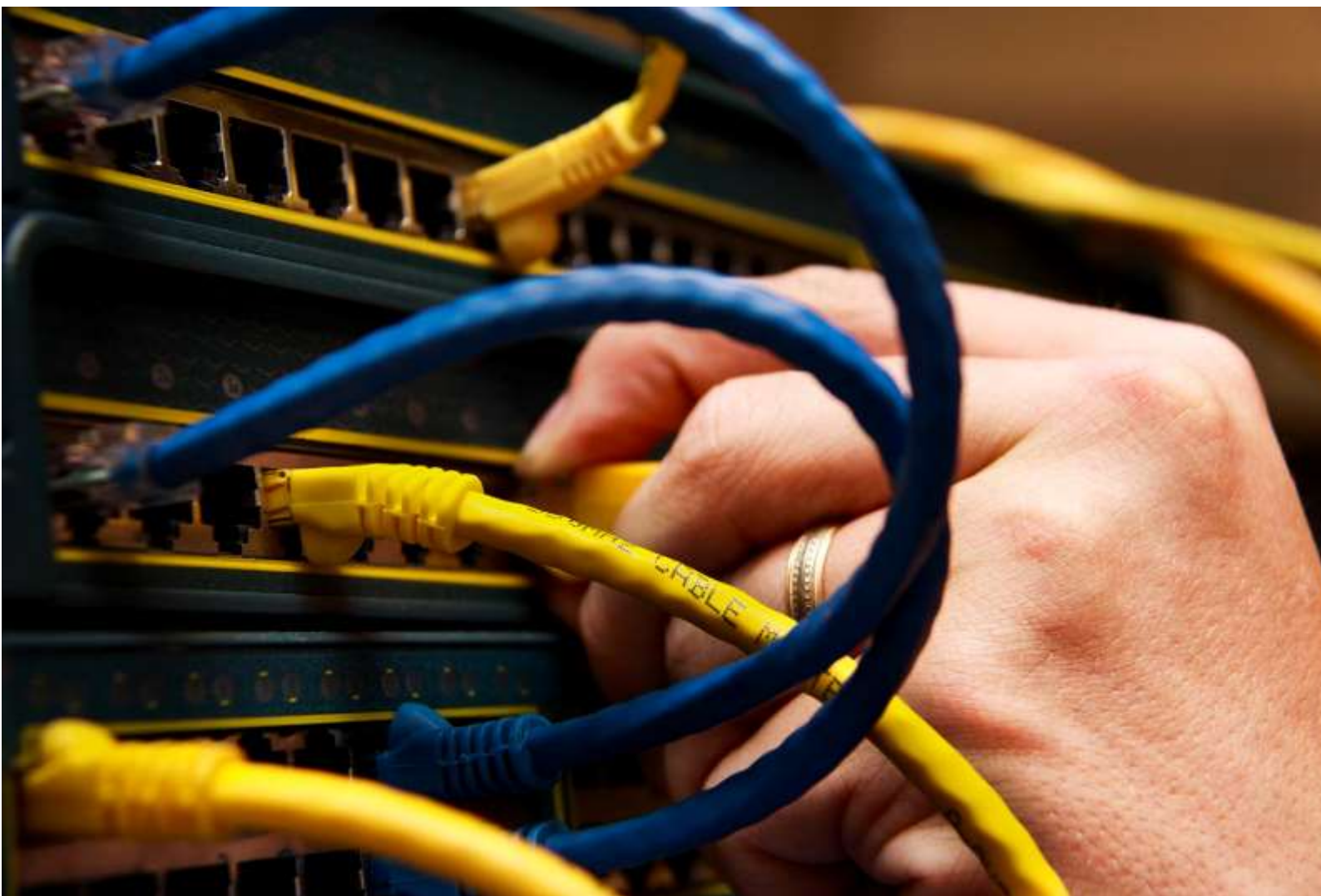




LRES

Training Management



Information Technology Qualification Packaging
based on Unit Resources Available from LRES
Training Management

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Complete Qualifications

Note: Units highlighted are those available from LRES Training Management

ICT40415 - Certificate IV in Information Technology Networking (Release 2)

Packaging Rules

Total number of units = 17

8 core units *plus*

9 elective units

The elective units consist of:

- up to 9 from the elective units listed below
- up to 3 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Certificate IV or Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

BSBWHS304 Participate effectively in WHS communication and consultation processes

ICTICT401 Determine and confirm client business requirements

ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

ICTNWK401 Install and manage a server

ICTNWK402 Install and configure virtual machines for sustainable ICT

ICTNWK403 Manage network and data integrity

ICTNWK404 Install, operate and troubleshoot a small enterprise branch network

ICTTEN416 Install, configure and test an internet protocol network

Elective units

BSBCRT401 Articulate, present and debate ideas

BSBWOR404 Develop work priorities

ICTICT403 Apply software development methodologies

ICTICT408 Create technical documentation

ICTICT417 Identify, evaluate and apply current industry-specific technologies to meet industry standards

ICTICT423 Select cloud storage strategies

ICTNWK405 Build a small wireless local area network

ICTNWK406 Install, configure and test network security

ICTNWK407 Install and configure client-server applications and services

ICTNWK408 Configure a desktop environment

ICTNWK409 Create scripts for networking

ICTNWK410 Install hardware to a network

ICTNWK411 Deploy software to networked computers

ICTNWK412 Create network documentation

ICTNWK419 Identify and use current virtualisation technologies

ICTPMG401 Support small scale ICT projects

ICTPRG425 Use structured query language

ICTSAS426 Locate and troubleshoot ICT equipment, system and software faults

ICTOPN402 Use advanced optical test equipment

ICTSUS401 Install and test renewable energy system for ICT networks

ICTSUS402 Install and test power saving hardware

ICTSUS403 Install and test power management software
ICTSUS404 Install thin client applications for power over ethernet
ICTTEN417 Install, configure and test a router
ICTTEN418 Install and test a radio frequency identification system
ICTTEN419 Implement and troubleshoot enterprise routers and switches
ICTTEN420 Design, install and configure an internetwork
ICTTEN513 Install, configure and test a local area network switch

ICT50415 - Diploma of Information Technology Networking (Release 2)

Packaging Rules

Total number of units = 16

5 core units *plus*

11 elective units

The elective units consist of:

- up to 11 from the elective units listed below
- up to 3 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Diploma or Advanced Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

ICTICT511 Match IT needs with the strategic direction of the enterprise

ICTNWK529 Install and manage complex ICT networks

ICTSUS501 Implement server virtualisation for a sustainable ICT system

ICTTEN611 Produce an ICT network architecture design

Elective units

BSBSUS501 Develop workplace policy and procedures for sustainability

ICTICT501 Research and review hardware technology options for organisations

ICTICT509 Gather data to identify business requirements

ICTICT514 Identify and manage the implementation of current industry specific technologies

ICTICT603 Manage the use of appropriate development methodologies

ICTNWK501 Plan, implement and test enterprise communication solutions

ICTNWK502 Implement secure encryption technologies

ICTNWK503 Install and maintain valid authentication processes

ICTNWK504 Design and implement an integrated server solution

ICTNWK505 Design, build and test a network server

ICTNWK506 Configure, verify and troubleshoot WAN links and IP services in a medium enterprise network

ICTNWK507 Install, operate and troubleshoot medium enterprise routers

ICTNWK508 Install, operate and troubleshoot medium enterprise switches

ICTNWK509 Design and implement a security perimeter for ICT networks

ICTNWK510 Develop, implement and evaluate system and application security

ICTNWK511 Manage network security

ICTNWK513 Manage system security

ICTNWK524 Install and configure network access storage devices

ICTNWK525 Configure an enterprise virtual computing environment

ICTNWK527 Manage an enterprise virtual computing environment

ICTNWK531 Configure an internet gateway

ICTNWK533 Configure and manage advanced virtual computing environments

ICTNWK534 Monitor and troubleshoot virtual computing environments

ICTNWK535 Install an enterprise virtual computing environment

ICTNWK615 Design and configure desktop virtualisation

ICTOPN502 Perform acceptance and commissioning tests on optical network
ICTOPN503 Plan for an optical system upgrade and cut over
ICTOPN505 Test the performance of specialised optical devices
ICTOPN506 Analyse and integrate specialised optical devices in the network
ICTPMG501 Manage ICT projects
ICTSAD506 Produce a feasibility report
ICTSAS406 Implement and hand over system components
ICTSAS501 Develop, implement and evaluate an incident response plan
ICTSAS502 Establish and maintain client user liaison
ICTSAS503 Perform systems test
ICTSAS505 Review and update disaster recovery and contingency plans
ICTSAS512 Review and manage delivery of maintenance services
ICTSAS515 Manage the testing process
ICTSUS601 Integrate sustainability in ICT planning and design projects
ICTSUS602 Establish a business case for sustainability and competitive advantage in ICT projects
ICTTEN422 Configure and troubleshoot advanced network switching
ICTTEN512 Design and implement an enterprise voice over internet protocol and a unified communications network
ICTTEN514 Install, configure and test a server
ICTTEN515 Dimension and design a radio frequency identification system
ICTTEN516 Produce technical solutions from business specifications
ICTTEN517 Plan a wireless mesh network
ICTTEN610 Design and configure an IP-MPLS network with virtual private network tunnelling

ICT60215 - Advanced Diploma of Network Security (Release 2)

Packaging Rules

Total number of units = 12

5 core units *plus*

7 elective units

The elective units consist of:

- up to 7 from the elective units listed below
- up to 2 from elsewhere in ICT Information and Communications Technology Training Package at Diploma or Advanced Diploma level
- up to 2 from any other Training Package or accredited course at Advanced Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

ICTNWK502 Implement secure encryption technologies

ICTNWK509 Design and implement a security perimeter for ICT networks

ICTNWK601 Design and implement a security system

ICTNWK602 Plan, configure and test advanced server based security

ICTSUS601 Integrate sustainability in ICT planning and design projects

Elective units

BSBPMG517 Manage project risk

CPPSEC5003A Assess security risk management options

CPPSEC5004A Prepare security risk management plan

CPPSEC5005A Implement security risk management plan

CPPSEC5006A Determine strategy for the implementation of biometric technology

CPPSEC5007A Assess biometric system

CPPSEC3009A Prepare and present evidence in court

ICTICT609 Lead the evaluation and implementation of current industry specific technologies

ICTNWK603 Plan, configure and test advanced internetwork routing solutions

ICTNWK604 Plan and configure advanced internetwork switching solutions

ICTNWK605 Design and configure secure integrated wireless systems

ICTNWK606 Implement voice applications over secure wireless networks

ICTNWK607 Design and implement wireless network security

ICTNWK608 Configure network devices for a secure network infrastructure

ICTNWK609 Configure and manage intrusion prevention system on network sensors

ICTNWK610 Design and build integrated VoIP networks

ICTNWK611 Configure call processing network elements for secure VoIP networks

ICTNWK612 Plan and manage troubleshooting advanced integrated IP networks

ICTNWK613 Develop plans to manage structured troubleshooting process of enterprise networks

ICTNWK615 Design and configure desktop virtualisation

ICTNWK616 Manage security, privacy and compliance of cloud service deployment

ICTPMG804 Evaluate and use telecommunications management networks

ICTPMG802 Manage a telecommunications project

ICTSUS602 Establish a business case for sustainability and competitive advantage in ICT projects

ICTSUS804 Use ICT to improve sustainability outcomes

ICTSUS805 Manage improvements in ICT sustainability

ICT50115 - Diploma of Information Technology (Release 2)

Packaging Rules

Total number of units = 20

4 core units *plus*

16 elective units

The elective units consist of:

- up to 16 units from the specialist elective groups below, with a maximum of 5 units from any one group:
 - Group A Networking
 - Group B Programming
 - Group C IT support
 - Group D Web design and development
 - Group E Digital games
 - Group F Digital media technologies
 - Group G Project management
- up to 5 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Diploma or Advanced Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

BSBSUS501 Develop workplace policy and procedures for sustainability

BSBWHS501 Ensure a safe workplace

ICTICT509 Gather data to identify business requirements

ICTICT511 Match ICT needs with the strategic direction of the enterprise

Specialist elective units

Group A Networking

ICTNWK501 Plan, implement and test enterprise communication solutions

ICTNWK502 Implement secure encryption technologies

ICTNWK503 Install and maintain valid authentication processes

ICTNWK504 Design and implement an integrated server solution

ICTNWK505 Design, build and test a network server

ICTNWK506 Configure, verify and troubleshoot WAN links and IP services in a medium enterprise network

ICTNWK507 Install, operate and troubleshoot medium enterprise routers

ICTNWK508 Install, operate and troubleshoot medium enterprise switches

ICTNWK509 Design and implement a security perimeter for ICT networks

ICTNWK510 Develop, implement and evaluate system and application security

ICTNWK511 Manage network security

ICTNWK513 Manage system security

ICTNWK514 Model preferred system solutions

ICTNWK515 Develop configuration management protocols

ICTNWK516 Determine best-fit topology for a local network

ICTNWK517 Determine best-fit topology for a wide area network

ICTNWK518 Design an enterprise wireless local area network

ICTNWK519 Design an ICT security framework
ICTNWK520 Design ICT system security controls
ICTNWK521 Install, configure and test a payment gateway
ICTNWK522 Build decks using wireless markup language
ICTNWK524 Install and configure network access storage devices
ICTNWK525 Configure an enterprise virtual computing environment
ICTNWK527 Manage an enterprise virtual computing environment
ICTNWK529 Install and manage complex ICT networks
ICTNWK531 Configure an internet gateway
ICTNWK532 Identify and resolve network problems
ICTNWK533 Configure and manage advanced virtual computing environments
ICTNWK534 Monitor and troubleshoot virtual computing environments
ICTNWK535 Install an enterprise virtual computing environment
ICTNWK614 Manage ICT security
ICTNWK615 Design and configure desktop virtualisation

Group B Programming

ICTPRG501 Apply advanced object-oriented language skills
ICTPRG502 Manage a project using software management tools
ICTPRG503 Debug and monitor applications
ICTPRG504 Deploy an application to a production environment
ICTPRG505 Build advanced user interface
ICTPRG506 Design application architecture
ICTPRG507 Implement security for applications
ICTPRG508 Create mashups
ICTPRG509 Build using rapid application development
ICTPRG510 Maintain custom software
ICTPRG511 Monitor and support data conversion to new ICT system
ICTPRG512 Prepare for the build phase of an ICT system
ICTPRG513 Coordinate the build phase of an ICT system
ICTPRG514 Prepare for software development using rapid application development
ICTPRG515 Review developed software
ICTPRG516 Develop integration blueprint for ICT systems
ICTPRG517 Install, test and evaluate pilot version of ICT system
ICTPRG518 Monitor the system pilot
ICTPRG523 Apply advanced programming skills in another language
ICTPRG524 Develop high-level object-oriented class specifications
ICTPRG525 Build Java applets
ICTPRG526 Maintain functionality of legacy code programs
ICTPRG527 Apply intermediate object-oriented language skills
ICTPRG528 Perform ICT data conversion
ICTPRG601 Develop advanced mobile multi-touch applications
ICTSAD501 Model data objects
ICTSAD502 Model data processes
ICTSAD503 Minimise risk of new technologies to business solutions

Group C IT Support

ICTICT501 Research and review hardware technology options for organisations
 ICTICT502 Develop detailed component specifications from project specifications
 ICTICT503 Validate quality and completeness of system design specifications
 ICTICT504 Confirm transition strategy for a new system
 ICTICT506 Implement process re-engineering strategies
 ICTICT507 Select new technology models for business
 ICTICT510 Determine appropriate ICT strategies and solutions
 ICTICT512 Plan process re-engineering strategies for business
 ICTICT514 Identify and manage the implementation of current industry-specific technologies
 ICTICT515 Verify client business requirements
 ICTSAD506 Produce a feasibility report
 ICTSAS501 Develop, implement and evaluate an incident response plan
 ICTSAS502 Establish and maintain client user liaison
 ICTSAS503 Perform systems tests
 ICTSAS504 Develop and conduct client acceptance test
 ICTSAS505 Review and update disaster recovery and contingency plans
 ICTSAS506 Update ICT system operational procedures
 ICTSAS507 Implement and evaluate systems for regulatory and standards compliance
 ICTSAS509 Provide client ICT support services
 ICTSAS510 Review and develop ICT maintenance strategy
 ICTSAS511 Prioritise ICT change requests
 ICTSAS512 Review and manage delivery of maintenance services
 ICTSAS513 Develop detailed test plans
 ICTSAS515 Manage the testing process
 ICTSAS517 Use network tools
 ICTSAS518 Install and upgrade operating systems

Group D Web design and development

ICTWEB411 Produce basic client-side script for dynamic web pages
 ICTWEB429 Create a markup language document to specification
 ICTWEB501 Build a dynamic website
 ICTWEB502 Create dynamic web pages
 ICTWEB503 Create web-based programs
 ICTWEB504 Build a document using eXtensible markup language
 ICTWEB505 Develop complex web page layouts
 ICTWEB506 Develop complex cascading style sheets
 ICTWEB507 Customise a complex ICT content management system
 ICTWEB508 Develop website information architecture
 ICTWEB509 Use site server tools for transaction management
 ICTWEB510 Analyse information and assign meta tags
 ICTWEB511 Implement quality assurance process for websites
 ICTWEB512 Administer business websites and servers
 ICTWEB515 Implement and use web services
 ICTWEB516 Research and apply emerging web technology trends

Group E Digital games

ICTGAM501 Create design concepts for digital games and 3-D media

ICTGAM503 Create a complex 3-D interactive computer game
 ICTGAM504 Manage interactive media production
 ICTGAM506 Create complex code for mobile game devices
 ICTGAM507 Develop intermediate 3-D software for games and interactive media
 ICTGAM508 Develop complex 3-D software for games and interactive media
 ICTGAM509 Design interactive 3-D applications for scientific and mathematical modelling
 ICTGAM510 Prepare games for different platforms and delivery modes
 ICTGAM511 Manage testing of games and interactive media
 ICTGAM512 Create and implement designs for a 3-D games environment
 ICTGAM514 Design and create models for a 3-D and digital effects environment
 ICTGAM515 Design and create advanced particles, fluids and bodies for 3-D digital effects
 ICTGAM516 Animate a 3-D character for digital games
 ICTGAM517 Produce a digital animation sequence
 ICTGAM518 Animate physical attributes of models and elements
 ICTGAM519 Manage technical art and rigging in 3-D animation
 ICTGAM520 Create and combine 3-D digital games and components
 ICTGAM521 Create interactive 3-D environments for digital games
 ICTGAM522 Complete digital editing for the 3-D and digital effects environment
 ICTGAM523 Collaborate in the design of 3-D game levels and environments
 ICTGAM524 Integrate multiple data sources into interactive 3-D environments
 ICTGAM525 Apply digital texturing for the 3-D environment in digital games
 ICTGAM526 Create complex 3-D characters for games
 ICTGAM527 Integrate database with online game
 ICTGAM529 Analyse business opportunities in the digital games environment

Group F Digital media technologies

BSBCRT501 Originate and develop concepts
 CUADIG502 Design digital applications
 CUADIG503 Design e-learning resources
 CUADIG507 Design digital simulations
 CUAPHI504 Employ specialised imaging technologies
 CUAPOS201 Perform basic vision and sound editing
 CUAPOS401 Edit screen content for fast turnaround
 CUASOU307 Record and mix a basic music demo
 CUASOU504 Produce sound recordings
 ICTDMT501 Incorporate and edit digital video
 ICTICT406 Build a graphical user interface
 ICTICT419 Work effectively in the digital media industry

Group G Project management

ICTPMG501 Manage ICT projects

ICT40418 - Certificate IV in Information Technology Networking (Release 1)

Packaging Rules

Total number of units = 17

8 core units *plus*

9 elective units

The elective units consist of:

- up to 9 from the elective units listed below
- up to 3 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Certificate IV or Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

BSBWHS304 Participate effectively in WHS communication and consultation processes

ICTICT401 Determine and confirm client business requirements

ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

ICTNWK401 Install and manage a server

ICTNWK403 Manage network and data integrity

ICTNWK404 Install, operate and troubleshoot a small enterprise branch network

ICTNWK420 Install and configure virtual machines

ICTTEN416 Install, configure and test an internet protocol network

Elective units

BSBCRT401 Articulate, present and debate ideas

BSBWOR404 Develop work priorities

ICTICT403 Apply software development methodologies

ICTICT408 Create technical documentation

ICTICT427 Identify, evaluate and apply current industry-specific technologies to meet organisational needs

ICTICT428 Select cloud storage solutions

ICTNWK405 Build a small wireless local area network

ICTNWK407 Install and configure client-server applications and services

ICTNWK408 Configure a desktop environment

ICTNWK409 Create scripts for networking

ICTNWK410 Install hardware to a network

ICTNWK411 Deploy software to networked computers

ICTNWK412 Create network documentation

ICTNWK419 Identify and use current virtualisation technologies

ICTNWK421 Install, configure and test network security

ICTOPN402 Use advanced optical test equipment

ICTPMG401 Support small scale ICT projects

ICTPRG425 Use structured query language

ICTSAS426 Locate and troubleshoot ICT equipment, system and software faults

ICTSUS402 Install and test power saving hardware

ICTSUS403 Install and test power management software

ICTSUS404 Install thin client applications for power over ethernet

ICTTEN417 Install, configure and test a router
ICTTEN418 Install and test a radio frequency identification system
ICTTEN419 Implement and troubleshoot enterprise routers and switches
ICTTEN420 Design, install and configure an internetwork
ICTTEN513 Install, configure and test a local area network switch

ICT50418 - Diploma of Information Technology Networking (Release 1)

Packaging Rules

Total number of units = 16

5 core units *plus*

11 elective units

The elective units consist of:

- up to 11 from the elective units listed below
- up to 3 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Diploma or Advanced Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

ICTICT517 Match ICT needs with the strategic direction of the organisation

ICTNWK529 Install and manage complex ICT networks

ICTSUS501 Implement server virtualisation for a sustainable ICT system

ICTTEN611 Produce an ICT network architecture design

Elective units

BSBSUS501 Develop workplace policy and procedures for sustainability

ICTICT501 Research and review hardware technology options for organisations

ICTICT509 Gather data to identify business requirements

ICTICT514 Identify and manage the implementation of current industry specific technologies

ICTICT603 Manage the use of appropriate development methodologies

ICTNWK502 Implement secure encryption technologies

ICTNWK503 Install and maintain valid authentication processes

ICTNWK504 Design and implement an integrated server solution

ICTNWK505 Design, build and test a network server

ICTNWK506 Configure, verify and troubleshoot WAN links and IP services in a medium enterprise network

ICTNWK507 Install, operate and troubleshoot medium enterprise routers

ICTNWK508 Install, operate and troubleshoot medium enterprise switches

ICTNWK509 Design and implement a security perimeter for ICT networks

ICTNWK510 Develop, implement and evaluate system and application security

ICTNWK511 Manage network security

ICTNWK513 Manage system security

ICTNWK524 Install and configure network access storage devices

ICTNWK525 Configure an enterprise virtual computing environment

ICTNWK527 Manage an enterprise virtual computing environment

ICTNWK531 Configure an internet gateway

ICTNWK533 Configure and manage advanced virtual computing environments

ICTNWK534 Monitor and troubleshoot virtual computing environments

ICTNWK535 Install an enterprise virtual computing environment

ICTNWK536 Plan, implement and test enterprise communication solutions

ICTNWK615 Design and configure desktop virtualisation

ICTOPN502 Perform acceptance and commissioning tests on optical network
ICTOPN503 Plan for an optical system upgrade and cut over
ICTOPN505 Test the performance of specialised optical devices
ICTOPN506 Analyse and integrate specialised optical devices in the network
ICTPMG501 Manage ICT projects
ICTSAD506 Produce a feasibility report
ICTSAS406 Implement and hand over system components
ICTSAS501 Develop, implement and evaluate an incident response plan
ICTSAS502 Establish and maintain client user liaison
ICTSAS505 Review and update disaster recovery and contingency plans
ICTSAS512 Review and manage delivery of maintenance services
ICTSAS519 Perform systems test
ICTSAS522 Manage the testing process
ICTSUS601 Integrate sustainability in ICT planning and design projects
ICTSUS602 Establish a business case for sustainability and competitive advantage in ICT projects
ICTTEN422 Configure and troubleshoot advanced network switching
ICTTEN512 Design and implement an enterprise voice over
ICTTEN514 Install, configure and test a server
ICTTEN515 Dimension and design a radio frequency identification system
ICTTEN516 Produce technical solutions from business specifications
ICTTEN517 Plan a wireless mesh network

ICT80115 - Graduate Certificate in Information Technology and Strategic Management (Release 3)

Packaging Rules

Total number of units = 4

1 core units *plus*

3 elective units

The elective units consist of:

- up to 3 from the elective units listed below
- up to 1 from elsewhere in ICT Information and Communications Technology Training Package, or any other Training Package or accredited course at Graduate Certificate level or above.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

ICTICT809 Facilitate business analysis

Elective units

BSBLDR803 Develop and cultivate collaborative partnerships and relationships

ICTICT801 Lead research into identifying new marketplace opportunities

ICTICT802 Direct ICT services

ICTICT803 Endorse business plan components for a new initiative

ICTICT804 Direct ICT in a supply chain

ICTICT805 Direct ICT procurement

ICTICT806 Direct outsourced ICT services

ICTICT807 Direct research and business response to new ICT technology

ICTICT808 Direct the development of a knowledge management strategy for a business

ICTICT810 Synchronise ICT projects

ICTICT811 Manage an information architecture project

ICTICT812 Develop a business intelligence framework

ICTICT813 Manage ICT services

ICTICT814 Develop cloud computing strategies for a business

ICTSUS802 Conduct a business case study for integrating sustainability in ICT planning and design projects

ICTSUS803 Research strategies using SAP solutions for sustainable economic and environmental outcomes

ICTSUS804 Use ICT to improve sustainability outcomes

ICTSUS805A Manage improvements in ICT sustainability

ICTSUS808 Plan and manage virtualisation for ICT sustainability

Incomplete Qualifications

Note: Units highlighted are those available from LRES Training Management

ICT40115 - Certificate IV in Information Technology (Release 2)

Packaging Rules

Total number of units = 20

5 core units plus

15 elective units

The elective units consist of:

- up to 15 from the specialist elective groups below, with a maximum of 5 units from any one group:
 - Group A Networking
 - Group B Programming
 - Group C IT support
 - Group D Web design and development
 - Group E Digital games
 - Group F Digital media technologies
 - Group G Project management
- up to 5 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Certificate IV or Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

BSBWHS304 Participate effectively in WHS communication and consultation processes

BSBSUS401 Implement and monitor environmentally sustainable work practices

ICTICT202 Work and communicate effectively in an ICT environment

ICTICT401 Determine and confirm client business requirements

ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

Elective units

Specialist elective units

Group A Networking

ICTICT423 Select cloud storage strategies

ICTNWK401 Install and manage a server

ICTNWK402 Install and configure virtual machines for sustainable ICT

ICTNWK403 Manage network and data integrity

ICTNWK404 Install, operate and troubleshoot a small enterprise branch network

ICTNWK405 Build a small wireless local area network

ICTNWK406 Install, configure and test network security

ICTNWK407 Install and configure client-server applications and services

ICTNWK408 Configure a desktop environment

ICTNWK409 Create scripts for networking

ICTNWK410 Install hardware to a network

ICTNWK411 Deploy software to networked computers

ICTNWK412 Create network documentation

ICTNWK414 Create a common gateway interface script

ICTNWK416 Build security into virtual private networks

ICTNWK417 Build an enterprise wireless network

ICTNWK418 Implement backbone technologies in a local area network

ICTNWK419 Identify and use current virtualisation technologies

ICTSAS307 Install, configure and secure a small office or home office network

Group B Programming

ICTICT410 Conduct post-implementation ICT system reviews

ICTICT420 Develop client user interface

ICTPRG401 Maintain open-source code programs

ICTPRG402 Apply query language

ICTPRG403 Develop data-driven applications

ICTPRG404 Test applications

ICTPRG405 Automate processes

ICTPRG406 Apply introductory object-oriented language skills

ICTPRG407 Write script for software applications

ICTPRG409 Develop mobile applications

ICTPRG410 Build a user interface

ICTPRG412 Configure and maintain databases

ICTPRG413 Use a library or pre-existing components

ICTPRG414 Apply introductory programming skills in another language

ICTPRG415 Apply skills in object-oriented design

ICTPRG416 Manage a software component reuse library

ICTPRG417 Apply mathematical techniques for software development

ICTPRG418 Apply intermediate programming skills in another language

ICTPRG419 Analyse software requirements

ICTPRG425 Use structured query language

ICTPRG426 Prepare software development review

ICTPRG427 Use XML effectively

ICTPRG428 Use regular expressions in programming languages

Group C ICT support

ICTDBS403 Create basic databases

ICTDBS407 Monitor physical database implementation

ICTDBS408 Link an RFID system to a database

ICTDBS503 Create a data warehouse

ICTICT402 Determine project specifications and secure client agreement

ICTICT403 Apply software development methodologies

ICTICT404 Use online learning tools

ICTICT405 Develop detailed technical design

ICTICT406 Build a graphical user interface

ICTICT408 Create technical documentation

ICTICT411 Select and employ software and hardware testing tools

ICTICT412 Coordinate and maintain ICT work teams

ICTICT413 Relate to clients on a business level

ICTICT415 Provide one-to-one instruction

ICTICT416 Contribute to the development of strategic plans

ICTICT417 Identify, evaluate and apply current industry specific technologies to meet industry standards

ICTSAD401 Develop and present feasibility reports

ICTSAS402 Implement configuration management strategies

ICTSAS403 Review site environmental factors prior to ICT system implementation

ICTSAS404 Acquire ICT system components
ICTSAS405 Identify and evaluate ICT industry vendor technologies
ICTSAS407 Conduct pre-installation audit for software installation
ICTSAS408 Complete data transition in data migration process
ICTSAS409 Manage risks involving ICT systems and technology
ICTSAS410 Identify and resolve client ICT problems
ICTSAS411 Assist with policy development for client support procedures
ICTSAS412 Action change requests
ICTSAS413 Manage resolution of system faults on a live system
ICTSAS414 Evaluate system status
ICTSAS415 Optimise ICT system performance
ICTSAS416 Implement maintenance procedures
ICTSAS417 Undertake ICT system capacity planning
ICTSAS418 Monitor and administer security of an ICT system
ICTSAS419 Support system software
ICTSAS420 Provide first-level remote help-desk support
ICTSAS421 Support users and troubleshoot desktop applications
ICTSAS424 Support different operating systems

Group D Web design and development

ICTICT407 Maintain website information standards
ICTWEB401 Design a website to meet technical requirements
ICTWEB402 Confirm accessibility of websites for people with special needs
ICTWEB403 Transfer content to a website using commercial packages
ICTWEB404 Maintain website performance
ICTWEB405 Monitor traffic and compile website traffic reports
ICTWEB406 Create website testing procedures
ICTWEB407 Conduct operational acceptance tests of websites
ICTWEB408 Ensure basic website security
ICTWEB409 Develop cascading style sheets
ICTWEB410 Apply web authoring tool to convert client data for websites
ICTWEB411 Produce basic client-side script for dynamic web pages
ICTWEB412 Produce interactive web animation
ICTWEB413 Optimise search engines
ICTWEB414 Design simple web page layouts
ICTWEB415 Produce server-side script for dynamic web pages
ICTWEB416 Customise content management system
ICTWEB417 Integrate social web technologies
ICTWEB418 Use development software and ICT tools to build a basic website
ICTWEB419 Develop guidelines for uploading information to a website
ICTWEB420 Write content for web pages
ICTWEB421 Ensure website content meets technical protocols and standards
ICTWEB422 Ensure website access and useability
ICTWEB423 Ensure dynamic website security
ICTWEB424 Evaluate and select a web hosting service
ICTWEB425 Apply structured query language to extract and manipulate data
ICTWEB429 Create a markup language document to specification

Group E Digital games

ICTGAM401 Produce an interactive game
ICTGAM402 Identify and apply principles of games design and game playing
ICTGAM403 Create design documents for interactive games
ICTGAM405 Write story and content for digital games
ICTGAM406 Create visual design components for interactive games
ICTGAM407 Write scripts for interactive games
ICTGAM408 Use 3-D animation interface and toolsets
ICTGAM409 Create 3-D characters for interactive games
ICTGAM410 Develop 3-D components for interactive games
ICTGAM412 Design interactive media
ICTGAM413 Design and create 3-D digital models
ICTGAM414 Create audio for digital games
ICTGAM415 Develop simple environments for 3-D games
ICTGAM416 Prepare and complete image rendering processes
ICTGAM417 Apply digital effects to interactive products
ICTICT419 Work effectively in the digital media industry

Group F Digital media technologies

BSBCRT401 Articulate, present and debate ideas
CUAANM301 Create 2D digital animations
CUAANM302 Create 3D digital animations
CUAANM402 Create digital visual effects
CUADIG401 Author interactive media
CUAPPM407 Create storyboards
CUASOU202 Perform basic sound editing
CUASOU304 Prepare audio assets
ICTDMT401 Create visual design components for digital media

ICTDMT402 Produce interactive animation

ICTDMT403 Produce and edit digital images

Group G Project management

ICTPMG401 Support small scale ICT projects

ICT41015 - Certificate IV in Computer Systems Technology (Release 2)

Packaging Rules

Total number of units = 20

12 core units *plus*

8 elective units

The elective units consist of:

- up to 8 from the elective units listed below
- up to 4 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Certificate IV or Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

BSBSUS401 Implement and monitor environmentally sustainable work practices

BSBWHS304 Participate effectively in WHS communication and consultation processes

ICTICT401 Determine and confirm client business requirements

ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

ICTICT421 Connect, maintain and configure hardware components

ICTNWK404 Install, operate and troubleshoot a small enterprise branch network

ICTNWK405 Build a small wireless local area network

ICTPRG414 Apply introductory programming skills in another language

ICTSAS425 Configure and troubleshoot operating system software

ICTSAS426 Locate and troubleshoot ICT equipment, system and software faults

ICTTEN417 Install, configure and test a router

ICTWEB411 Produce basic client-side script for dynamic web pages

Elective units

BSBCRT401 Articulate, present and debate ideas

ICTICT405 Develop detailed technical design

ICTICT408 Create technical documentation

ICTICT412 Coordinate and maintain ICT work teams

ICTICT415 Provide one-to-one instruction

ICTICT417 Identify, evaluate and apply current industry specific technologies to meet industry standards

ICTICT423 Select cloud storage strategies

ICTNWK401 Install and manage a server

ICTNWK402 Install and configure virtual machines for sustainable ICT

ICTNWK403 Manage network and data integrity

ICTNWK407 Install and configure client-server applications and services

ICTNWK408 Configure a desktop environment

ICTNWK419 Identify and use current virtualisation technologies

ICTNWK507 Install, operate and troubleshoot medium enterprise routers

ICTPMG401 Support small scale ICT projects

ICTPRG406 Apply introductory object-oriented language skills

ICTPRG409 Develop mobile applications

ICTSAS307 Install, configure and secure a small office or home office network

ICTSAS420 Provide first-level remote help-desk support

ICTTEN202 Use hand and power tools

ICTTEN416 Install, configure and test an internet protocol network

ICTWEB414 Design simple web page layouts

ICTWEB415 Produce server-side script for dynamic web pages

ICTWEB425 Apply structured query language to extract and manipulate data

ICTWEB429 Create a markup language document to specification

ICT40515 - Certificate IV in Programming (Release 1)

Packaging Rules

Total number of units = 18

10 core units plus

8 elective units

The elective units consist of:

- up to 8 from the elective units listed below
- up to 3 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Certificate IV or Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

ICTPRG402 Apply query language

ICTPRG403 Develop data-driven applications

ICTPRG404 Test applications

ICTPRG405 Automate processes

ICTPRG406 Apply introductory object-oriented language skills

ICTPRG410 Build a user interface

ICTPRG414 Apply introductory programming skills in another language

ICTPRG415 Apply skills in object-oriented design

ICTPRG419 Analyse software requirements

Elective units

BSBCRT401 Articulate, present and debate ideas

BSBWHS304 Participate effectively in WHS communication and consultation processes

ICTDBS403 Create basic databases

ICTICT404 Use online learning tools

ICTICT408 Create technical documentation

ICTICT417 Identify, evaluate and apply current industry specific technologies to meet industry standards

ICTICT420 Develop client user interface

ICTPMG401 Support small scale ICT projects

ICTPRG401 Maintain open-source code programs

ICTPRG407 Write script for software applications

ICTPRG409 Develop mobile applications

ICTPRG412 Configure and maintain databases

ICTPRG413 Use a library or pre-existing components

ICTPRG418 Apply intermediate programming skills in another language

ICTPRG427 Use XML effectively

ICTPRG428 Use regular expressions in programming languages

ICTPRG527 Apply intermediate object-oriented language skills

ICTSAD401 Develop and present feasibility reports

ICTSAD501 Model data objects

ICTSAD502 Model data processes

ICT50715 - Diploma of Software Development (Release 1)

Packaging Rules

Total number of units = 16

10 core units plus

6 elective units

The elective units consist of:

- up to 6 from the elective units listed below
- up to 3 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Diploma or Advanced Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

ICTPRG418 Apply intermediate programming skills in another language

ICTPRG501 Apply advanced object-oriented language skills

ICTPRG502 Manage a project using software management tools

ICTPRG503 Debug and monitor applications

ICTPRG504 Deploy an application to a production environment

ICTPRG520 Validate an application design against specifications

ICTPRG523 Apply advanced programming skills in another language

ICTPRG527 Apply intermediate object-oriented language skills

ICTPRG529 Apply testing techniques for software development

Elective units

ICTICT403 Apply software development methodologies

ICTICT503 Validate quality and completeness of system design specifications

ICTICT509 Gather data to identify business requirements

ICTICT511 Match ICT needs with the strategic direction of the enterprise

ICTICT514 Identify and manage the implementation of current industry-specific technologies

ICTNWK514 Model preferred system solutions

ICTPMG501 Manage ICT projects

ICTPRG505 Build advanced user interface

ICTPRG506 Design application architecture

ICTPRG507 Implement security for applications

ICTPRG508 Create mashups

ICTPRG509 Build using rapid application development

ICTPRG510 Maintain custom software

ICTPRG512 Prepare for the build phase of an ICT system

ICTPRG513 Coordinate the build phase of an ICT system

ICTPRG514 Prepare for software development using rapid application development

ICTPRG515 Review developed software

ICTPRG601 Develop advanced mobile multi-touch applications

ICTPRG604 Create cloud computing services

ICTSAD501 Model data objects

ICTSAD502 Model data processes

ICTSAD506 Produce a feasibility report

ICTSAS502 Establish and maintain client user liaison

ICT60515 - Advanced Diploma of Computer Systems Technology (Release 1)

Packaging Rules

Total number of units = 18

12 core units plus

6 elective units

The elective units consist of:

- up to 6 from the elective units listed below
- up to 3 from elsewhere in ICT Information and Communications Technology Training Package at Advanced Diploma level
- up to 3 from any other Training Package or accredited course at Diploma or Advanced Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

ICTNWK506 Configure, verify and troubleshoot WAN links and IP services in a medium enterprise network

ICTNWK507 Install, operate and troubleshoot medium enterprise routers

ICTNWK508 Install, operate and troubleshoot medium enterprise switches

ICTNWK509 Design and implement a security perimeter for ICT networks

ICTNWK529 Install and manage complex ICT networks

ICTNWK602 Plan, configure and test advanced server based security

ICTNWK607 Design and implement wireless network security

ICTPMG608 Manage ICT project systems implementation

ICTPMG609 Plan and direct complex ICT projects

ICTPRG527 Apply intermediate object-oriented language skills

ICTWEB501 Build a dynamic website

ICTWEB502 Create dynamic web pages

Elective units

ICTDBS504 Integrate database with a website

ICTICT502 Develop detailed component specifications from project specifications

ICTICT604 Identify and implement business innovation

ICTICT609 Lead the evaluation and implementation of current industry specific technologies

ICTNWK502 Implement secure encryption technologies

ICTNWK503 Install and maintain valid authentication processes

ICTNWK504 Design and implement an integrated server solution

ICTNWK505 Design, build and test a network server

ICTNWK524 Install and configure network access storage devices

ICTNWK525 Configure an enterprise virtual computing environment

ICTNWK527 Manage an enterprise virtual computing environment

ICTNWK533 Configure and manage advanced virtual computing environments

ICTNWK534 Monitor and troubleshoot virtual computing environments

ICTNWK535 Install an enterprise virtual computing environment

ICTNWK603 Plan, configure and test advanced internetwork routing solutions

ICTNWK605 Design and configure secure integrated wireless systems

ICTNWK610 Design and build integrated VoIP networks

ICTNWK611 Configure call processing network elements for secure VoIP networks

ICTNWK612 Plan and manage troubleshooting advanced integrated IP networks

ICTNWK613 Develop plans to manage structured troubleshooting process of enterprise networks

ICTNWK615 Design and configure desktop virtualisation

ICTNWK616 Manage security, privacy and compliance of cloud service deployment

ICTPRG505 Build advanced user interface

ICTPRG601 Develop advanced mobile multi-touch applications

ICTPRG602 Manage the development of technical solutions from business specifications

ICTSAS517 Use network tools

ICTWEB503 Create web-based programs

ICTWEB505 Develop complex web page layouts

ICT60115 - Advanced Diploma of Information Technology (Release 2)

Packaging Rules

Total number of units = 16

5 core units *plus*

11 elective units

The elective units consist of:

- 5 from one of the following specialist groups:
Group A Knowledge management
Group B Systems development.

Of the remaining elective units:

- up to 6 may be from the specialist elective groups below or from Group C general elective units below
- up to 3 may be from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Advanced Diploma level.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

BSBWOR502 Lead and manage team effectiveness

ICTICT608 Interact with clients on a business level

ICTICT610 Manage copyright, ethics and privacy in an ICT environment

ICTPMG609 Plan and direct complex ICT projects

ICTSUS601 Integrate sustainability in ICT planning and design projects

Elective units

Specialist elective units

Group A Knowledge management

ICTDBS501 Monitor and improve knowledge management system

ICTDBS601 Build a data warehouse

ICTDBS602 Develop a knowledge management strategy

ICTICT604 Identify and implement business innovation

ICTICT605 Implement a knowledge management strategy

Group B Systems development

ICTICT508 Evaluate vendor products and equipment

ICTICT602 Develop contracts and manage contracted performance

ICTPRG604 Create cloud computing services

ICTSAD504 Implement quality assurance processes for business solutions

ICTSAD505 Develop technical requirements for business solutions

ICTSAS601 Implement change management processes

General elective units

Group C

BSBINN601 Lead and manage organisational change

BSBMGT608 Manage innovation and continuous improvement

ICTDBS603 Determine suitability of database functionality and scalability

ICTICT601 Develop ICT strategic and action plans

ICTICT603 Manage the use of appropriate development methodologies

ICTICT606 Develop communities of practice

ICTICT609 Lead the evaluation and implementation of current industry specific technologies

ICTNWK601 Design and implement a security system

ICTNWK616 Manage security, privacy and compliance of cloud service deployment

ICTPMG606 Manage ICT project quality

ICTPRG601 Develop advanced mobile multi-touch applications

ICTPRG602 Manage the development of technical solutions from business specifications

ICTSAD602 Conduct knowledge audits

ICT80215 - Graduate Certificate in Information Technology Sustainability (Release 3)

Packaging Rules

Total number of units = 4

1 core unit *plus*

3 elective units

The elective units consist of:

- up to 3 from the elective units listed below
- up to 1 from elsewhere in ICT Information and Communications Technology Training Package, or any other Training Package or accredited course at Graduate Certificate level or above.

The elective units chosen must be relevant to the work outcome and meet local industry needs.

Core units

ICTSUS802 Conduct a business case study for integrating sustainability in ICT planning and design projects

Elective units

BSBLDR803 Develop and cultivate collaborative partnerships and relationships

ICTICT806 Direct outsourced ICT services

ICTICT807 Direct research and business response to new ICT technology

ICTICT809 Facilitate business analysis

ICTICT810 Synchronise ICT projects

ICTSUS801 Plan and manage virtualisation for ICT sustainability

ICTSUS803 Research strategies using SAP solutions for sustainable economic and environmental outcomes

ICTSUS804 Use ICT to improve sustainability outcomes

ICTSUS805 Manage improvements in ICT sustainability

ICTSUS806 Lead applied research in ICT sustainability

ICTSUS807 Conduct and manage a life cycle assessment for sustainability

ICT80415 - Graduate Diploma of Telecommunications Network Engineering (Release 2)

Packaging Rules

Total number of units = 8

3 core units *plus*

5 elective units

The elective units must be relevant to the industry-supported vocational outcomes, local industry requirements and is to be chosen as follows:

The elective units consist of:

- up to 5 from the elective units listed below
- up to 1 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Graduate Certificate level or above.

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

ICTPMG802 Manage a telecommunications project

ICTPMG804 Evaluate and use telecommunications management networks

ICTSUS806 Lead applied research in ICT sustainability

Elective Units

BSBINN801 Lead innovative thinking and practice

ICTICT809 Facilitate business analysis

ICTICT801 Lead research into identifying new marketplace opportunities

ICTICT803 Endorse business plan components for a new initiative

ICTICT808 Direct the development of a knowledge management strategy for a business

ICTICT812 Develop a business intelligence framework

ICTICT814 Develop cloud computing strategies for a business

ICTICT815 Manage automated ICT system applications using enterprise wide operating system

ICTRFN801 Produce a radio link budget

ICTRFN802 Analyse a cellular mobile network system

ICTRFN803 Analyse a satellite communications system

ICTSUS807 Conduct and manage a life cycle assessment for sustainability

ICTTEN801 Plan a transmission network

ICTTEN805 Manage solution architecture and impacts in line with organisational processes

ICTTEN807 Manage voice, data and internet protocol network solutions

ICTTEN808 Manage network testing strategies

ICTTEN809 Analyse business specifications to produce technical solutions

ICTTEN810 Investigate the application of cloud networks in telecommunications switching

ICTTEN811 Evaluate and apply network security

ICTTEN812 Evaluate and apply digital signal processing to communications system

ICTTEN813 Produce engineering solutions using numerical computations and simulation

ICT80515 - Graduate Diploma of Telecommunications and Strategic Management (Release 2)

Packaging Rules

Total number of units = 8

2 core units *plus*

6 elective units

The elective units must be relevant to the industry-supported vocational outcomes, local industry requirements and is to be chosen as follows:

The elective units consist of:

- up to 6 from the elective units listed below
- up to 1 from elsewhere in ICT Information and Communications Technology Training Package or any other Training Package or accredited course at Graduate Certificate level or above.

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

BSBINN801 Lead innovative thinking and practice

ICTICT809 Facilitate business analysis

Elective Units

ICTICT801 Lead research into identifying new marketplace opportunities

ICTICT803 Endorse business plan components for a new initiative

ICTICT808 Direct the development of a knowledge management strategy for a business

ICTICT812 Develop a business intelligence framework

ICTICT814 Develop cloud computing strategies for a business

ICTICT815 Manage automated ICT system applications using enterprise wide operating system

ICTPMG802 Manage a telecommunications project

ICTPMG804 Evaluate and use telecommunications management networks

ICTRFN801 Produce a radio link budget

ICTRFN802 Analyse a cellular mobile network system

ICTRFN803 Analyse a satellite communications system

ICTSUS806 Lead applied research in ICT sustainability

ICTSUS807 Conduct and manage a life cycle assessment for sustainability

ICTTEN801 Plan a transmission network

ICTTEN805 Manage solution architecture and impacts in line with organisational processes

ICTTEN807 Manage voice, data and internet protocol network solutions

ICTTEN808 Manage network testing strategies

ICTTEN809 Analyse business specifications to produce technical solutions

ICTTEN810 Investigate the application of cloud networks in telecommunications switching

ICTTEN811 Evaluate and apply network security

ICTTEN812 Evaluate and apply digital signal processing to communications system

ICTTEN813 Produce engineering solutions using numerical computations and simulation