

# **Course Outline**

#### ICT60220 Advanced Diploma of Information Technology

Telecommunications Network Engineering and Cyber Security



## **Course Information**

Qualification Code	ICT60220
Qualification Name	Advanced Diploma of Information Technology
Qualification Specialisation	Telecommunications Network Engineering and Cyber Security
CRICOS Course Code	113936A
Duration in Weeks (92)	78 Study Weeks + 14 Holiday Weeks
CRICOS Provider	#03980A
RTO Code	52785
Provider Name	Federation Academy
Delivery Location/s	Brisbane   Level 3, 160 Edward Street Brisbane Q 4000 Adelaide   Level 4 117 King William St, ADELAIDE, SA, 5000 Cairns   58-70 Lake St, CAIRNS CITY, QLD, 4870

#### What is the Course About?

This dual specialisation qualification has been designed to reflects the role of individuals in a variety of information and communications technology (ICT) roles who have significant experience in specialist technical skills, or managerial business and people management skills. The course is designed to prepare graduates to work as part of a security team in the detection and resolution of security breaches, and in the implementation of risk mitigation and prevention strategies for a company's telecommunications network operations and digital systems.

The elective choices outlined in this Training and Assessment Strategy align with both the Telecommunications Network Engineering and Cyber Security specialisation.



# What do I get out of this course?

The elective choice and course structure is designed to empower international students to establish long term careers in the Information and Communication Technology sector. In to addition having both а Cyber Security and Telecommunications Network Engineering focused outcomes, this program also provides a comprehensive exposure to the broader ICT Industry at a managerial entry level as well as incorporating communication, team, and client interaction units to enable students to develop personal interaction skills to suit particular ICT and business needs.

This qualification is designed to reflect the role of employees who perform positions such as:

- E-security specialist
- ICT security specialist
- ICT security administrator
- Network security specialist
- Telecommunications Technologist
- Telecommunications Network Planner
- Network or Systems security analyst
- Telecommunications Technical Officer
- System/Network Administrator



# What do I need to apply?

The following requirements apply to entry into this qualification:

- Age 18+
- IELTS 6.0 or equivalent English proficiency
- Completed high school Year 12, or equivalent.

Refer to the Federation Academy Enrolment Form for further information regarding possible enrolment requirements.





# Who is this course for?

This qualification has been designed to cater to the needs of a variety of student candidates, including but not limited to the following:

- CRICOS (international) candidates seeking to find employment in the Information Technology and Communications Industry in the fields of Telecommunications Networking Engineering or Cyber Security.
- CRICOS (international) candidates who have previously completed lower-level ICT qualifications.
- CRICOS (international) candidates who have previously worked in or completed Business or Managerial qualifications in a non-ICT related field and wish to transition into a new industry.
- Adult learners, most learners are 18-45 years of age, but age is not limited in the target group.
- Are interested in obtaining employment in future senior or managerial positions in the ICT sector, in either Australia or their country of origin.
- Those who have an interest in working in the Cyber Security sector.
- Those who have worked in the ICT sector in other roles/allied roles and now wish to expand their skillset to include managerial, networking, or cyber security.

#### What career path does this course follow?

#### Educational Pathways into the Qualification / Skill set

Student's pathway may include.

- Completion of previous courses such as:
- » Certificate IV in Information Technology
- » Certificate IV in Telecommunications Network Design
- » Certificate IV in Telecommunications Engineering Technology
- » Certificate IV in Cyber Security
- » Diploma of Information Technology
- » Diploma of Applied Technologies

Related/Potential Allied Pathways

• Advanced Diploma of Electronics and Communications Engineering

Higher Education Level Qualifications in:

- » Information Technology or Cyber Security
- » Telecommunications





# How is this course trained and assessed?

Training has been designed to be progressive and step-based to provide the skills and knowledge required for the training product. The course is designed to provide the skills and knowledge in a practical and theorybased approach to meet the needs of the cohort, who have little experience working in a managerial level in the ICT. Training is conducted in a continuous intense classroom and simulated workplace environment. Students are required to attend class a minimum of 20 hours per week over the seventy-eight (78) study weeks. All training material is available to students 24/7 on the Federation Academy LMS. All assessments are submitted and assessed via the LMS.

This qualification includes the required elective units for both the Telecommunication Network Engineering specialisation and the Cyber Security specialisation. The program has been separated into Six (6) study blocks and the electives have been chosen to fulfil the packaging rules of the qualification in relation to both the Cyber Security (4 units) and Telecommunication Network Engineering specialisation (5 units). The final elective unit has been chosen to ensure that you have the interpersonal and communication skills required for individuals working at this managerial level.

Ongoing trainer support and training is provided by direct face to face contact with trainers and assessors thought out the training products delivery. Each trainer is also contactable by email to help students.



## **Qualification Structure**

C/E	Unit Code – Unit Title	Study Weeks
С	BSBCRT611 Apply critical thinking for complex problem solving	6
С	BSBTWK502 Manage team effectiveness	4
Е	BSBCMM511 Communicate with influence	
E/CS	ICTCYS604 Implement best practices for identity management	4
E/CS	ICTCYS606 Evaluate an organisation's compliance with cyber security standards and law	4
E/CS	ICTCYS608 Perform cyber security risk assessments	4
E/CS	ICTCYS612 Design and implement virtualised cyber security infrastructure for organisations	6
E/TN	ICTNPL413 Evaluate networking regulations and legislation for the telecommunications industry	2
С	ICTICT618 Manage IP, ethics and privacy in ICT environments	6
С	ICTSAD609 Plan and monitor business analysis activities in an ICT environment	6
С	ICTICT608 Interact with clients on a business level	6
E/TN	ICTPMG613 Manage ICT project planning	6
E/TN	ICTNWK612 Plan and manage troubleshooting advanced integrated IP networks	6
С	BSBXCS402 Promote workplace cyber security awareness and best practices	2
E/TN	ICTTEN615 Manage network traffic	6
E/TN	ICTTEN622 Produce ICT network architecture designs	6
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