

ICT60220

Advanced Diploma of Information Technology (Cyber Security)

About this course

Become a cyber defender. Build your skills in key cyber security areas such as implementing secure encryption, performing cyber security risk assessments, completing penetration testing and more. By the end of this course, you'll be ready to kickstart an in-demand cyber security career.

You'll also be able to gain advanced standing into a Bachelor of Cyber Security.

What will I learn?

- Develop your understanding of cyber security infrastructure security for medium and large organisation, including firewalls and router/switch technology
- Build your skills in ethical hacking and performing penetrating testing
- Develop your ability to secure and configure enterprise level devices and communication networks
- Grow your skills in implementing troubleshooting and reporting on cyber security solutions
- Learn how to perform encryption on data which can be extended to blockchain technology
- Build your ability to implement network security best practices and navigate enterprise-level network requirements
- Discover how to use a range of specialised software for cyber security

Career Opportunities

- Cyber Security Analyst
- Cyber Security Administrator
- Cyber Security Consultant
- Cyber Security Tester
- Network Security Analyst
- Network Security Specialist
- IT Security Specialist

What are the entry requirements

International students:

- Have completed Australian Year 12 or equivalent
- IELTS 6.0 English language equivalence if a non-native English speaker
- Be at least 18 years of age
- Have technological literacy (ability to use and access a computer with word processing applications)

Course Overview



Qualification
Advanced Diploma



CRICOS code
105626D



Study mode
Blended learning



Duration
104 Weeks



Units
16 Units of Competency

Course Units

Unit code	Unit name	What you'll learn
ICTNWK537	Implement secure encryption technologies	Learn how to select, implement and monitor secure file encryption technologies. In this unit, you'll develop your skills in reviewing a range of encryption technologies and documenting an encryption implementation strategy. You'll also discover how to document an encryption analysis report and identify encryption compromises.
ICTCYS612	Design and implement virtualised cyber security infrastructure for organisations	In this unit, you'll grow your understanding of virtualised cyber security infrastructure. You'll learn how to investigate security levels, mission-critical network servers and secure boundary requirements. Then design, implement and test virtualised cyber security infrastructure for small to medium sized organisations.
ICTCYS608	Perform cyber security risk assessments	Build your skills in conducting cyber security risk assessments. Discover how to determine an organisation's risk appetite and risk culture. Then analyse its risk register, review its daily operations and document comprehensive cyber security risk findings.
ICTNWK540	Design, build and test network servers	Discover how to design, install and test servers in complex network environments. Build your ability to document network configuration requirements, determine user disruptions and back up local data. Also grow your understanding of installing network operating systems, implementing security designs and testing servers.
ICTCYS604	Implement best practices for identity management	Jump into the world of identity management. In this unit, you'll discover best practices for ensuring only authorised identities, such as individuals, devices and applications, securely access the correct resources at the right time. You'll learn how to analyse an organisation's identity management environment. Then take action to minimise threats, risks and cybercrime attacks.
BSBCRT611	Apply critical thinking for complex problem solving	Build your ability to develop solutions to complex IT issues. In this unit, you'll discover how you can use problem solving frameworks to develop structured and innovative IT solutions. You'll also gain hands-on skills in facilitating ideation sessions, preparing solution briefs and developing feedback registers.
ICTCYS606	Evaluate an organisation's compliance with cyber security standards and law	Develop a comprehensive understanding of cyber security standards and laws that impact Australian organisations. Learn how to assess how compliant an organisation's operations are with relevant standards and laws. Then develop recommendations for enhancing the organisation's cyber security practices and processes.
ICTCYS603	Undertake penetration testing for organisations	Dive into the world of penetration testing, where simulated cyberattacks are carried out to help identify and fix cyber security vulnerabilities. Discover how to select scanning tools, document testing regime and perform penetration testing. Then document potential threats and remediate identified vulnerabilities.
ICTNWK543	Install, operate and troubleshoot medium enterprise switches	Build your understanding of enterprise switches; high-performance, managed networking devices used by large organisations. Grow your understanding of a range of industry standard installation requirements of switches, such as spanning tree protocol (STP), switch command line interface (CLI) commands, secure shell (SSH) and debug commands. Also build your skills in installing enterprise switches and testing network elements.

Course Units

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BSBXCS402	Promote workplace cyber security awareness and best practices	In this unit, you'll explore the latest cyber security threats and trends impacting organisations. You'll learn how to assess employees' understanding of cyber security practices. You'll also discover how to improve your coworkers' understanding of cyber security threats and practical ways they can be minimised or avoided.
ICTNWK542	Install, operate and troubleshoot medium enterprise routers	Discover how to use enterprise routers; high-performance network edge devices that connect private networks to the internet. In this unit, you'll build your ability to install enterprise routers and configure dynamic classless routing protocols, including using variable length subnet mapping (VLSM) approaches. You'll also learn how to troubleshoot device configuration and network connectivity.
ICTCYS602	Implement cyber security operations	Build your skills in analysing the effectiveness of an organisation's existing cyber operations and determining required updates. Learn how to successfully implement organisational cyber security operations and test operational processes.
BSBTWK502	Manage team effectiveness	Develop key leadership skills you need to effectively manage IT teams. Discover how to prepare team performance plans, promote team member accountability and resolve work performance problems. Also learn how to take corrective action address concerns and problems raised by internal and external stakeholders.
ICTSAD609	Plan and monitor business analysis activities in an ICT environment	Build your ability to undertake business analysis activities for medium and large organisations. Discover how to determine business analysis deliverables, tasks and estimates. Then document a scope of work, establish a requirements repository, perform business analysis and recommend preventative or corrective actions.
ICTICT618	Manage IP, ethics and privacy in ICT environments	Learn how to manage issues relating to Intellectual Property (IP), copyright and privacy in IT environments, including through the use of IT security systems. Build your understanding of important laws that IT managers need to know. Also develop your ability to enhance organisational policies relating IP, ethical conduct and privacy.
ICTICT608	Interact with clients on a business level	By studying this unit, you'll gain valuable skills in interacting with IT clients at a management level. You'll build your ability to review a client's business domain, research client service needs and propose opportunities for new business. You'll also discover how to present clear, concise and engaging client proposals. Then negotiate terms with the client, monitor progress in achieving new client initiatives and use strategies to maintain positive client relationships.
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