



Australian Government

Department of Education, Employment and Workplace Relations

ICA60208 Advanced Diploma of Information Technology (Network Security)

Release: 1

ICA60208 Advanced Diploma of Information Technology (Network Security)

Modification History

Not Applicable

Description

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This qualification provides the skills and knowledge for an individual to be competent in planning, technical design, implementation and management of complex and high level ICT network security systems and components. The qualification has a robust ICT technical base with appropriate security units imported from other Training Packages.

Within previous ICT Training Packages, the security of networks and systems was a priority and a number of units in the areas of risk management, websites and privacy were developed. These have been included in Advanced Diploma core along with several more traditional Property Services security units. A number of server, network and interface electives are offered to allow a further level of specialisation as required. The facility for selecting electives from ICA05 and other Training Packages enables other ICT oriented skill areas (e.g. programming or database development) or broader business units to be included.

Job Roles

Possible job titles include:

- Database Security Expert
- Database Security Expert
- E-Risk Manager
- E-security Specialist
- ICT Network Specialist
- ICT Security Consultants
- ICT Security Specialist
- Information Risk Manager (IRM)
- Internal Computer Audit Specialist
- IT Security Administrator
- IT Security Analyst/Engineer
- IT Security Specialist
- Lead Security Analyst
- MCSE&CCNE Systems/Network Administrator
- Network and Systems Manager
- Network Engineer
- Network Security Analyst
- Network Security Specialist
- Network Specialist - Technical Lead
- Security Administrator
- Security Engineer
- Senior Network Administrator
- Senior Software Engineer (Security)
- Systems Security Analyst
- Web Security Administrator
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Pathways Information

Not Applicable

Licensing/Regulatory Information

Not Applicable

Entry Requirements

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The following units contain the basic fundamentals of ICT knowledge and skills for all qualifications at Certificate III in IT and above. These units or demonstrated equivalence are required for entry into this qualification:

BSBCM106A	Follow workplace safety procedures
ICAD2012B	Design organisational documents using computing packages
ICAU1128B	Operate a personal computer
ICAU2005B	Operate computer hardware
ICAU2006B	Operate computing packages
ICAU2013B	Integrate commercial computing packages
ICAU2231B	Use computer operating system
ICAW2001B	Work effectively in an IT environment
ICAW2002B	Communicate in the workplace

Employability Skills Summary

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The following table contains a summary of the Employability Skills required for a Security Consultant. The Employability Skills facets described here are broad industry requirements that may vary depending on qualification packaging options.

Employability Skill	Industry requirements for this qualification include:
Communication	<ul style="list-style-type: none"> articulating complex security scenarios in a clear, concise manner relevant to all levels of the organisation documenting information related to attacks, threats, risks and controls in a security plan using report writing skills for business requiring depth in some areas, and analysis and evaluation of information in a defined range of areas, for example when documenting recommendations for improvement and referring them to appropriate technical specialists
Teamwork	<ul style="list-style-type: none"> managing group facilitation and presentation skills in relation to transferring and collecting information, for example when senior management and auditor approval is obtained for the design of the controls reviewing the security strategy with security approved key stakeholders
Problem Solving	<ul style="list-style-type: none"> developing controls and contingencies to alleviate security threats taking corrective action on system implementation breakdowns using problem-solving skills for an evolving complex

Employability Skill	Industry requirements for this qualification include:
	scenario of security threats
Initiative and Enterprise	<ul style="list-style-type: none"> developing new criteria, applications, knowledge and procedures generating ideas at an abstract level through the analysis of information and concepts identifying and applying skill and knowledge areas to a wide variety of contexts, with depth in some areas
Planning and Organising	<ul style="list-style-type: none"> developing security plans planning for controls and contingencies when designing an IT security framework
Self-management	<ul style="list-style-type: none"> having accountability and responsibility for self and others in achieving workplace outcomes taking responsibility for own outputs in relation to broad quantity and quality parameters
Learning	<ul style="list-style-type: none"> having knowledge of current industry accepted hardware and software products, including broad knowledge of security features and capabilities
Technology	<ul style="list-style-type: none"> identifying technology needs, sourcing, purchasing, installing, configuring and testing components including software and hardware using technological capability assessment skills involving analysis, diagnosis and evaluation, for example when evaluating various products against architecture requirements to determine the best IT solution, and for estimating current and future capacity requirements and evaluating against client's future requirements

Packaging Rules

Qualification Structure

To attain the ICA60208: Advanced Diploma of Information Technology (Network Security) 17 units must be achieved:

- 8 core units; plus
- 9 elective units

Achieve 8 Core from the following 9 Units

Core (9 Units, choose 8)

BSBEBUS605A Identify and implement e-business innovation

ICAA5044C Develop system infrastructure design plan

ICAA6052B Design an IT security framework

ICAA6053B Design system security and controls
 ICAI5152B Implement risk management processes
 ICAI6187B Implement change management processes
 PRSTS301A Identify technical security requirements
 PRSSM504A Prepare security risk management plan
 PSPPM601B Direct complex project activities

Achieve 4 Elective Units Chosen from the ICA60208 Electives list below which have not previously counted in a Diploma qualification

Electives

ICAA5045C Produce network architecture design
 ICAA5056B Prepare disaster recovery and contingency plans
 ICAA5141C Design and develop dynamic websites to meet technical requirements
 ICAA5145B Identify best-fit topology for a wide area network
 ICAA5245A Evaluate RFID systems
 ICAA5246A Design an RFID implementation
 ICAB5159C Build a security shield for a network
 ICAB5160C Build and configure a server
 ICAB5237B Build a highly secure firewall
 ICAB5238B Build a high performance security perimeter
 ICAI5098C Install and manage complex networks
 ICAI5100C Build an internet infrastructure
 ICAI5176C Install and configure router
 ICAI5197B Install and maintain valid authentication processes
 ICAI5250A Develop, implement and evaluate system and application security
 ICAI5252A Develop, implement and evaluate an incident response plan
 ICAI5253A Implement and evaluate systems for regulatory and standards compliance
 ICAS5192B Configure an internet gateway
 ICAS5199B Manage business websites and servers
 ICTTC168A Design and implement an enterprise VoIP&unified communications network

Achieve 5 Elective Units Chosen from the Following Sources, which have not previously counted in a Diploma qualification (Listed in Recommended Order)

- ICA60208 Electives list; and/or
- ICA05 Information and Communications Technology Training Package or BSB07 Business Services Training Package at Diploma or Advanced Diploma; and/or
- any other Training Package at Advanced Diploma (to a maximum of 3 units) based on documented industry or enterprise needs
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Prerequisite Requirements

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A number of units within this qualification have prerequisites. These are detailed as follows:

Code and Title	Prerequisite units required
ICAA5044C Develop system infrastructure design plan	ICAA4041C Determine and confirm client business expectations and needs ICAA5144B Determine best-fit topology for a local

Code and Title	Prerequisite units required
	network
	ICAA5145B Identify best-fit topology for a wide area network
	ICAD4217B Create technical documentation
ICAA5245A Evaluate RFID systems	ICAA4041C Determine and confirm client business expectations and needs
	ICAD4217B Create technical documentation
ICAA5246A Design an RFID implementation	ICAA4041C Determine and confirm client business expectations and needs
	ICAD4217B Create technical documentation
ICAA6052B Design an IT security framework	ICAA4041C Determine and confirm client business expectations and needs
ICAI5250A Develop, implement and evaluate system and application security	ICAB4225B Automate processes
ICAI5252A Develop, implement and evaluate an incident response plan	ICAP4037B Contribute to the development of a strategy plan #
	ICAI5152B Implement risk management processes
ICAI5253A Implement and evaluate systems for regulatory and standards compliance	ICAA4041C Determine and confirm client business expectations and needs

This unit has prerequisites.