



Australian Government

ICA70211 Graduate Certificate in Information Technology Sustainability

Release: 1

ICA70211 Vocational Graduate Certificate in Information Technology Sustainability

Modification History

Release	Comments
Release 1	This Qualification first released with <i>ICA11 Information and Communications Technology Training Package version 1.0</i>

Description

This qualification provides the skills and knowledge for an individual to plan and manage the implementation of sustainability strategies for information and communications technology (ICT) networks and systems, including conducting applied research, developing organisational policy, and devising strategies to meet sustainability targets.

Job roles

Possible job titles relevant to this qualification include:

- IT sustainability systems consultant
- IT sustainability solutions architect
- IT sustainability project manager
- IT sustainability technology specialist
- IT sustainability business manager
- IT sustainability requirements manager.

Pathways Information

Pathways into the qualification

Preferred pathways for candidates considering this qualification include:

- after achieving any ICA11 or ICT10 Diploma or Advanced Diploma.

OR

- with demonstrated vocational experience in a range of work environments in senior network engineering or ICT roles

Pathways from the qualification

Other ICA11 Vocational Graduate Certificate qualification OR other higher education sector qualifications.

Licensing/Regulatory Information

There is no link between this qualification and licensing, legislative or regulatory requirements. However users should confirm requirements with the relevant federal, state or territory authority. There may be some alignment with industry standard certification competencies.

Entry Requirements

There are no entry requirements for this qualification.

Employability Skills Summary

The following table contains a summary of the employability skills required by industry for this qualification. The employability skills facets described here are broad industry requirements that may vary depending on qualification packaging options.

Employability skill	Industry/enterprise requirements for this qualification
Communication	- conducting research for a business case study to integrate sustainability in ICT projects - discussing options with stakeholders and negotiating for best practice and solutions for the enterprise - producing cost-benefit analyses, business case studies, management plans, executive summaries and justifications for implementing sustainability solutions - conducting applied research studies, writing and presenting high-level reports - reading, interpreting and using equipment or system manuals and specifications and relevant enterprise policy and documentation - interpreting high-level technical information and presenting to general audiences
Teamwork	- assigning roles to team members and leading teams - directing and managing team activities and goals - recognising and resolving conflict within team - facilitating team members to work with clients to install equipment - liaising with clients, employer, supervisors, work associates, team members and other contractors
Problem-solving	- ranking causes of problems, working from system-wide impacts to specific impacts - managing resolution of diagnosed network problems before and after implementation of sustainability solutions - generating solutions regarding compatibility and interoperability between proposed integrated system and existing system - devising solutions for better grade of service and reliability of new system - managing operations to obtain best solutions for allocated budget - responding promptly to difficulties and known problem areas, as they emerge
Initiative and enterprise	- leading the early adoption of new initiatives and technology - prioritising urgent requests and acting according to organisational guidelines

	- identifying barriers to integrating sustainability in ICT planning and design projects and developing strategies to overcome them within time and budget restrictions - adapting and modifying operating strategies to suit specific features of site - managing issues and providing solutions within established guidelines - interacting with enterprise personnel, customers and other contractors, keeping a customer focus and considering customer needs
Planning and organising	- planning and monitoring projects to meet key dates and milestones - planning the installation of virtualised systems, taking into account technical, scheduling and financial considerations - interpreting design and relating to site characteristics - prioritising and scheduling work according to organisational guidelines - running a test of network security arrangements
Self-management	- assigning realistic short and long-term career objectives - prioritising and scheduling work to be completed - complying with all related OHS requirements and work practices - developing implementation plans to ensure minimal disruption to the workplace - relating own role to the industry and establishing own work schedule - devising strategies to present a professional image to customers - interpreting and applying relevant regulations and standards
Learning	- relating current or intended role to career objectives in a positive manner - giving and receiving feedback to assist in meeting team and organisational goals - making clients aware of opportunities that exist for system upgrades, additional services and training - seeking assistance from team members when necessary - providing suitable training and assessment opportunities for work team members - providing training to customers on virtualised system features and facilities
Technology	- facilitating convergence of many integrated and emerging technologies - modifying the use of high end machines to optimise operations and performance

	• evaluating and implementing virtual machines with minimal disruptions • directing testing, and measuring network performance of ICT sustainability • using software evaluation and audit tools to improve ICT sustainability • directing relevant acceptance tests and analysing results against specified performance criteria
--	---

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 ICA11 at Vocational Graduate Certificate level or above
- up to 1 from any other Training Package or accredited course at Vocational Graduate Certificate level.

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

Core units

ICASUS702A Conduct a business case study for integrating sustainability in IT planning and design projects

Elective units

BSBREL701A Develop and cultivate collaborative partnerships and relationships

ICAICT706A Direct outsourced ICT services

ICAICT707A Direct research and business response to new ICT technology

ICAICT709A Facilitate business analysis

ICAICT710A Synchronise IT projects

ICASUS701A Plan and manage virtualisation for IT sustainability

ICASUS703A Research strategies using SAP solutions for sustainable economic and environmental outcomes

ICTSUS7235A Use ICT to improve sustainability outcomes

ICTSUS7236A Manage improvements in ICT sustainability

ICTSUS8237A Lead applied research in ICT sustainability

ICTSUS8238A Conduct and manage a life cycle assessment for sustainability

Selecting elective units for different outcomes

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

IT sustainability systems consultant

Core units plus:

- ICTSUS7235A Use ICT to improve sustainability outcomes
- ICAICT709A Facilitate business analysis

Plus one additional unit from elective units as appropriate to the specific job role.

IT sustainability solutions architect

Core units plus:

- ICAICT706A Direct outsourced ICT services
- ICAICT707A Direct research and business response to new ICT technology

Plus one additional unit from elective units as appropriate to the specific job role.

IT sustainability project manager

Core units plus:

- ICTSUS8238A Conduct and manage a life cycle assessment for sustainability
- ICAICT706A Direct outsourced ICT services
- ICAICT710A Synchronise IT projects
- BSBREL701A Develop and cultivate collaborative partnerships and relationships

IT sustainability technology specialist

Core units plus:

- ICTSUS7235A Use ICT to improve sustainability outcomes
- ICTSUS8237A Lead applied research in ICT sustainability
- ICTSUS8238A Conduct and manage a life cycle assessment for sustainability

IT Sustainability Business Manager

Core units plus:

- ICAICT706A Direct outsourced ICT services
- ICAICT707A Direct research and business response to new ICT technology
- ICAICT709A Facilitate business analysis

IT Sustainability Requirements Manager

Core units plus:

- ICTSUS8237A Lead applied research in ICT sustainability
- ICTSUS8238A Conduct and manage a life cycle assessment for sustainability

Plus one additional unit from elective units as appropriate to the specific job role.

