Australian Government

ICA40711 Certificate IV in Systems Analysis and Design

Release 2

ISC INDUSTRY SKILLS COUNCILS
Creating Australia's Future

ICA40711 Certificate IV in Systems Analysis and Design

Modification History

Release	Comments
Release 2	This Qualification released with *ICA11 Information and Communications Technology Training Package version 2.0* Updated elective unit to most current version.
Release 1	This Qualification first released with *ICA11 Information and Communications Technology Training Package version 1.0*

Description

This qualification provides the skills and knowledge for an individual to work as part of a project team to analyse and redesign existing systems to meet client business requirements.

Job roles

Possible job titles relevant to this qualification include:

- information technology support analyst
- information technology designer
- systems support analyst
- system designer
- operational support analyst
- technical support analyst.

Pathways Information

Pathways into the qualification

Preferred pathways for candidates considering this qualification include:

- after achieving ICA30111 Certificate III in Information, Digital Media and Technology, or other relevant qualifications or units equivalent to the core of ICA30111

OR

- with demonstrated vocational experience in a range of work environments in an information technology support role.

Pathways from the qualification

ICA50811 Diploma of Systems Analysis and Design, or a range of other Diploma 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	• determining and confirming client business expectations and needs • documenting system requirements and problems in plain English • writing and presenting detailed technical reports
Teamwork	• organising own work priorities • supporting team members with and coordinating project activities • scheduling feedback meetings to discuss reports and possible next actions with stakeholders
Problem-solving	• using project planning methodologies to set benchmarks and scope • locating, analysing, testing and rectifying faults • contributing to the identification of business strategy, vision, goals and objectives • confirming that the proposed project will come in on time and within budget
Initiative and enterprise	• responding to clients in a timely manner • transferring and applying theoretical concepts and/or technical or creative skills to a range of situations
Planning and organising	• planning and organising project and team meetings • contributing to the development of a strategic plan
Self-management	• taking responsibility for own outputs in relation to specified quality standards • working according to the Australian Computer Society Code of Ethics regarding security, legal, moral and ethical issues
Learning	• maintaining knowledge of tools and software applications and the goods and services provided • obtaining client evaluation and feedback
Technology	• selecting and using software and hardware diagnostic tools, including for multimedia contexts and automated testing environments

Packaging Rules

Total number of units = 22
7 core units plus
15 elective units

The elective units consist of:

- **up to 15 from the elective units listed below**
- **up to 4 from elsewhere in ICA11 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
BSBSUS301A Implement and monitor environmentally sustainable work practices
ICAICT401A Determine and confirm client business requirements
ICAICT403A Apply software development methodologies
ICAICT405A Develop detailed technical design
ICAICT418A Contribute to copyright, ethics and privacy in an IT environment
ICAPRG405A Automate processes
ICASAD401A Develop and present feasibility reports

Elective units
BSBCRT401A Articulate, present and debate ideas
BSBWOR301B Organise personal work priorities and development
ICADBS401A Identify physical database requirements
ICADBS412A Build a database
ICAICT402A Determine project specifications and secure client agreement
ICAICT408A Create technical documentation
ICAICT411A Select and employ software and hardware testing tools
ICAICT412A Coordinate and maintain IT work teams
ICAICT413A Relate to clients on a business level
ICAICT416A Contribute to the development of strategic plans
ICAICT417A Identify, evaluate and apply current industry-specific technologies to meet industry standards
ICAPMG401A Support small scale IT projects
ICAPRG404A Test applications
ICAPRG406A Apply introductory object-oriented language skills
ICAPRG414A Apply introductory programming skills in another language
ICAPRG415A Apply skills in object-oriented design
ICAPRG419A Analyse software requirements
ICAPRG425A Use structured query language
ICTTEN4081A Locate, diagnose and rectify faults