Australian Government

ICA40911 Certificate IV in Digital and Interactive Games

Release 2

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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 be competent in supporting the design, development and programming of basic digital games briefs as part of a larger development team. The qualification has a small suite of core units with an opportunity to select units from specialist groups of electives across the different artistic or programming fields of the industry.

Job roles

Possible job titles relevant to this qualification include:

- support 2-D/3-D artist
- assistant animator
- assistant designer
- support games developer
- assistant graphic/media designer
- interaction media developer
- support digital media developer
- assistant PC games programmer
- support web designer.

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

- after achieving a Year 12 certificate and relevant ICT experience equivalent to the following units of competency:
  - ICAICT201A Use computer operating systems and hardware
  - ICAICT202A Work and communicate effectively in an IT environment
  - ICAICT203A Operate application software packages
  - ICAWEB201A Use social media tools for collaboration and engagement

OR

- with demonstrated vocational experience in a range of ICT and games development environments.

Pathways from the qualification

ICA50211 Diploma of Digital and Interactive Games, 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	• researching and gathering information on the games industry • documenting work and producing technical reports for games design and development • articulating, presenting and debating ideas for games development • writing scripts, storyboards, content and stories for games
Teamwork	• working collaboratively with team members • supporting team members and project leader to meet deadlines
Initiative and enterprise	• generating solutions in response to individual and collaborative project tasks
Planning and organising	• producing concept design and documentation/storyboarding • meeting resource implications and requirements
Problem-solving	• developing creative and technical solutions or outcomes in response to presented design briefs and exercises
Self-management	• applying safe and sustainable work practices • meeting copyright, ethical and privacy standards in the areas of security, legal, moral and ethical practice
Learning	• maintaining knowledge of digital media tools and software applications • keeping up-to-date and maintaining own competence
Technology	• using a range of 2-D and 3-D games development software and tools to design and produce an interactive game

Packaging Rules

Total number of units = 16
4 core units plus
12 elective units

The elective units consist of:

- 5 units from one of the following specialist elective groups:
- **Group A Design**
- **Group B Programming**
- **Group C Art**
- **of the remaining units:**
- **up to 7 may be from the specialist elective groups below or from Group D general elective units below or elsewhere in ICA11**
- up to 3 may be from **elsewhere in** ICA11 or from 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
BSBOHS302B Participate effectively in OHS communication and consultative processes
ICAGAM401A Produce an interactive game
ICAICT418A Contribute to copyright, ethics and privacy in an IT environment
ICAICT419A Work effectively in the digital media industry

Elective units

Specialist elective units
Group A Design
CUFPPM404A Create storyboards
ICAGAM402A Identify and apply principles of games design and game playing
ICAGAM403A Create design documents for interactive games
ICAGAM405A Write story and content for digital games
ICAGAM406A Create visual design components for interactive games
ICAGAM407A Write scripts for interactive games

Group B Programming
ICAGAM404A Apply artificial intelligence in game development
ICAICT406A Build a graphical user interface
ICAPRG301A Apply introductory programming techniques
ICAPRG405A Automate processes
ICAPRG406A Apply introductory object-oriented language skills
ICAPRG413A Use a library or pre-existing components
ICAPRG415A Apply skills in object-oriented design
ICAPRG417A Apply mathematical techniques for software development
ICAPRG527A Apply intermediate object-oriented language skills

Group C Art
CUFANM301A Create 2D digital animations
CUFANM302A Create 3D digital animations
CUFANM303A Create 3D digital models
CUFANM402A Create digital visual effects
CUVDRA201A Develop drawing skills

ICADMT402A Produce interactive animation
ICADMT403A Produce and edit digital images
ICAGAM301A Apply simple modelling techniques
ICAGAM302A Design and apply simple textures to digital art
ICAGAM303A Review and apply the principles of animation
ICAGAM408A Use 3-D animation interface and toolsets
ICAGAM409A Create 3-D characters for interactive games
ICAGAM410A Develop 3-D components for interactive games
ICAGAM412A Design interactive media
ICAGAM413A Design and create 3-D digital models
ICAGAM414A Create audio for digital games
ICAGAM416A Prepare and complete image rendering processes
ICAGAM417A Apply digital effects to interactive products
ICAGAM418A Use simple modelling for animation

General elective units
Group D
BSBCRT401A Articulate, present and debate ideas
ICAICT408A Create technical documentation
ICAICT417A Identify, evaluate and apply current industry-specific technologies to meet industry standards
ICAICT420A Develop client user interface