



**Australian Government**

# **ICTGAM406 Create visual design components for interactive games**

**Release: 1**

# ICTGAM406 Create visual design components for interactive games

## Modification History

| Release   | Comments                                                                                                     |
|-----------|--------------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with ICT Information and Communications Technology Training Package Version 1.0. |

## Application

This unit describes the skills and knowledge required to create visual design components for games and interactive media using industry standard authoring tools.

It applies to individuals who contribute who support the design, development, and programming of digital games as part of a larger development team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## Unit Sector

Game development

## Elements and Performance Criteria

| ELEMENT                                                                                | PERFORMANCE CRITERIA                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>                                       | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                      |
| 1. Identify the commonly used visual design components for games and interactive media | 1.1 Obtain the project brief and documents<br>1.2 Identify the features of visual design components for games and interactive media<br>1.3 Discuss design considerations for an interactive visual design component with relevant personnel |
| 2. Identify the graphics software packages used for visual design                      | 2.1 Identify and review the range of industry-standard graphics software available<br>2.2 Assess the software related to visual design component requirements<br>2.3 Discuss the technical specifications for rendering and editing         |

| ELEMENT                                                                 | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                         | processes with relevant personnel<br>2.4 Select the graphics software package                                                                                                                                                                                                                                           |
| 3. Use graphics software                                                | 3.1 Run the graphics software and become familiar with the interface<br>3.2 Create new files and organise a file structure<br>3.3 Learn the tools and features used to create visual design components                                                                                                                  |
| 4. Create the visual design components for a game and interactive media | 4.1 Design a basic graphical user interface (GUI) for a game and interactive media<br>4.2 Consider the interaction processes of GUI elements<br>4.3 Document the design and programming requirements needed to implement the GUI<br>4.4 Use graphics software to create visual design components to be used for the GUI |
| 5. Evaluate the implementation                                          | 5.1 Demonstrate the component to relevant personnel<br>5.2 Evaluate the usability of the design components<br>5.3 Reflect on possible changes to improve the visual design and interactivity of the components                                                                                                          |

## Foundation Skills

*This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.*

| Skill    | Performance Criteria | Description                                                                                                                                                                                                                                                                                                             |
|----------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Learning | 3.1, 3.3             | <ul style="list-style-type: none"><li>Identifies, investigates and applies information from a variety of texts containing highly technical language, to expand own knowledge of chosen graphics software programs</li></ul>                                                                                             |
| Reading  | 1.1, 1.2, 2.1, 3.1   | <ul style="list-style-type: none"><li>Identifies and interprets a range of documents containing complex terminology, and applies the information in selecting software and designing the GUI</li><li>Interprets and comprehends diagrams, icons, symbols, text, numbers and letters necessary to design a GUI</li></ul> |

|                      |                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Writing              | 4.1, 4.3, 4.4                                                   | <ul style="list-style-type: none"> <li>• Uses correct spelling and grammar, plain English, specific terminology and the appropriate document layout, when documenting GUI design for developers</li> <li>• Uses a vocabulary level suited to the intended audience and game in GUI design</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                      |
| Oral Communication   | 1.1, 1.3, 2.1, 2.3                                              | <ul style="list-style-type: none"> <li>• Participates in verbal exchanges of ideas and solutions, using games terminology and effective listening and questioning techniques to clarify information</li> <li>• Presents the design using games specific terminology and non-verbal features appropriate to the audience</li> </ul>                                                                                                                                                                                                                                                                                                                                                        |
| Numeracy             | 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.3, 4.1, 4.2, 4.3, 4.4, 5.2, 5.3 | <ul style="list-style-type: none"> <li>• Uses whole numbers, decimals and percentages relevant to measurement, font size, scale, ratio, coordinates, colour, shading and other attributes/variables in the development design specifications, and GUI components</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                               |
| Interact with others | 5.1                                                             | <ul style="list-style-type: none"> <li>• Cooperates with others as part of routine activities relevant to gaming design concepts</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Get the work done    | 1.1-1.3, 2.1-2.4, 3.1-3.3, 4.1-4.4, 5.1-5.3                     | <ul style="list-style-type: none"> <li>• Makes decisions, and implements procedures, for both routine and non-routine tasks using formal decision-making processes</li> <li>• Plans, organises and completes work according to defined requirements and schedules, taking responsibility for decisions and sequencing tasks to achieve efficient outcomes</li> <li>• Uses a high level of creativity, innovation and initiative in interactive game design</li> <li>• Uses digital systems and tools to complete tasks</li> <li>• Understands the importance of secure information in relation to own work, and takes responsibility for data structure, format and management</li> </ul> |

## Unit Mapping Information

| Code and title<br>current version                               | Code and title<br>previous version                               | Comments                                                                                            | Equivalence status |
|-----------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------|
| ICTGAM406 Create visual design components for interactive games | ICAGAM406A Create visual design components for interactive games | <p>Updated to meet Standards for Training Packages.</p> <p>Minor edits to clarify intent of the</p> | Equivalent unit    |

| <b>Code and title<br/>current version</b> | <b>Code and title<br/>previous version</b> | <b>Comments</b>       | <b>Equivalence status</b> |
|-------------------------------------------|--------------------------------------------|-----------------------|---------------------------|
|                                           |                                            | performance criteria. |                           |

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

# Assessment Requirements for ICTGAM406 Create visual design components for interactive games

## Modification History

| Release   | Comments                                                                                                     |
|-----------|--------------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with ICT Information and Communications Technology Training Package Version 1.0. |

## Performance Evidence

Evidence of the ability to:

- demonstrate original approaches to the creative development of a graphical user interface (GUI)
- implement game development and production strategies
- maintain the integrity of the design brief
- develop concept art and design specifications for splash screens, start screens and game field screens, consistent with a design brief
- develop technical specifications for visual design components and overall usability
- implement and evaluate a working GUI with basic functionalities.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

## Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the principles of GUI design and related programming techniques
- list the human resources required in the process of creating visual design components
- list technology requirements and outline technical constraints that they impose on design and development
- discuss techniques for applying concept development skills
- discuss techniques for applying concept visualisation skills.

## Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the game development field of work, and include access to:

- a design brief
- computer hardware, software, and peripheral devices suitable for games development
- games engines
- the internet for research purposes.

Assessors must satisfy NVR/AQTF assessor requirements.

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>