



**Australian Government**

# **Assessment Requirements for ICTGAM423**

## **Apply artificial intelligence in game development**

**Release: 1**

# Assessment Requirements for ICTGAM423 Apply artificial intelligence in game development

## Modification History

| Release   | Comments                                                                                                     |
|-----------|--------------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with ICT Information and Communications Technology Training Package Version 6.0. |

## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- identify and analyse at least two artificial intelligence (AI) strategies applicable to a game development brief
- design a feasible AI game strategy
- implement at least two path finding algorithms and at least two non-player character AI strategies in a game.

In the course of the above, the candidate must:

- review and evaluate AI strategies
- comply with industry standards, client brief and game requirements.

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- basic path-finding algorithms implications on game development
- major AI terms used in the game industry
- the development process of creating AI strategies in non-player characters (NPCs) in a game
- applying object-oriented programming practices
- overall architecture of a game engine
- game development testing processes
- industry standards applicable to game development.

## Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- the internet
- research tools
- required hardware, software and its component
- path-finding libraries
- game development testing tools
- development tools to implement AI strategies
- game design specifications and documentation.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## Links

Companion Volume Implementation Guide is found on VETNet -

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