



Australian Government

**Assessment Requirements for ICTGAM509
Design interactive 3-D applications for
scientific and mathematical modelling**

Release: 1

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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:

- determine business requirements and select data to be used in a 3-D computer simulation or mathematical modelling application
- design an interactive 3-D environment that reflects scientific or mathematical modelling
- develop and document testing procedures and standards to verify modelling.

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:

- provide a detailed explanation of documentation techniques
- outline object-oriented 3-D programming design methodologies
- summarise object-oriented 3-D programming principles
- discuss data sources and business expectations and needs
- explain techniques for using a graphical user interface (GUI) to interact with a user
- provide a detailed summary of testing procedures
- describe how 3-D technologies can simulate scientific or mathematical models.

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:

- suitable 3-D equipment, software and hardware
- technical manuals
- examples of scientific or mathematical models.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

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