



Australian Government

Assessment Requirements for ICTGAM541 Design and create advanced particles, fluids and bodies for 3-D digital effects

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 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:

- develop at least three advanced simulation effects according to design brief and requirements.

In the course of the above, the candidate must:

- analyse design requirements and develop design documents according to organisational procedures
- use applicable effects including particles, fluids and rigid or soft bodies
- render digital effects on at least one small device and one large device and confirm pixels are optimised
- maintain portfolio of reference materials
- present pre-production portfolio demonstrating project research and development to required personnel
- seek evaluation and review from required personnel for finalised advanced simulation effects.

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:

- programming languages and techniques required for creating 3-D digital effects
- overview of game development and production processes, including specific terminology
- design approaches to creating advanced simulated effects
- media and techniques used in designing and creating simulated effects
- key features of game-play hardware and software products
- technology requirements and human resources required in process of creating digital effects and each team member's respective skills

- methods of maintaining reference portfolios applicable in creating 3-D digital effects
- risk and critical path management techniques
- technical constraints that hardware imposes on:
 - software development
 - graphics requirements
 - code development
 - creative visual design
- techniques for applying concept development and visualisation skills
- methods of creating and testing 3-D digital effect prototypes
- documentation processes applicable in 3-D digital effects creation process
- creating and presenting pre-production portfolios demonstrating project research and development
- organisational procedures applicable to the design and creation of 3-D digital effects.

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:

- hardware and software applicable to designing and creating simulated effects
- games engine
- IDE
- digital devices
- file storage
- design brief
- the internet
- organisational procedures applicable to designing and creating simulated effects.

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>