



Australian Government

ICTGAM301 Apply simple modelling techniques

Release: 1

ICTGAM301 Apply simple modelling techniques

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 develop, and refine, 3-D models using simple modelling techniques and appropriate software.

It applies to individuals who support the design, development, and programming of basic 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. Clarify work requirements	1.1 Clarify the requirements for, and purpose of, 3-D digital modelling techniques and refer to the production documentation, WHS requirements and roles of project team members 1.2 Clarify work-flow sequences in consultation with the relevant personnel, to ensure that production schedule deadlines are met 1.3 Select the software that best suits the type of production and delivery platform for which simple 3-D modelling techniques are being applied 1.4 Gather and analyse reference materials to help with the

ELEMENT	PERFORMANCE CRITERIA
	application of modelling techniques
2. Apply simple 3-D modelling techniques	2.1 Apply simple 3-D modelling techniques to create 3-D models 2.2 Use software features to block out models in order to determine the correct proportions related to reference materials 2.3 Manipulate software features to apply basic lighting and shaders to the models, as required 2.4 Ensure that the topology of the models allows for appropriate deformation, as required 2.5 Progressively refine, and check, the integrity of the models until they meet design requirements 2.6 Submit models to the relevant personnel for comment regarding whether production requirements have been met, and make final adjustments as required 2.7 Render and output the models in the required format, and submit to the relevant personnel by agreed deadlines 2.8 Make backup copies of files and complete workplace documentation, according to enterprise procedures

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
Reading	1.1, 1.2, 1.3, 1.4, 2.4, 2.6	- Interprets documentation, diagrams, designs, objects and images to identify relevant information - Recognises and comprehends signs, symbols, pictures, jargon, abbreviations, computer generated text, numbers and letters, necessary to operate modelling applications software
Writing	2.8	Completes the documentation necessary for work tasks and reporting according to requirements
Oral Communication	1.1, 1.2, 1.3, 1.4, 2.6	- Uses industry terminology to clarify requirements and obtain information - Listens and responds to instructions, answers to questions and feedback

Numeracy	2.1, 2.2, 2.3, 2.4, 2.5, 2.7	- Adds, subtracts, multiplies and divides whole numbers, and decimals, when manipulating measurement, scale, ratio and coordinates in the development of models - Structures timeframes to work to deadlines
Navigate the world of work	2.8	Complies with explicit organisational procedures
Get the work done	1.1-1.4, 2.1-2.8	- Makes routine decisions and implements standard procedures for routine tasks - Uses key features of specific digital systems and tools to complete routine tasks - Uses creativity and initiative in design - Understands the importance of secure information in relation to own work, and takes responsibility for data integrity and management

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTGAM301 Apply simple modelling techniques	ICAGAM301A Apply simple modelling techniques	Updated to meet Standards for Training Packages	Equivalent unit

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 ICTGAM301 Apply simple modelling techniques

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Performance Evidence

Evidence of the ability to:

- clarify 3-D modelling requirements
- create 3-D digital models that:
 - demonstrate the application of simple 3-D modelling techniques
 - demonstrate the efficient use of geometry and attention to detail
 - meet production documentation requirements
- work collaboratively with the other members of the design and development team
- meet deadlines.

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:

- identify 3-D digital model design techniques
- outline 3-D digital modelling techniques
- outline the stages in the production process, from the initial concept through to the finished product
- discuss the features of a range of delivery platforms
- discuss geometry as it applies to the creation of realistic 3-D digital models
- outline the issues and challenges of creating 3-D digital models
- outline work health and safety (WHS) standards, as they relate to working for periods of time on computers
- outline the roles and responsibilities of project team members in the relevant industry sector
- discuss the use of scale, form, weight and volume in the design, and development, of 3-D digital models

- discuss basic copyright issues associated with designing and creating 3-D 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:

- the production documentation
- reference materials
- computer hardware
- industry software packages
- games engines
- file storage
- enterprise policy about WHS requirements.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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