



Australian Government

CUAANM303 Create 3D digital models

Release: 1

CUAANM303 Create 3D digital models

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to create 3D digital models that meet technical and design specifications.

It applies to individuals who clarify production requirements and produce 3D models under supervision, but may have responsibility for planning their own work. They produce these 3D models primarily for online and mobile device application.

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

Unit Sector

Visual Communication – Animation and Digital Effects

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 requirements and purpose for 3D digital models with reference to production documents 1.2 Clarify workflow sequences in consultation with relevant personnel to ensure production schedule deadlines are met 1.3 Clarify with relevant personnel the modelling technique that suits production requirements 1.4 Discuss and select digital modelling software with relevant personnel that suits production delivery platform and modelling techniques 1.5 Gather and analyse reference materials to help visualise 3D models

ELEMENT	PERFORMANCE CRITERIA
2. Develop 3D digital models	2.1 Use software features and apply modelling principles to block out models based on reference materials 2.2 Adopt safe ergonomic practices when using screens and keyboards for extended periods of time 2.3 Use software features and geometry to shape models and apply various effects as required 2.4 Check that models' topology allows appropriate deformation as required 2.5 Refine and check integrity of models progressively until they meet design requirements 2.6 Confirm with relevant personnel that models have not infringed copyright 2.7 Test models to identify faults, and modify as required 2.8 Demonstrate models to relevant personnel for feedback, and make adjustments as required
3 Finalise 3D digital models	3.1 Review 3D models to ensure creative solutions meet design specifications 3.2 Discuss and confirm with relevant personnel additional requirements or modifications to 3D models and undertake necessary amendments 3.3 Render and output models in appropriate format and submit to relevant personnel by agreed deadlines 3.4 Make back-up copies of files, and save and store 3D models using standard naming conventions

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, 1.5	Analyses textual information from production documents and reference materials to confirm design requirements
Writing	1.1, 1.2	Uses specific language appropriate to audience to clarify requirements and prepare work-related

		documentation
Numeracy	2.1, 2.3	Uses knowledge of shapes, symmetry and solids to perform required adjustments to models
Oral Communication	1.1-1.4, 2.6, 2.8, 3.2	- Explains ideas and requirements clearly and listens carefully to verbal instructions - Uses questioning and listening skills to clarify and confirm understanding
Navigate the world of work	2.2, 2.6	Applies legislatives requirements relevant to own role
Interact with others	1.1-1.4, 2.6, 2.8, 3.2, 3.3	- Responds to and draws on others' perspectives when negotiating design of 3D digital models - Collaborates to achieve joint outcomes in the design process, playing an active role in facilitating effective group interaction
Get the work done	1.2-1.5, 2.1-2.8, 3.1-3.4	- Plans, organises and implements tasks required to meet requirements within deadlines - Makes aesthetic and technical decisions in collaboration with others - Evaluates requirements and technical criteria to ensure design specifications are achieved - Uses digital software to create models and to manage files

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAANM303 Create 3D digital models	CUFANM303A Create 3D digital models	Updated to meet Standards for Training Packages. Minor edits to elements and performance criteria. Additional element.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAANM303 Create 3D digital models

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Performance Evidence

Evidence of the ability to:

- create 3D digital models that meet design requirements and production deadlines
- collaborate with others to clarify requirements, discuss techniques, select modelling software and review models
- use 3D modelling software proficiently to build models and apply various modelling effects
- correctly store 3D models in appropriate file formats using industry naming conventions.

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 stages in the production process from initial design through to finished product
- outline basic modelling principles used to build 3D digital models
- explain how geometry is used to create scale, form, weight and volume in 3D models
- describe the concept of integrity as it applies to 3D modelling
- explain the relationship between topology and deformation
- describe the process of rendering as it applies to 3D modelling
- outline intellectual property considerations if using images from external sources
- outline work health and safety standards as they apply to using screens and keyboards for extended periods of time.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- production documentation
- software for producing 3D digital models
- interaction with others.

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

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>