CUAANM411 Create advanced 3D digital models

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Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 5.0.

Application

This unit describes the skills and knowledge required to prepare 3D digital models to a high level of finish, ready to use in different contexts.

The unit applies to those who prepare 3D digital models for use in animations, high-end games, virtual worlds or specialist digital resource materials in areas such as medicine, architecture, engineering and aeronautics. They work with minimum supervision and collaborate closely with other production team members to deliver to schedule deadlines.

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

Pre-requisite Unit

CUAANM313 Create 3D digital models

Unit Sector

Visual communication – Animation and digital effects

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Clarify work requirements	1.1 Identify requirements and purpose for 3D digital models with reference to production documentation
	1.2 Identify workflow sequences and production schedule deadlines in consultation with required personnel
	1.3 Select modelling technique that suits production requirements
	1.4 Select digital modelling software required for production, delivery platform and modelling technique
2. Design and develop 3D	2.1 Build detailed 3D models that meet design and aesthetic

ELEMENT	PERFORMANCE CRITERIA
models	requirements, using features of digital modelling software
	2.2 Adopt safe ergonomic practices when using screens and keyboards for extended periods of time
	2.3 Simulate physical realism in characters and environments using software features, geometry and different effects
	2.4 Develop functionality of the models using scripting language as required
	2.5 Rig model to animation controls using applicable weights and mesh assignments
	2.6 Check models have not infringed copyright
	2.7 Liaise with other team members to ensure models relate to other aspects of the production
	2.8 Refine and check integrity of models until they meet design requirements
	2.9 Confirm with required personnel that production requirements have been met and make necessary adjustments
3. Finalise 3D digital models	3.1 Test models, identify faults and adjust models as required
	3.2 Render final models in required output file formats
	3.3 Make back-up copies of files, and save and store 3D models using standard naming conventions
	3.4 Submit final models to required personnel for approval by agreed deadlines
	3.5 Review own work and processes used for constructing 3D digital models and note areas for future improvement

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Oral communication	• Conveys requirements and discusses improvements by speaking clearly and using effective language • Confirms understanding using listening and questioning techniques
Reading	• Identifies project requirements by analysing textual information from required sources
Writing	• Clarifies requirements and completes reports and documentation using clear and technically specific language
Self-management	• Follows organisational procedures when managing files and

SKILL	DESCRIPTION
	directories including back-up of files • Conducts work according to legislative requirements • Plans and implements workflow to prepare 3D digital models for production within deadlines • Makes decisions directly related to task and role requirements
Teamwork	• Maintains the production process in association with others through discussion and consultation
Technology	• Selects software based on requirements of job and knowledge of software features • Uses digital tools to manage files and to develop refined, accurate 3D models in a range of styles

Unit Mapping Information

Supersedes and is equivalent to CUAANM401 Create advanced 3D digital models.

Links

Companion Volume Implementation Guide is found on VETNet -
https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5