



**Australian Government**

# **ICTGAM544 Animate physical attributes of models and elements**

**Release: 1**

## ICTGAM544 Animate physical attributes of models and elements

### Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

### Application

This unit describes the skills and knowledge required to animate the required physical attributes of models and elements using 3-D modelling and animation software tools.

It applies to those with high-level mathematical, technical and communication skills working as concept artists, game designers, games programmers, animators, and other personnel working in the game development industry.

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. Establish project requirements and collect and use reference material	1.1 Establish project and animation requirements of models and elements, according to organisational procedures 1.2 Create storyboard sequence of required animation according to organisational procedures 1.3 Determine animation attribute sequence of objects according to created storyboard 1.4 Identify type of production and target platform for which 3-D digital animations are being created and select applicable 3-D modelling and animation software tools 1.5 Research and gather reference material applicable to animation requirements
2. Prepare 3-D digital models	2.1 Research and select applicable animation methodology for

ELEMENT	PERFORMANCE CRITERIA
using a variety of manipulating techniques	<p>required models</p> <p>2.2 Confirm models' topology allows required deformation of objects and their parts, according to storyboard animation brief</p> <p>2.3 Apply a variety of manipulation techniques according to model and element requirements</p> <p>2.4 Refine animation attributes and confirm integrity of models and elements until storyboard requirements are met</p> <p>2.5 Submit pre-model animation to required personnel for feedback and confirm storyboard objectives have been met</p> <p>2.6 Make final adjustments as required according to feedback</p>
3. Create required animations using a variety of animation tools	<p>3.1 Animate object, applying animation principles and techniques to produce required motions</p> <p>3.2 Submit animation to required personnel for approval</p> <p>3.3 Make adjustments as required and refine animation in passes until storyboard requirements are achieved</p>
4. Test and render 3-D digital model	<p>4.1 Research and select applicable render engine according to project requirements</p> <p>4.2 Render component for testing purposes using nominal lighting</p> <p>4.3 Test against production plan and evaluate results</p> <p>4.4 Continue manipulation process according to meet required effects</p> <p>4.5 Evaluate final render, and confirm further client requirements are met</p> <p>4.6 Prepare required render passes according to animation requirements</p> <p>4.7 Render required component</p>
5. Evaluate and finalise animation	<p>5.1 Present edited material to required personnel, in applicable format for evaluation</p> <p>5.2 Obtain final sign-off from required personnel</p> <p>5.3 Make backup copies of files and complete workplace documentation, according to organisational procedures</p>

## Foundation Skills

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

<b>SKILL</b>	<b>DESCRIPTION</b>
Reading	<ul style="list-style-type: none"> <li>Interprets and analyses reference sources and applies knowledge to project work</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Communicates complex relationships between ideas and information, matching style of writing to purpose and audience when creating storyboard and workplace documentation</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Applies manipulation techniques, animates objects and makes adjustments using mathematical and problem-solving strategies</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Uses listening and questioning techniques to determine client requirements and articulate ideas using specific language applicable to audience</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>Plans a range of routine and non-routine tasks, including collecting resources, determining storyboard sequences and selecting software tools</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of factors into account</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>Implements actions as per plans, making slight adjustments if necessary and addressing some unexpected issues</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Uses a broad range of features of software applications for specific purposes</li> <li>Manages and maintains files in a variety of storage media and formats</li> </ul>

## Unit Mapping Information

Supersedes and is equivalent to ICTGAM518 Animate physical attributes of models and elements.

## Links

Companion Volume Implementation Guide is found on VETNet -

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