

## PREPARE 3D ANIMATION CHARACTER

**UNIT CODE:** MD/OS/AN/CR/10/6/MA

### UNIT DESCRIPTION

This unit specifies the competencies required to prepare animation character. It involves selecting character rig, developing character rig, testing character rig, skinning 3D character with the rig and testing rigged 3D character.

### ELEMENTS AND PERFORMANCE CRITERIA

<b>ELEMENT</b> These describe the key outcomes which make up workplace function.	<b>PERFORMANCE CRITERIA</b> These are assessable statements which specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the range.</i>
1. Select character rig	1.1 3D character is imported to <i>3D software</i> 1.2 3D character is analysed as per the SOPs. 1.3 <i>Character rig</i> is identified and selected as per the SOPs
2. Develop character rig	2.1 Character rigs are customised as per the character. 2.2 Character rig controllers are created. 2.3 Character rig constraints are established.
3. Test character rig	3.1 Character rig is tested using 3D software as per SOPs. 3.2 Character rig controllers are tested. 3.3 Character rig constraints are tested. 3.4 Geometry skeleton systems and mechanical structure interaction tool sets are refined.
4. Skinning 3D character	4.1 Character rig is aligned with the 3D character 4.2 Character rig dimensions are matched with the 3D character 4.3 Character rig is attached to the 3D character 4.4 Vertices are weighed as per the character body parts.

5. Test rigged 3D character	5.1 Facial deformation is tested as per the SOPs 5.2 Limbs deformation are tested as per the SOPs 5.3 Body torso deformation is tested as per the SOPs 5.4 Test character animation as per the SOPs
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### **RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

<b>Variable</b>	<b>Range</b>
1. Character rig includes but not limited to	<ul style="list-style-type: none"> <li>• 3D Max</li> <li>• Maya</li> <li>• Blender</li> <li>• Cinema 4D</li> </ul>
2. Character rig includes but not limited to:	<ul style="list-style-type: none"> <li>• Facial bone structure</li> <li>• Spine bone structure</li> <li>• Limbs bone structure</li> <li>• Automated</li> </ul>

### **REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

#### **Required skills**

The individual needs to demonstrate the following skills:

- Organic modelling
- Hard surface modelling

#### **Required knowledge**

The individual needs to demonstrate knowledge of:

- Human anatomy
- Body kinematics
- 3D animation software
- Principles of character design

## EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Selected character rig 1.2 Developed character rig 1.3 Tested character rig 1.4 Skinning 3D character 1.5 Tested rigged 3D character
2. Resource Implications	The following resources must be provided: 2.1 3D modelled character 2.2 Body anatomy references 2.3 Bone structure references 2.4 Bone structure movement
3. Methods of Assessment	Competency may be accessed through: 3.1 Written tests 3.2 Observation 3.3 Oral questions 3.4 Third party report 3.5 Interviewing 3.6 Project and report writing
4. Context of Assessment	Competency may be assessed: 4.1 On-the- job 4.2 Off the job 4.3 Off the job assessment must be undertaken in a closely simulated workplace environment.
5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended.