

## 3D CHARACTER MODELLING

**UNIT CODE:** ME/CU/AN/CR/07/5/B

### Relationship to Occupational Standards

This unit addresses the unit of competency: model 3D characters

**Duration of Unit:** 120 hours

### Unit Description

This unit specifies the competencies required to model 3D characters. It involves preparing character T poses, modelling 3D character and unwrapping 3D characters.

### Summary of Learning Outcomes

Elements	Hours
Prepare character T poses	20
Model 3D character	42
Model 3D furniture	28
Unwrap 3D characters	30
<b>Total hours</b>	<b>120</b>

### Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Prepare character T poses	1.1. Character blue prints set-up 1.2. Character front view 1.3. Character side view. 1.4. Character back view. 1.5. Character top view.	<ul style="list-style-type: none"><li>• Written tests</li><li>• Observation</li><li>• Oral questions</li><li>• Third party report</li><li>• Interviewing</li><li>• Project and report writing</li></ul>
2. Model 3D character	2.1. Mesh model selection 2.2. Mesh- model formation 2.3. Quadrilaterals 2.4. Edge loops 2.5. Topology 2.6. Facial loops development	<ul style="list-style-type: none"><li>• Written tests</li><li>• Observation</li><li>• Oral questions</li><li>• Third party report</li><li>• Interviewing</li><li>• Project and report writing</li></ul>

	2.7. Body joint loops development 2.8. Appendages modelling 2.9. Character costumes 2.10. Mesh- model refining	
3. Model 3D furniture	3.1. Mesh model selection 3.2. Mesh- model formation 3.3. Quadrilaterals 3.4. Edge loops 3.5. Topology 3.6. Mesh- model refining	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Observation</li> <li>• Oral questions</li> <li>• Third party report</li> <li>• Interviewing</li> <li>• Project and report writing</li> </ul>
4. Unwrap 3D characters	4.1. UVW unwrap modifier 4.2. Meaning the seam-lines 4.3. Planar mapping 4.4. Checker texture map	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Observation</li> <li>• Oral questions</li> <li>• Third party report</li> <li>• Interviewing</li> <li>• Project and report writing</li> </ul>

### **Suggested Methods of Instruction**

- Project
- Demonstration by trainer
- Practice by the trainee
- Discussions
- Direct instruction
- Case study
- Audio –visual aids

### **Recommended Resources**

- Computers
- Audio recorder
- Internet
- Digital Cameras
- Magazines
- Testing books
- Animation films
- Text books

- Editing & recording studio
- Computer software
- Television
- Drawing sets
- Drawing tables
- A4 Colour scanner
- Stereo studio headset
- Digital tablet
- Flash drives