Contents

What are Occupational Standards(OS)?

➢ OS describe what individuals need to do, know and understand in order to carry out a particular job role or function

➢ OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

Contact Us:
Media & Entertainment Skills Council

E-mail: mesc@ficci.com

Introduction

Qualifications Pack- Texturing artist

SECTOR: MEDIA AND ENTERTAINMENT

SUB-SECTOR: Animation, Gaming

OCCUPATION: Asset Creation

REFERENCE ID: MES/ Q 2503

Texturing artist in the Media & Entertainment Industry is also known as a Shading artist

Brief Job Description: Individuals at this job are responsible to add textures to models to create photo-realistic models that can be used for animation

Personal Attributes: This job requires the individual to create textures using software such as Autodesk Maya, 3D Studio Max, Mud Box, Zbrush, etc. The individual must be well-versed with the techniques of texture mapping and projection. The individual must also have a good understanding of the principles of colour theory, photography multi-pass rendering and lighting etc.

<table>
<tr><td rowspan="7">Job Details</td></tr>
<tr><td>Qualifications Pack Code</td><td colspan="3">MES/ Q 2503</td></tr>
<tr><td>Job Role</td><td colspan="3">Texturing artist
This job role is applicable in both national and international scenarios</td></tr>
<tr><td>Credits(NVEQF/NVQF/NSQF) [OPTIONAL]</td><td>TBD</td><td>Version number</td><td>01</td></tr>
<tr><td>Sector</td><td>Media and Entertainment</td><td>Drafted on</td><td>16/07/13</td></tr>
<tr><td>Sub-sector</td><td>Animation, Gaming</td><td>Last reviewed on</td><td>30/07/13</td></tr>
<tr><td>Occupation</td><td>Asset Creation</td><td>Next review date</td><td>08/08/13</td></tr>
</table>

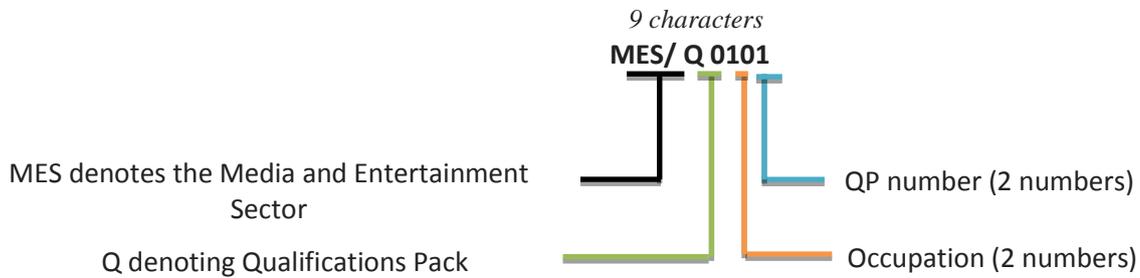| Job Role	Texturing artist
Role Description	Add textures to create photo-realistic models
NVEQF/NVQF level	4
Minimum Educational Qualifications	Class X and above
Maximum Educational Qualifications	-
Training (Suggested but not mandatory)	3D software such as Maya, 3D Studio Max etc.
Experience	0-1 years Trainee / Junior Texturing Artist 1+ years Texturing Artist
Applicable National Occupational Standards (NOS)	**Compulsory:** 1. MES / N 2503 (Add textures to models)
Performance Criteria	As described in the relevant OS units

Keywords /Terms	Description
Budget	Budget is an estimate of the total cost of production that may include a break-up of cost components
Compositing	Compositing is the process of combining layers of images/elements into a single frame
Clean-up	Refining the interim/rough rough animation
Creative Brief	Creative brief is a document that captures the key questions that serve as a guide for the production including the vision, objective of the project, target audience, timelines, budgets, milestones, stakeholders etc.
Key Frame	Key Frames are the key poses, usually the start and end poses for a particular animation sequence
Modelling	Modelling is the process of creating three-dimensional models for animation using a specialised software application.
Rendering	Rendering is the process of converting three-dimensional models into two-dimensional images with 3D effects
Rigging	Rigging is the process of adding joints to a static three-dimensional model to aid movement during posing
Texturing	Texturing is the process of adding colour and texture to plain models to give them a photo-real appearance
Timelines	Timelines is a listing of dates by which the production milestones/stages need to be completed
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Sub-functions	Sub-functions are sub-activities essential to fulfill the achieving the objectives of the function.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task
National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack(QP)	Qualifications Pack comprises the set of OS, together with the

3

	educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an Occupational Standard, which is denoted by an 'N'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.

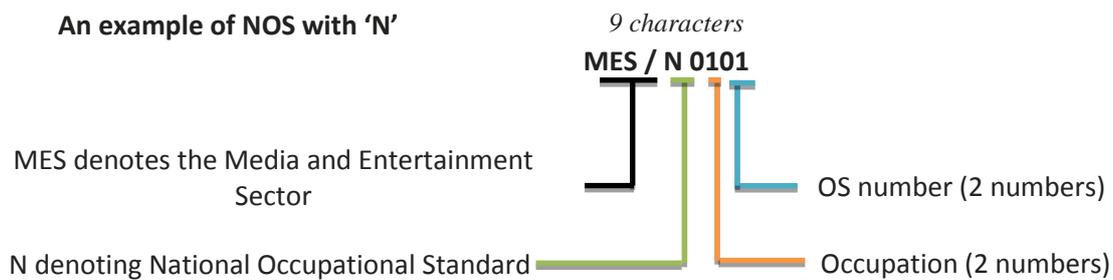| Keywords /Terms	Description
NOS	National Occupational Standard(s)
QP	Qualifications Pack
NVEQF	National Vocational Education Qualifications Framework
NVQF	National Vocational Qualifications Framework
CG	Computer Generated

Acronyms

Annexure

Nomenclature for QP and NOS

Qualifications Pack

9 characters

MES/ Q 0101

MES denotes the Media and Entertainment Sector

Q denoting Qualifications Pack

QP number (2 numbers)

Occupation (2 numbers)

Occupational Standard

An example of NOS with 'N'

9 characters

MES / N 0101

MES denotes the Media and Entertainment Sector

N denoting National Occupational Standard

OS number (2 numbers)

Occupation (2 numbers)

Back to top…

The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
…	…

Sequence	Description	Example
Three letters	Media and Entertainment	MES
Slash	/	/
Next letter	Whether **Q**P or **N**OS	Q
Next two numbers	Rigger, Modeller, Texturing	25
Next two numbers	QP number	03

National Occupational Standard
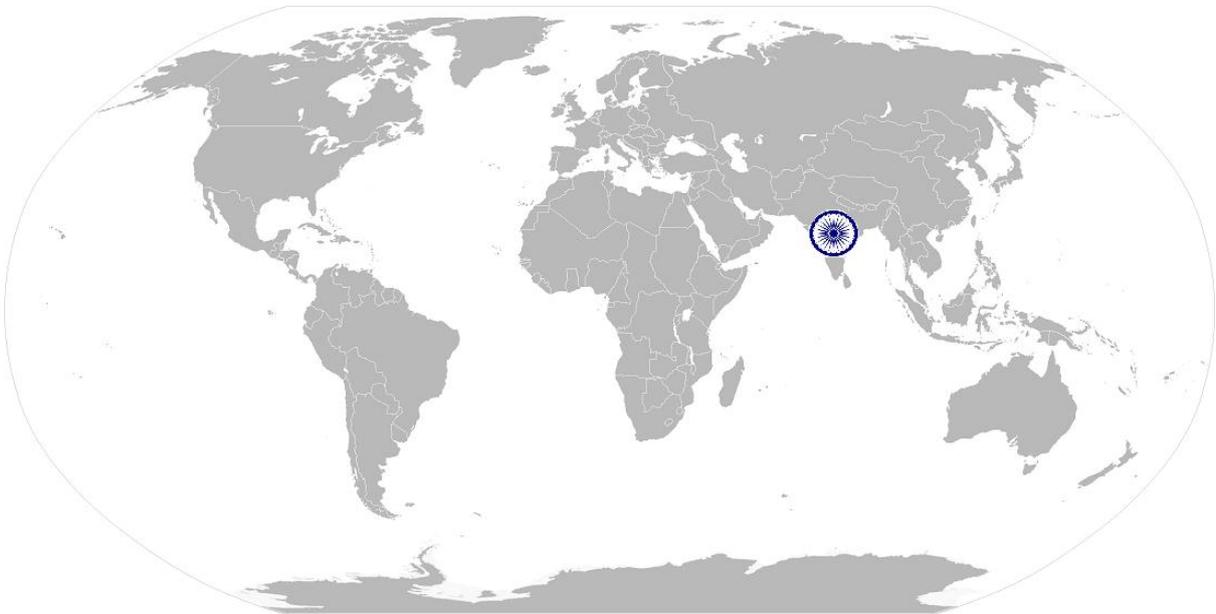
Overview

This unit is about creating and adding textures to models to create precise photo-realistic models that can be used for animation

National Occupational Standard

Unit Code	MES/ N 2503
Unit Title (Task)	Add textures to models
Description	This OS unit is about creating and adding textures to models to create precise photo-realistic models that can be used for animation

Scope	This unit/task covers the following:
	
	• Create textures for human, animal, character, location, set and props etc. which may include organic and inorganic surfaces such as:
	   • Bones
	   • Wrinkles
	   • Bricks
	   • Ground
	   • Rust
	   • Wood
	   • Tiles
	   • Plastic
	   • Paper
	   • Metal
	   • Food
	   • Water
	   • Fire
	   • Skin and Eyes
	   • Walls and ceiling
	   • Imaginary

Performance Criteria (PC) w.r.t. the Scope

Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Visualise possibilities for adding textures to models to create photo-realistic models/images PC2. Develop and add textures to models in accordance to the design brief and concept art for different types of models PC3. Understand the final exhibition medium and adapt the textures accordingly PC4. Manage quality of textures during the animation process and ensure uniformity and consistency in the final output

Knowledge and Understanding (K)

A. Organizational Context (Knowledge of the	The user/individual on the job needs to know and understand: KA1. The creative vision and elements of production

company / organization and its processes)	KA2. The production pipeline/schedule and timelines KA3. The medium on which the product will be exhibited
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. The principles of Colour theory and ways in which it can be explored to meet the needs of the production KB2. Lighting properties and concepts like three point lighting, Blinn, Lambert, transparency, self-illumination, glow, bump, displacement, reflection, refraction etc. KB3. Techniques and workflow of UV mapping KB4. Techniques of texture mapping, projection and managing texture seams KB5. Techniques of drawing, painting and sculpting KB6. Fundamentals of photography/lighting (would be an added advantage) KB7. Fundamentals of modeling, multi-pass rendering and lighting KB8. How to apply colour effects such as colour tones, textures, matte etc. KB9. Properties of different types of surfaces such as wood, glass, plastic, leather, metal etc. and native materials for rendering (for Vray, MentalRay etc.) KB10. How different types of surfaces react to varying lighting conditions KB11. How to work on software such as Autodesk Maya, Photoshop, 3D Studio Max, Blender, Mud Box, Zbrush, Mari, Renderman Shader scripting etc. and render plug-ins like renderman, air, vray etc. KB12. How to create photo-realistic textures consistent with the creative look of the production and in accordance to the design brief KB13. How to test the textures using light reaction turnarounds tests, location study of the environment etc. KB14. How to optimise or enhance textures as per the needs of production KB15. The basics of modeling to understand the surface flow and create textures without stretching KB16. Fundamentals of scripting (added advantage) KB17. The sources for research and reference material KB18. Applicable copyright norms and intellectual property rights KB19. Applicable health and safety guidelines
Skills (S) (Optional)	
A. Core Skills/ Generic Skills	**Writing Skills**
	The user/individual on the job needs to know and understand how to: SA1. Document notes on the texture specifications to be complied with during the texturing process
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Keep apprised of the techniques applied by other artists to create photo-

	realistic textures
	SA3. Gather references and drawings to compare with real-life textures
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. Understand the design brief and textures that need to be created from the Art Director SA5. Collaborate with lighting artists and compositors to ensure that the final product matches quality standards SA6. Present the textured models to the Art Director and solicit feedback
B. Professional Skills	**Plan and Organize**
	The user/individual on the job needs to know and understand how to: SB1. Plan and prioritise work according to the requirements and agreed timelines
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB2. Identify any creative problems that may arise during the production and find solutions to address them

NOS Version Control

NOS Code	MES / N 2503		
Credits(NVEQF/NVQF/NSQF) [*OPTIONAL*]	TBD	**Version number**	01
Industry	Media and Entertainment	**Drafted on**	16/07/13
Industry Sub-sector	Animation, Gaming	**Last reviewed on**	30/07/13
		Next review date	08/08/13