

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR MEDIA AND ENTERTAINMENT INDUSTRY

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



Contents

1. Introduction and Contacts.....P.1
2. Qualifications Pack..... P.2
3. OS Units.....P.2
4. Glossary of Key TermsP.3
5. Annexure: Nomenclature for QP & OS...P.6

Introduction

Qualifications Pack-Animator

SECTOR: MEDIA AND ENTERTAINMENT

SUB-SECTOR: Animation, Gaming

OCCUPATION: Animator

REFERENCE ID: MES/ Q 0701

Animator in the Media & Entertainment Industry is also known as Flash Animator/ 3D Animator/ Flash Shadow Artist

Brief Job Description: Individuals at this job need to refer to concept artwork prepared by animation artists to produce a sequence of 2D/3D images using animation software

Personal Attributes: This job requires the individual to know the fundamentals of life drawing including human anatomy, emotions, actions and expressions. The individual must know and keep updated on graphics and animation software and apply principles of design, animation and film-making to create animation sequences. The individual must be able to collaborate and work effectively as a member of a team to deliver work-products within requisite timelines.

Job Details	Qualifications Pack Code	MES/ Q 0701		
	Job Role	Animator This job role is applicable in both national and international scenarios		
	Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	01
	Sector	Media and Entertainment	Drafted on	16/07/13
	Sub-sector	Animation, Gaming	Last reviewed on	30/07/13
	Occupation	Animator	Next review date	08/08/13

Job Role	Animator
Role Description	Producing a sequence of 2D/3D images using animation software
NVEQF/NVQF level	4
Minimum Educational Qualifications	Class X and above
Maximum Educational Qualifications	Graduation in Fine arts or equivalent
Training (Suggested but not mandatory)	Study of fundamentals & principles of Animation Training on 2D/3D Software Tools Course in Fine Arts Animation foundation course covering body mechanics, advance acting skills etc.
Experience	0-1 years Trainee Animator/ Junior Animator 1-3 years Animator
Applicable National Occupational Standards (NOS)	<p>Compulsory:</p> <ol style="list-style-type: none"> MES / N 0701 (Understand Animation Requirements) MES / N 0702 (Conceptualise Creative Ideas for Production) MES / N 0703 (Plan Tools and Workflow) <p>Optional:</p> <ol style="list-style-type: none"> MES / N 0704 (Produce 2D Animation) MES / N 0705 (Produce 3D Animation) MES / N 0706 (Produce Stop Motion Animation)
Performance Criteria	As described in the relevant OS units

Definitions

Keywords /Terms	Description
Animatic	Animatic is a story-board for animation which includes an series of images edited together with dialogues and sound
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
Composition	Composition is the positioning of the character with respect to the background and camera
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
Modeling	Modeling 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
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 3 qualifications pack.

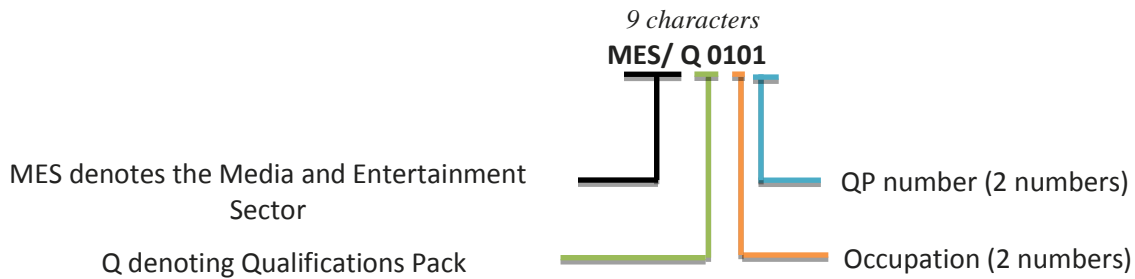
Qualifications Pack(QP)	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an Occupational Standard, 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

Acronyms

Annexure

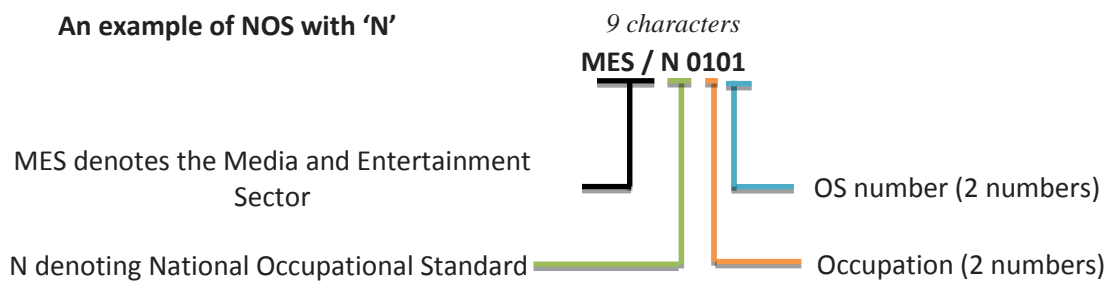
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



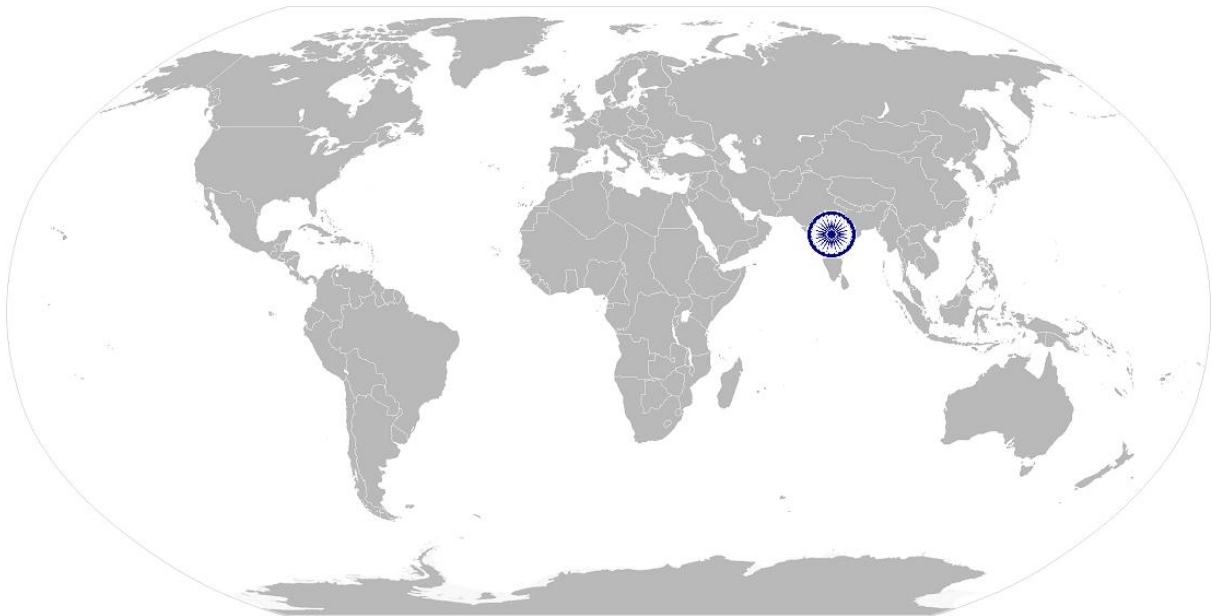
[Back to top...](#)

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 QP or NOS	Q
Next two numbers	Animator	07
Next two numbers	QP number	01

National Occupational Standard



Overview

This unit is about understanding the project brief, product requirements and methodology/technique(s) to be used for production

Unit Code	MES/ N 0701
Unit Title (Task)	Understand Animation Requirements
Description	This OS unit is about understanding the project brief, product requirements and methodology/technique(s) to be used for production
Scope	<p>This unit/task covers the following:</p> <p>Understanding the following from the Director and Art Director:</p> <ul style="list-style-type: none"> • Objective • Concept/style of animation • Script • Storyboard and Animatic • Do's and don'ts for Animation  <ul style="list-style-type: none"> • Target audience • Project Pipeline/ asset management/ scheduling and activities • Project timelines and constraints • Production brief/ key milestones for delivery • Creative brief/Desired look of the end-product – using similar projects for reference • Quality standards to be maintained • Technical details like aspect ratio, output format • List of deliverables and their respective output format <p>Understanding the type of end-product that needs to be produced</p> <ul style="list-style-type: none"> • Film • Television series • Mobile/Tablet/ Handheld episodes • Advertisement • Education content/ edutainment • Work-products for the Internet • Promotional material/Corporate presentations • Game art (Player Animation, Environment Animation, Background etc.) • Simulation 3D • Augmented reality • Industry specific content such as Scientific Animation, Legal, Architecture, Medical, Research wings of Armed forces etc. • Specifics for delivery with respect to the web/mobile platform <p>Selecting the animation technique(s) to be used:</p> <ul style="list-style-type: none"> • 2D animation <ul style="list-style-type: none"> • Cell Animation e.g. early episodes of Tom and Jerry (series) • Cut out animation e.g. Charlie and Lola (series)

MES/ N

Understand Animation Requirements

	<ul style="list-style-type: none"> • Limited Animation e.g. South Park, Empire Square (series) • 3D Animation <ul style="list-style-type: none"> • Realistic 3D Animation e.g. Beowulf, Avatar, Gollum (movies) • Semi-realistic e.g. Little Krishna, Brave (movies) • Toon animation e.g. Kung-fu Panda (movie) • Simulation of traditional & stop motion techniques e.g. Vineta Cucini and Amaron Battery (advertisements, Flushed Away (movie)) • Stop-motion animation • VFX • Stereo Conversion
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Understand, clarify and agree on the project brief from the Director, Art Director and Supervisors</p> <p>PC2. Understand various parameters of the end-product that would influence production requirements (e.g. duration, style, number of characters, storyline, effects required, format, music etc.)</p> <p>PC3. Understand the treatment of the output that needs to be produced and the volume of the final output</p> <p>PC4. Understand the shot sequence (high-level) and continuity/consistency required</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. The objective/purpose that the end-product intends to achieve</p> <p>KA2. The needs and expectations of the Producer/project sponsor</p> <p>KA3. The expectations of the Director, Art Director and Supervisor with respect to the process and techniques to be used</p> <p>KA4. Limitations on the time and resources and issues that might arise during production</p> <p>KA5. The animation process and technical pipeline to be followed for animation</p> <p>KA6. The format of the end-product and the medium on which it would be exhibited</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. The fundamentals and principles of animation</p> <p>KB2. The principles of animation, Posing and character emotion</p> <p>KB3. The basic rules of animation including squash and stretch, anticipation, staging, straight action, pose-to-pose, follow-through, overlapping action,</p>

MES/ N 0701

Understand Animation Requirements

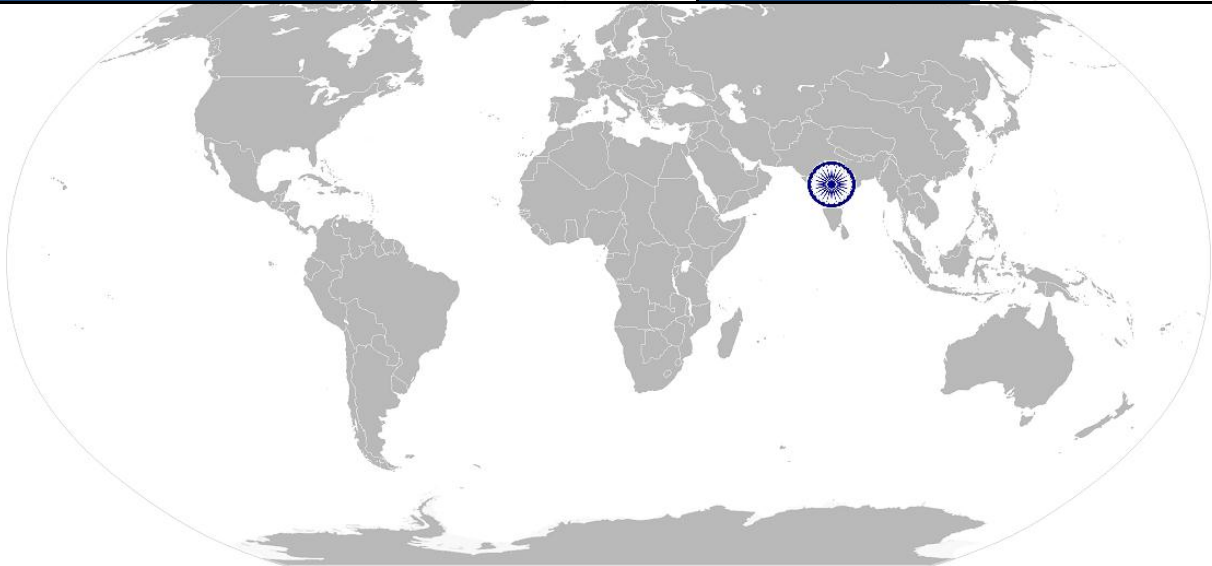
	<p>ease in ease out, exaggeration, timing, appeal and secondary action</p> <p>KB4. Life drawing including human anatomy, emotions, actions and expressions</p> <p>KB5. Production concepts and their applicability to each project</p> <p>KB6. The various techniques available for animating objects</p> <p>KB7. How to observe, act and emote</p> <p>KB8. The technical aspects of the job undertaken by other members of the production team (before and after the work of an animator)</p> <p>KB9. Applicability of various techniques to post production of each project</p> <p>KB10. Intellectual property rights to ensure that the end-product, elements, artwork etc. created is unique and does not infringe upon the rights of other products</p>
Skills (S) (Optional)	
A. Core Skills/ Generic Skills	Writing Skills
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA1. Document the project brief that can serve as a reference document for circulation to the production team (Supervisor)</p> <p>SA2. Document decisions on the technique to be used and reasons thereof (Supervisor)</p> <p>SA3. Document other areas (e.g. requirements of the target audience, market, end-product, reference links, videos etc.) that may be relevant for the production team</p> <p>SA4. Document notes on the project brief, techniques and other useful information for personal use (team)</p>
	Reading Skills
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. Read and understand the script and determine animation requirements (including specifics of the characters, country, culture etc.)</p> <p>SA6. Read about emerging techniques in animation and update skills accordingly</p> <p>SA7. Read and understand the comments given by the supervisor, director or customer</p> <p>SA8. Research the various types of end-products that have been produced and are available in the public domain</p>
	Oral Communication (Listening and Speaking skills)
<p>The user/individual on the job needs to know and understand how to:</p> <p>SA9. Understand, clarify and agree on the project brief and parameters of the end-product with the Producer and Director</p> <p>SA10. Discuss and agree on the technique to be used with the Director and Art Director</p> <p>SA11. Communicate the project brief effectively to team members, other animators and members from various departments involved in the animation process (Supervisor)</p> <p>SA12. Clarify needs and communicate with clients (knowledge of English is preferred)</p>	

MES/ N 0701

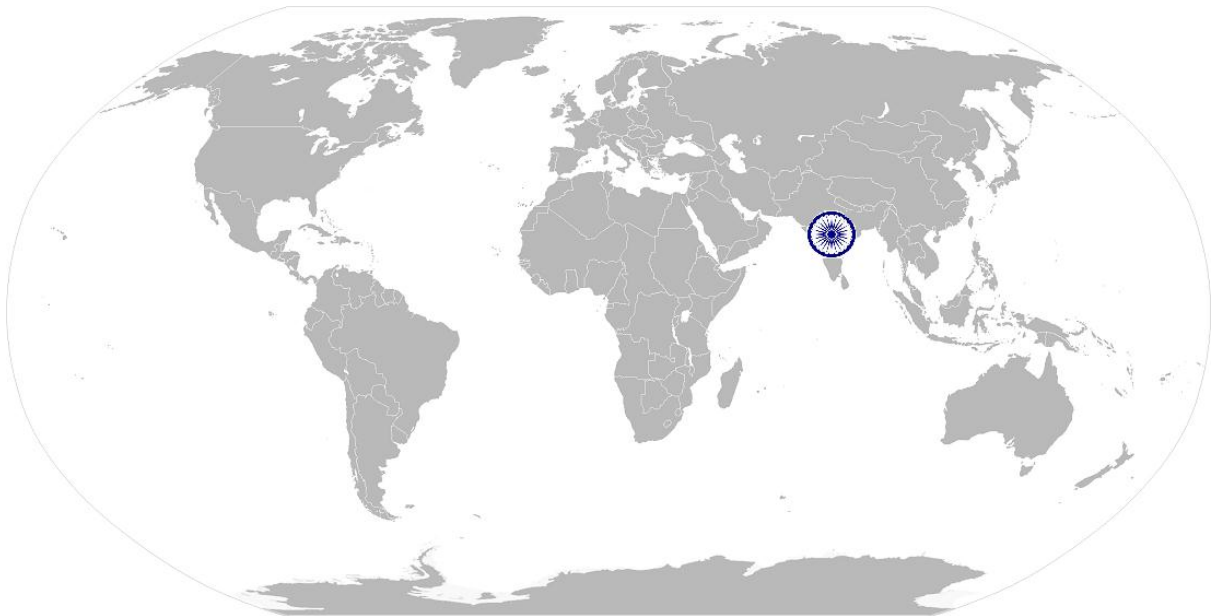
Understand Animation Requirements

NOS Version Control

NOS Code	MES/ N 0701		
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



National Occupational Standard




Overview

This unit is about detailing the creative and design aspects of production

MES/ N 0702

Conceptualise Creative Ideas for Production

National Occupational Standard

Unit Code	MES/ N 0702
Unit Title (Task)	Conceptualise Creative Ideas for Production
Description	This OS unit is about detailing the creative and design aspects of production
Scope	<p>This unit/task covers the following:</p> <p>Gather visual references that could serve as aids during the animation process, including:</p> <ul style="list-style-type: none"> • Previously executed animation work-products • Animations products available in the public domain • Artwork • General Human, Animal and creature behavioral video references <p>Conceptualise creative ideas for animation using the concept art-work prepared by the designers, including the following:</p> <ul style="list-style-type: none"> • Character's look, colors, dressing, attitude and behavior • Character expressions, emotions, poses • Character movements (e.g. walk, run, jump etc.) and timing (acting and body mechanics) • Shadow placement 
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Research and find character references that would aid and inspire designs</p> <p>PC2. Generate creative concepts and ideas for production using visualization and using references from the concept art-work prepared by the designers, drawing from imagination, acting and performing</p> <p>PC3. Present ideas to the Director, Art Director and Supervisors</p> <p>PC4. Agree on the style of the work-product that would most appeal to the target audience in sync with the schedule and show requirement</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. The guidelines provided by the Director, Animation Supervisor and the Producer with respect to characters and look and feel of the end-product</p> <p>KA2. The elements/concept artwork (prepared by the Character Designers and the Background/Layout designers) and the colour/lighting/shadow keys (prepared by the art director, colour key artists)</p>

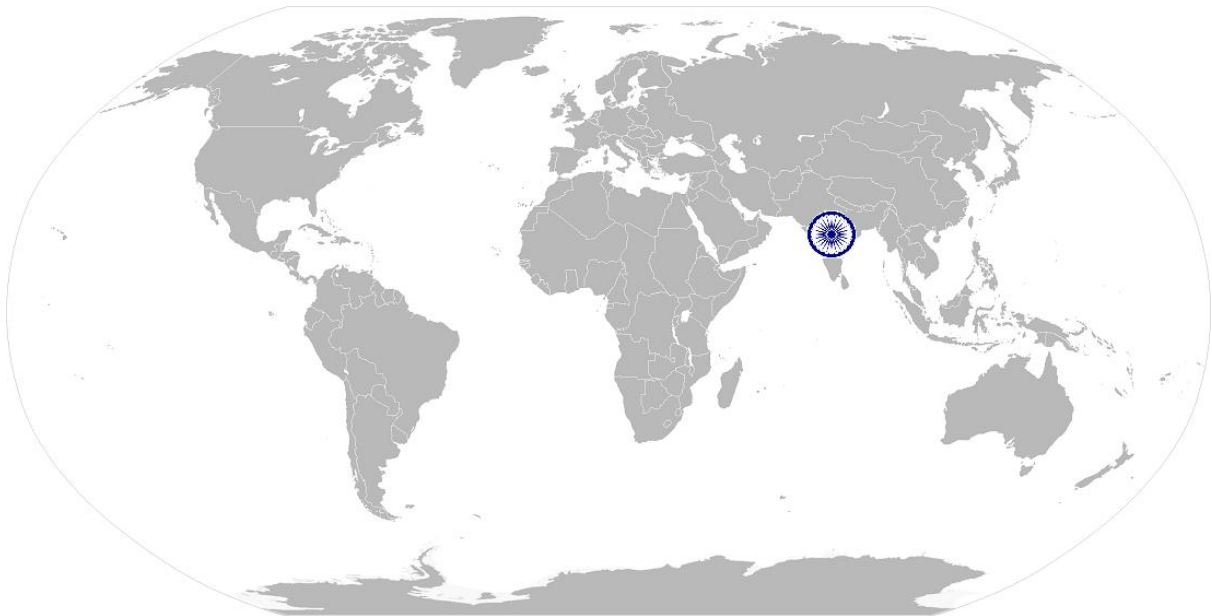
its processes)	KA3. The resources that are going to be used for production
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. The trends in animation and reference work-products produced before that closely relate to the style and technique that needs to be produced</p> <p>KB2. How to observe and study human behavior and expressions to help visualise concepts</p> <p>KB3. How to enact and emote</p> <p>KB4. How to create hook up poses and animation</p> <p>KB5. How to use camera angles to emphasize performance</p> <p>KB6. New media technology including what is good for the web, mobile, tablets</p> <p>KB7. How to evaluate the strengths and weaknesses of the hardware, software being used in the production pipeline</p>
Skills (S) (Optional)	
A. Core Skills/ Generic Skills	Writing Skills
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA1. Document links, animation videos, artwork etc. that can be used as references during the production process</p> <p>SA2. Document character profiles and background descriptions, to help present to Directors and supervisors, and guide the production process</p>
	Reading Skills
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. Interpret the storyboard/animatic correctly and understand the mood of the sequence/shot</p> <p>SA4. Research visual and written content to find appropriate references to be used during animation</p> <p>SA5. Keep apprised of the trends and work-products that are being produced in the market</p>
	Oral Communication (Listening and Speaking skills)
<p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. Suggest creative ideas to the Director and Animation supervisor</p> <p>SA7. Communicate clearly and collaborate effectively with colleagues from various departments</p>	

MES/ N 0702

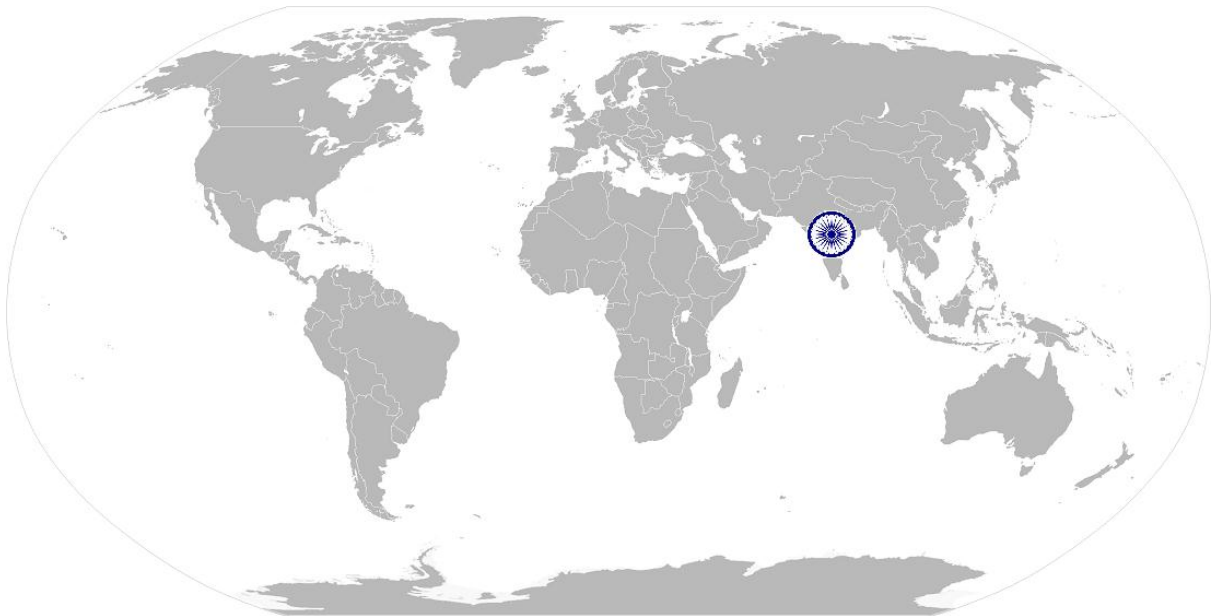
Conceptualise Creative Ideas for Production

NOS Version Control

NOS Code	MES/ N 0702		
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

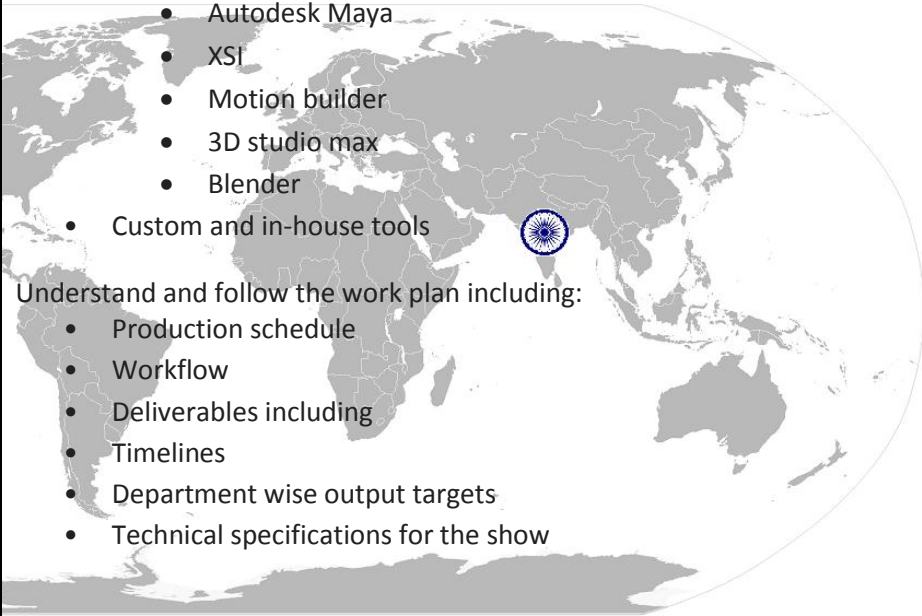


National Occupational Standard



Overview

This unit is about selecting the most appropriate software tool(s) for production and planning the workflow for animation

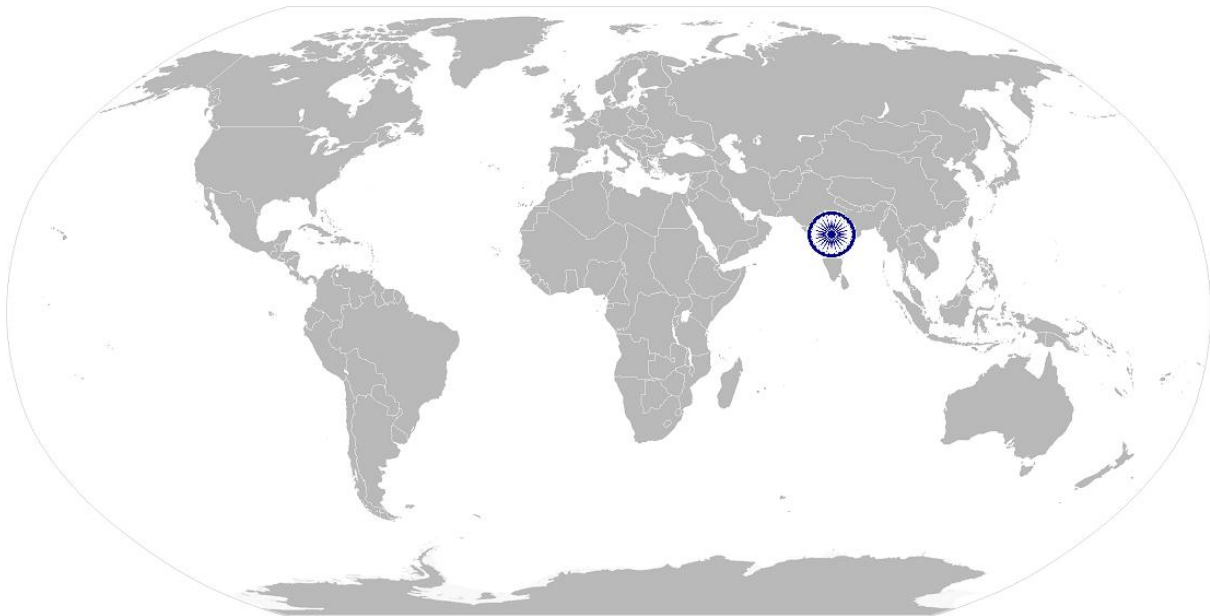
Unit Code	MES/ N 0703
Unit Title (Task)	Plan Tools and Workflow
Description	This OS unit is about selecting the most appropriate software tool(s) for production and planning the workflow for animation
Scope	<p>This unit/task covers the following:</p> <p>Understand the software tool(s) to be used for production, including:</p> <ul style="list-style-type: none"> • 2D animation <ul style="list-style-type: none"> • Toon boom Harmony • Adobe Flash • Hand-drawing • 3D animation <ul style="list-style-type: none"> • Autodesk Maya • XSI • Motion builder • 3D studio max • Blender • Custom and in-house tools <p>Understand and follow the work plan including:</p> <ul style="list-style-type: none"> • Production schedule • Workflow • Deliverables including • Timelines • Department wise output targets • Technical specifications for the show 
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Stay apprised of the various types of software tools available for production in the market</p> <p>PC2. Evaluate timelines for production in accordance to the production schedule (supervisor)</p> <p>PC3. Read, follow and update the production workflow/schedule, deliverables and timelines with the Director, Art Director and Supervisors</p> <p>PC4. Research and Suggest the best tool for the show</p>

Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. The production process followed by the organization KA2. The production team and their individual roles and capabilities KA3. The standards for quality set by the organization KA4. The production process and creative brief
B. Technical Knowledge	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KB1. The software tools and equipment available in-house and/or through third-party providers KB2. The nuances of various tools and how to suggest the best tool suitable for the production KB3. Traditional drawing tools and techniques KB4. How to plan a shot-break-up KB5. How to prepare a production schedule, including a break-up of activities that would need to be performed and deliverables that would need to be produced (supervisor) KB6. How to estimate the expected effort, expected time for production and delivery keeping in mind the delivery dates, quality standards and project schedule (supervisor) KB7. The principles of project management like Project planning, scheduling, effort estimation, resource requirements (right from people to machines, space and communication tools) KB8. Risk and Mitigation planning KB9. Rework and review management (efficiency and effectiveness) KB10. Techniques to identify trends in rework and propose/implement corrective action KB11. CPM and PERT techniques KB12. Configuration Management KB13. The technical aspects of the job undertaken by other members of the production team (before and after the work of an animator) KB14. How to prepare a detailed work plan and demarcate roles and responsibilities to members of the production team (supervisor)
Skills (S) (Optional)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/individual on the job needs to know and understand how to: <ul style="list-style-type: none"> SA1. Prepare the work-plan (production plan and schedule) in an appropriate format that can be used as a reference point for planning workflow and assigning responsibilities(supervisor) SA2. Track the workflow on a regular basis and document deviations from timelines (supervisor)

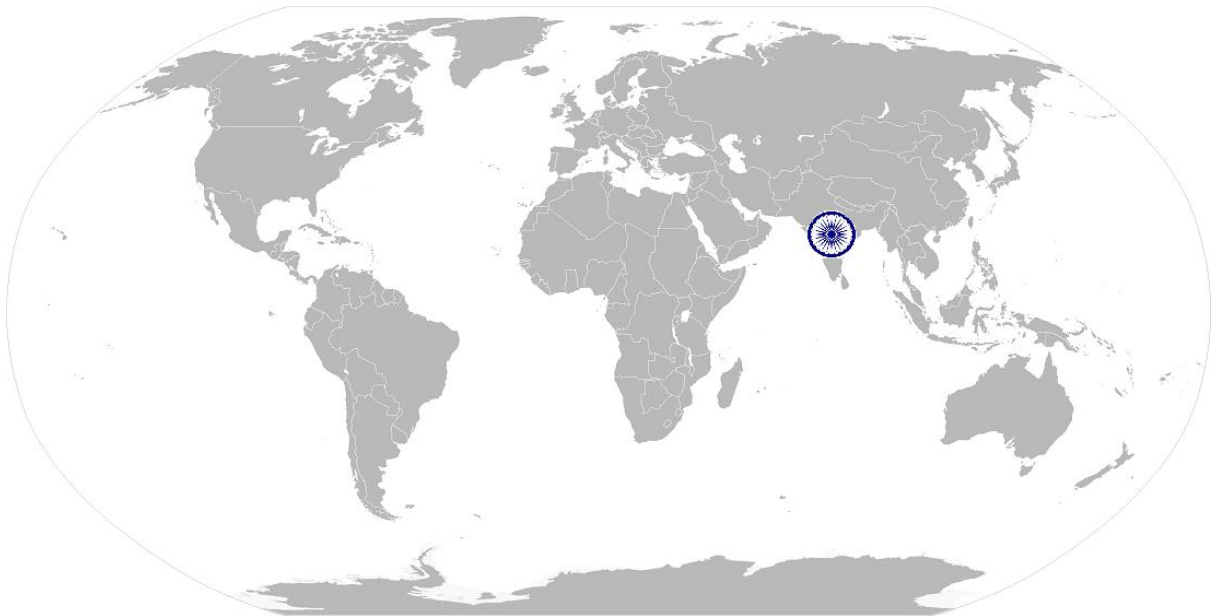
	<p>SA3. Create and present project status reports SA4. Write in English (added advantage)</p>
	<p>Reading Skills</p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. Keep apprised of the various software tools that are being used to produce animation SA6. Read and understand the software manuals and help tools, where required SA7. Read and understand the production and creative brief prepared by the Director and Art Director SA8. Read and understand notes, instructions and inputs from clients SA9. Read in English (added advantage)</p>
	<p>Oral Communication (Listening and Speaking skills)</p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA10. Clarify the production and creative brief from the Director, Art Director and Supervisors SA11. Understand the production specifications and quality standards to be maintained SA12. Discuss and agree upon the software tools to be used for production SA13. Discuss and agree upon the production schedule and work plan SA14. Communicate effectively with team members to demarcate workflow and responsibilities SA15. Seek clarifications on the work plan from Supervisors</p>
B. Professional Skills	<p>Plan and Organize</p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. Assess the effort, duration and cost involved for each work activity SB2. Plan the production workflow, timelines and deliverables SB3. Agree on the roles and responsibilities of the team members SB4. Foresee the risks, issues and challenges that might arise during the production environment and plan accordingly</p>

NOS Version Control

NOS Code	MES/ N 0703		
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



National Occupational Standard



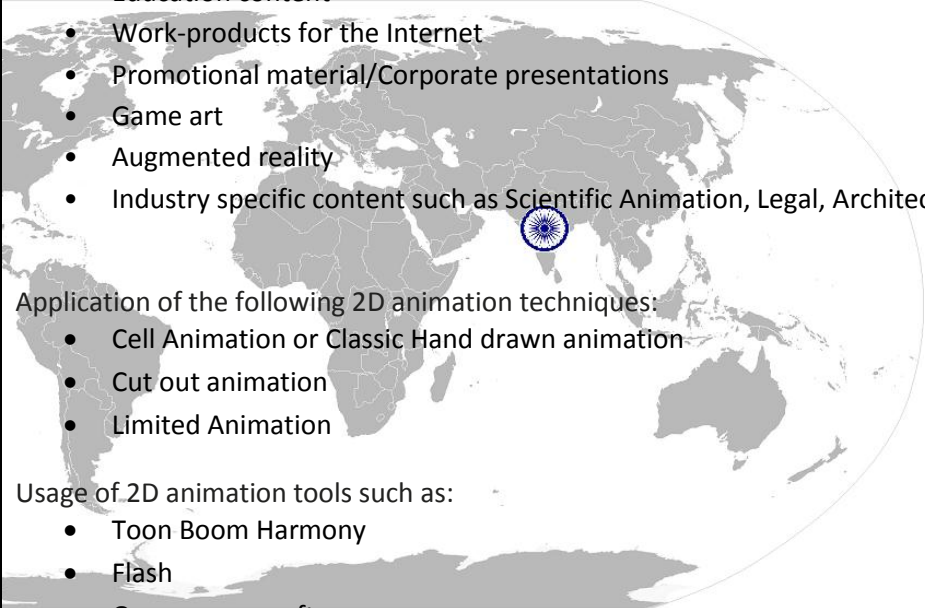
Overview

This unit is about producing a set of 2D animated images, based on the storyboard that would create an illusion of movement once played back in a sequential manner

MES/ N 0704

Produce 2D Animation

National Occupational Standard

Unit Code	MES/ N 0704
Unit Title (Task)	Produce 2D Animation
Description	This OS unit is about producing a set of 2D animated images, based on the storyboard that would create an illusion of movement once played back in a sequential manner.
Scope	<p>This unit/task covers the following:</p> <p>Preparation of a prototype 2D work product/pre-visualisation for review</p> <p>Preparation of the following 2D animation end-products:</p> <ul style="list-style-type: none"> • Film • Television series • Advertisement • Education content • Work-products for the Internet • Promotional material/Corporate presentations • Game art • Augmented reality • Industry specific content such as Scientific Animation, Legal, Architecture etc. <p>Application of the following 2D animation techniques:</p> <ul style="list-style-type: none"> • Cell Animation or Classic Hand drawn animation • Cut out animation • Limited Animation <p>Usage of 2D animation tools such as:</p> <ul style="list-style-type: none"> • Toon Boom Harmony • Flash • Open source software 
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Apply principles of design, 2D animation and film-making to create sequences and scenes/shots</p> <p>PC2. Apply varied techniques and styles based on the requirement</p> <p>PC3. Follow the storyboard for composition i.e. positioning of the character with respect to the background and camera to create the desired animation</p> <p>PC4. Draw/source key frame drawings to establish a reference point for strong poses</p> <p>PC5. Use graphics and animation software to produce in-between poses for animation</p>

	<p>PC6. Create shadows for animation using pre-defined lighting keys</p> <p>PC7. Incorporate audio/music assets</p> <p>PC8. Bring assets together to produce sequences and scenes/shots as per requirements and ensuring continuity</p> <p>PC9. Ensure that the hook-up/transition from one scene to another is done properly</p> <p>PC10. How to work with layers and get a good perspective view</p> <p>PC11. Ensure that the work-products meet quality standards (so that they can be approved with minimum iterations) and are delivered within the requisite timelines</p> <p>PC12. Organise, store and manage work-products into file formats using standard file naming conventions and maintain assets for further use</p> <p>PC13. How to achieve the required output targets</p> <p>PC14. Train junior animators to improve their quality ability to deliver within given timelines</p> <p>PC15. Work effectively within the team and with other departments, namely, assets, lighting and effects</p> <p>PC16. Critically review animation produced, keeping in mind the creative and design specifications and producer brief</p> <p>PC17. Refine the output based on deviations observed and/or modifications required within requisite timelines</p>
<p>Knowledge and Understanding (K)</p>	
<p>A. Organizational Context (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. The objective/purpose that the end-product intends to achieve</p> <p>KA2. Responsibilities and scope of work for various departments</p> <p>KA3. The expectations of the Client, Director, Animation Supervisor and the Producer with respect to the process, techniques to be used and guidelines with respect to characters and look and feel of the end-product</p> <p>KA4. Limitations on the effort, schedule, resources and issues that might arise during production</p> <p>KA5. The production requirements and quality that needs to be reflected in the final output</p> <p>KA6. The timelines within which the product needs to be delivered</p>
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. The fundamentals and principles of Animation and film-making</p> <p>KB2. Life drawing including human anatomy, emotions, actions and expressions</p> <p>KB3. How to enact and emote; and thereby animate characters in accordance to the demands of the script and animatic</p> <p>KB4. Principles of movement and timing</p> <p>KB5. How to work with graphics and animation software including Adobe Flash, Harmony and understand their specifics</p> <p>KB6. Design standards and specifications that needs to be complied with to produce the final output</p> <p>KB7. The interaction between various characters in a given scene and bring out that dynamic in the animation</p>

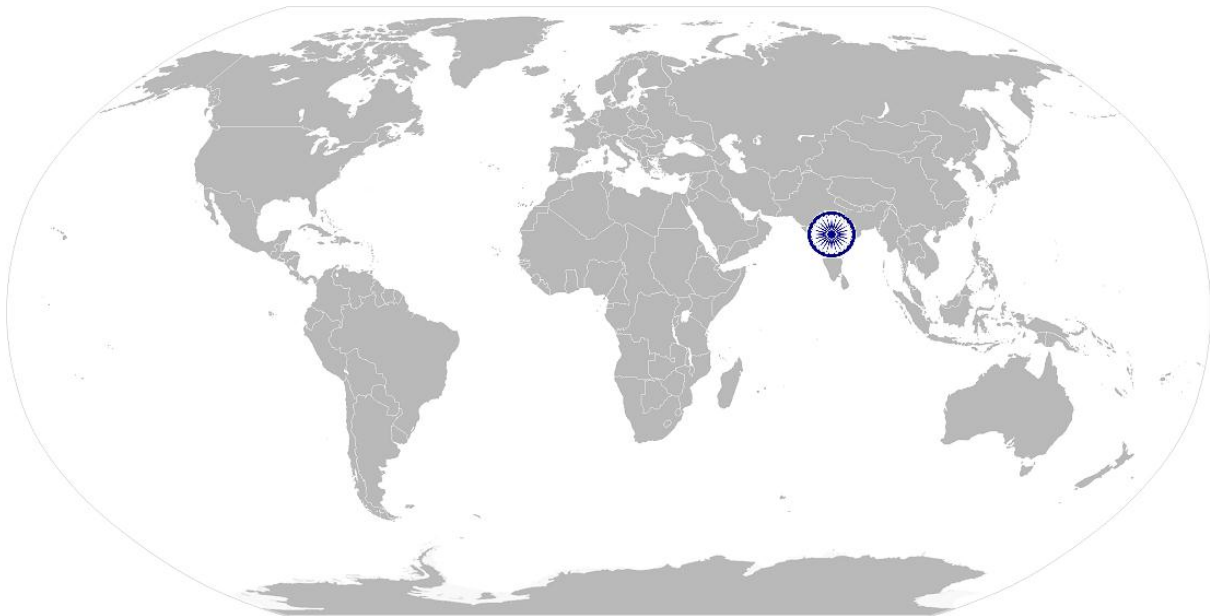
	KB8. Applicable health and safety guidelines
Skills (S) (Optional)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/individual on the job needs to know and understand how to: SA1. Report output, efforts and schedule taken to complete the allotted task
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Read and understand the script and character descriptions SA3. Read the work plan and production schedule to ensure that progress is in line
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. Suggest creative ideas to the Director and Animation supervisor SA5. Communicate clearly and collaborate effectively with colleagues who are working with the previous or next scenes/shots SA6. Understand the modifications required from the Director, Animation supervisor and Producer SA7. Discuss the challenges faced during production and discuss ways to address SA8. such challenges in future projects
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Make decisions in order to be able to work collectively and independently, where required
	Plan and Organize
	The user/individual on the job needs to know and understand: SB2. Understand shot break up and plan effort and time required for each element of the shot SB3. How to plan and prioritise individual timelines and deliver on schedule SB4. Work effectively as a member of the team and help realise overall timelines SB5. Prioritise work-products and tasks based on requirements
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB6. Address comments and make changes SB7. Seek assistance and guidance from the Director, Art Director and Supervisors, where required
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB8. Improve work-products and performance based on feedback received and through self-appraisal SB9. Understand the perspective of Client, Director, Art Director and Supervisors and apply it to the animation being produced

MES/ N 0704

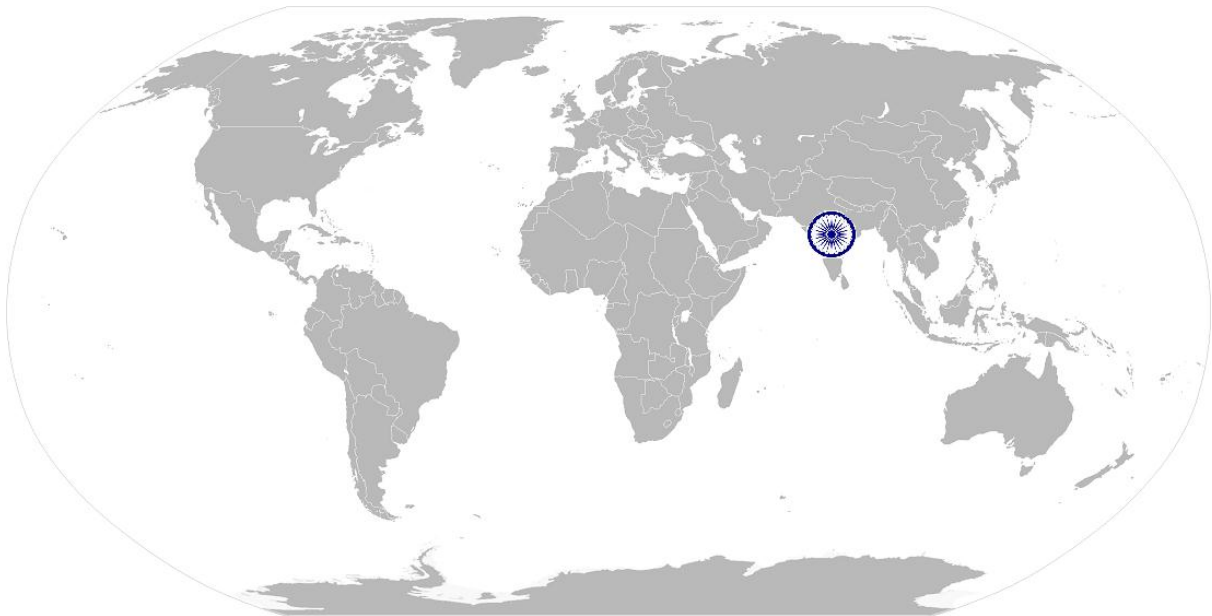
Produce 2D Animation

NOS Version Control

NOS Code	MES/ N 0704		
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



National Occupational Standard



Overview

This unit is about animating 3D models using relevant techniques, based on the storyboard

Unit Code	MES/ N 0705
Unit Title (Task)	Produce 3D Animation
Description	This OS unit is about animating 3D models using relevant techniques, based on the storyboard
Scope	<p>This unit/task covers the following:</p> <p>Preparation of a prototype work product/pre-visualisation for review</p> <p>Preparation of the following 3D animation end-products:</p> <ul style="list-style-type: none"> • Film • Television series • Advertisement • Education content • Work-products for the Internet • Promotional material/Corporate presentations • Game art • Augmented reality • Industry specific content such as Scientific Animation, Legal, Architecture etc. <p>Application of the following 3D animation techniques:</p> <ul style="list-style-type: none"> • Realistic 3D Animation (Motion capture + Key frame animation) e.g. in movies such as Beowulf, Avatar and Gollum • Semi-realistic e.g. in movies such as Little Krishna and Brave • Toon animation e.g. Kung-fu Panda • Simulation of traditional & stop motion techniques e.g. advertisements such as vineta cucini, amaron battery etc. <p>Usage of 3D animation tools such as:</p> <ul style="list-style-type: none"> • Autodesk Maya • XSI • 3D studio max • Blender • Motion Capture tools like marker tracking cameras and Inertial suits

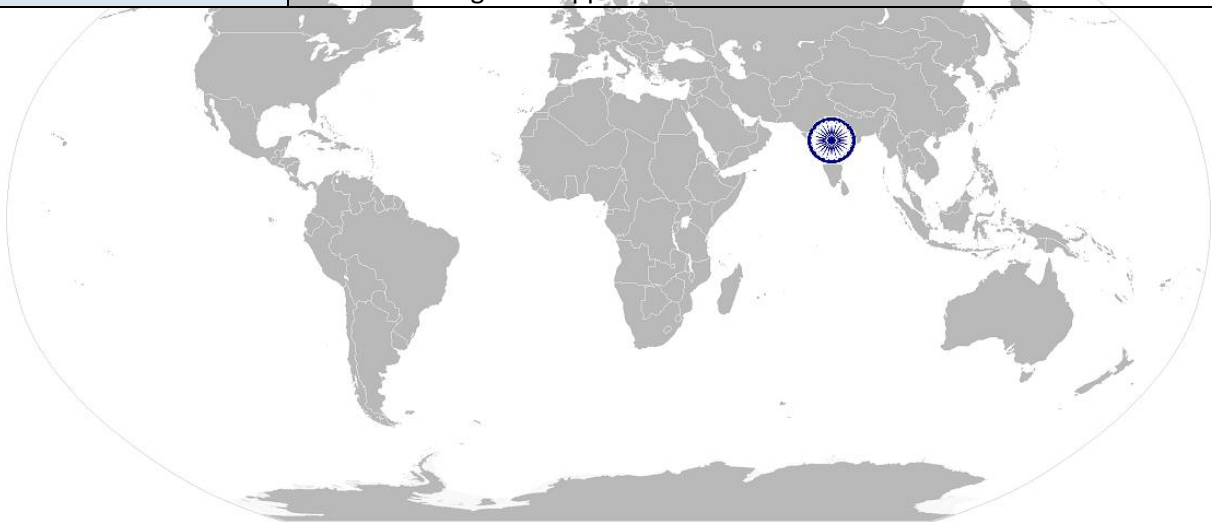
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
	<p>To be competent, the user/individual on the job must be able to:</p> <ul style="list-style-type: none"> PC1. Apply principles of design, 3D animation and film-making to create sequences and scenes/shots PC2. Follow the storyboard for composition i.e. positioning of the character model with respect to the background and camera to create the desired animation PC3. Animate expressions and lip movements to match dialogues and sound PC4. Communicate requirements to camera and lighting for motion capture, where required PC5. Work with motion capture data received from the motion/ performance capture studio (clean up the data and map animation data to 3D models) PC6. Produce 3D movements and performance required using 3D animation software within the agreed timelines PC7. Refine the product until the required creative effect is achieved PC8. Organise, store and manage work-products into file formats using standard file naming conventions and maintain assets for further use PC9. Work effectively within the team and with other departments, namely, design, modeling/rigging, texturing, editing, rendering and compositing PC10. Critically review animation produced keeping in mind the creative and design specifications and producer brief PC11. Refine the output based on deviations observed and/or modifications required within requisite timelines
Knowledge and Understanding (K)	
<p>A. Organizational Context (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KA1. The objective/purpose that the end-product intends to achieve KA2. The profile of the target audience for the end-product KA3. Responsibilities and scope of work expected from the animator KA4. The expectations of the Client, Director, Animation Supervisor and the Producer with respect to the process, techniques to be used and guidelines with respect to characters and look and feel of the end-product KA5. Limitations on the effort, duration, schedule and resources and issues that might arise during production KA6. The production requirements and quality that needs to be reflected in the final output KA7. The timelines within which the product needs to be delivered KA8. The typical processes involved 3D Animation Production i.e. Staging, Blocking, 1st. level Animation, lip-Sync and Facials, Final Animation, Specialised Animation (cloth and hair simulation), Secondary Animation (accessories), Lighting & Rendering, Sfx and Compositing KA9. Applicable health and safety guidelines

<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KB1. Basic/advanced scripting KB2. The fundamentals and principles of 3D Animation, 3D Environments and film-making KB3. Art and visual treatment KB4. Fundamentals of Motion capture and performance capture technologies KB5. Principles of movement and timing KB6. Principles of human/ animal/ character anatomy and how they can be applied to animation KB7. How to observe and study human/ animal/ character behavior and expressions to help visualise concepts KB8. How to enact and emote; and thereby animate characters in accordance to the demands of the script and animatic KB9. Properties of the surfaces that are being used in the animation KB10. How to work with graphics and animation software including Autodesk Maya, Softimage, XSI, 3D studio max and Blender KB11. Design standards and specifications that needs to be complied with to produce the final output KB12. 3D output and delivery formats KB13. Basics of modeling and rigging (added advantage) KB14. Applicable health and safety guidelines
<p>Skills (S) (Optional)</p>	
<p>A. Core Skills/ Generic Skills</p>	<p>Writing Skills</p> <p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> SA1. Report output, efforts and schedule taken to complete the allotted task <p>Reading Skills</p> <p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> SA2. Read and understand the script and character descriptions SA3. Read the work plan and production schedule to ensure that progress is in line SA4. Read and understand the short division, character identification and frames planned during motion / performance capture <p>Oral Communication (Listening and Speaking skills)</p> <p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> SA5. Suggest creative ideas to the Director and Animation supervisor SA6. Communicate clearly and collaborate effectively with colleagues who are working with the previous or next scenes/shots SA7. Understand the modifications required from the Director, Animation supervisor and Producer SA8. Discuss the challenges faced during production and discuss ways to address such challenges in future projects

MES/ N 0705

Produce 3D Animation

B. Professional Skills	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB1. How to plan individual timelines and deliver on schedule SB2. Work effectively as a member of the team and help realise overall timelines SB3. Prioritise work-products and tasks based on requirements SB4. Understand shot break up and plan effort and time required for each element of the shot
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB5. Address comments and make changes SB6. Seek assistance and guidance from the Director, Art Director and Supervisors, where required
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB7. Improve work-products and performance based on feedback received and through self-appraisal

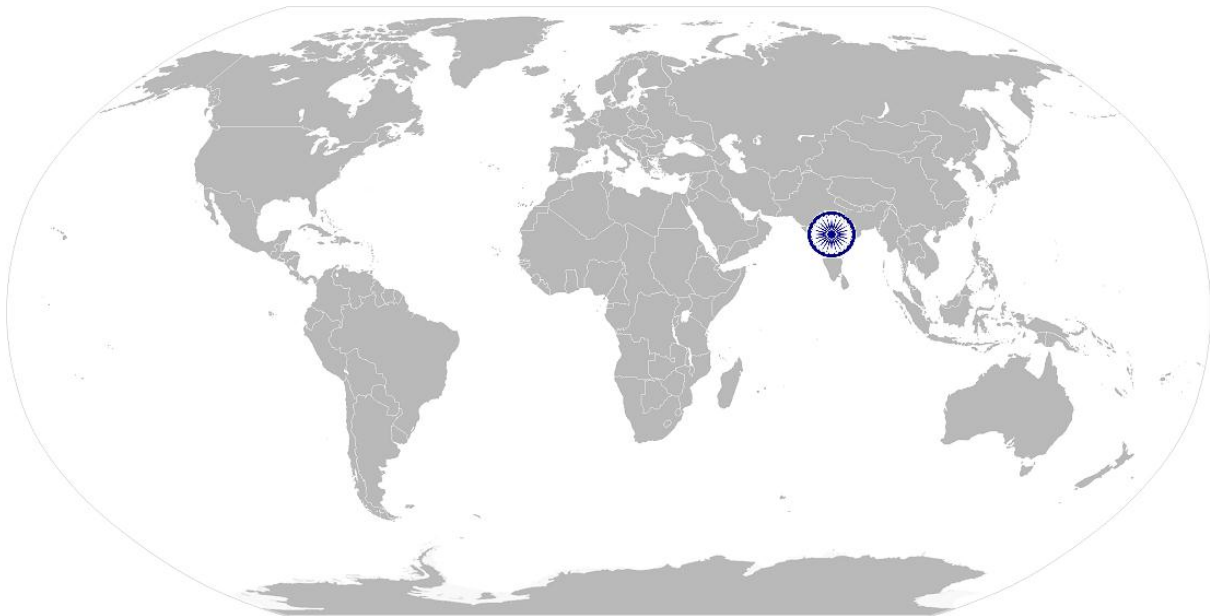


MES/ N 0705

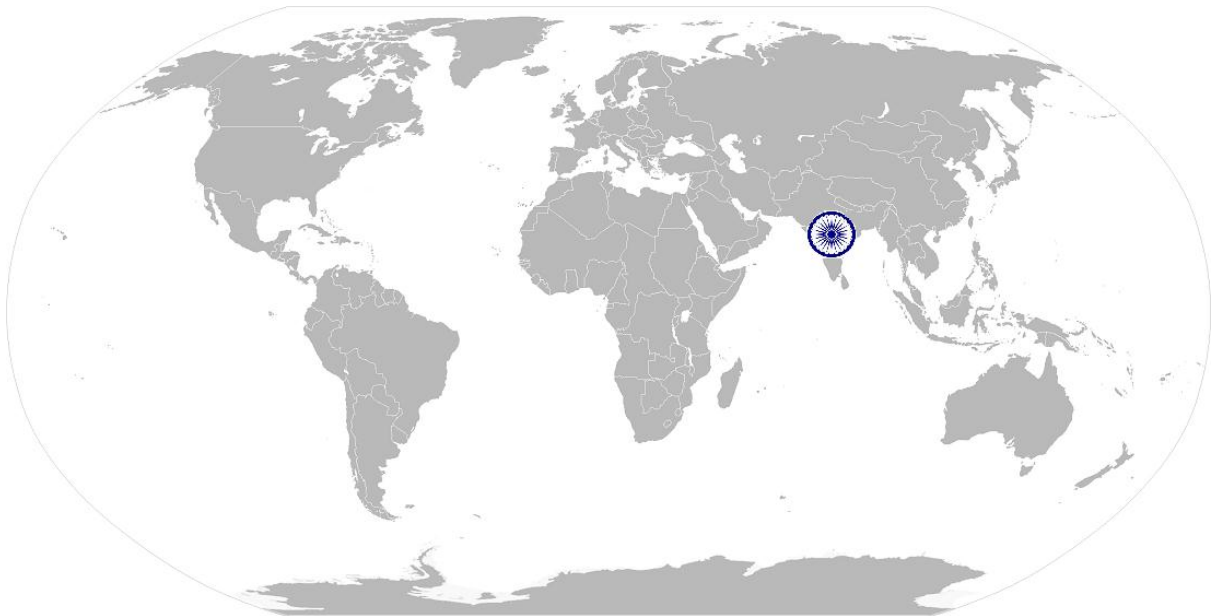
Produce 3D Animation

NOS Version Control

NOS Code	MES/ N 0705		
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



National Occupational Standard



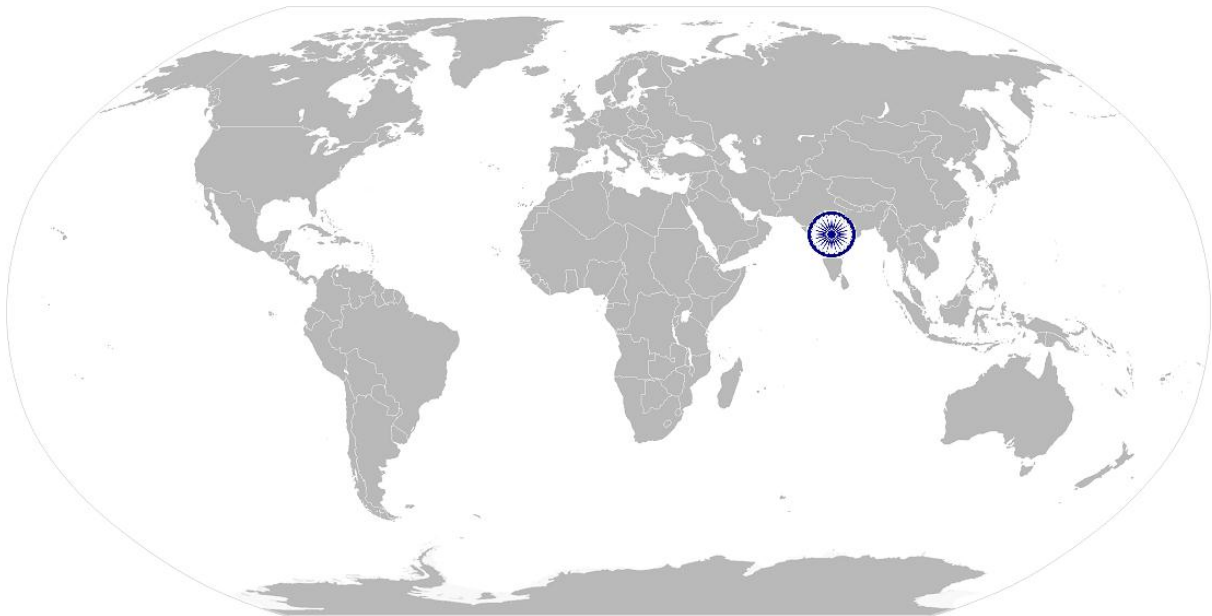
Overview

This unit is about producing stop motion animation using relevant techniques, based on the storyboard

Unit Code	MES/ N 0706
Unit Title (Task)	Produce Stop Motion Animation
Description	This OS unit is about producing stop motion animation using relevant techniques, based on the storyboard
Scope	<p>This unit/task covers the following:</p> <p>Preparation of a prototype work product/pre-visualisation for review</p> <p>Preparation of the following stop motion animation end-products:</p> <ul style="list-style-type: none"> • Film • Television series • Advertisement • Education content <p>Application of the following stop motion animation techniques:</p> <ul style="list-style-type: none"> • Traditional frame-by-frame capture • Claymation • Cut-out • Using Computer-generated tools
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Understand requirements including the way the characters will act/move in accordance to the storyboard</p> <p>PC2. Move characters and Construct/compose a shot in accordance to the script and storyboard</p> <p>PC3. Animate stop motion characters (puppets or models) in accordance to the script and directors instructions</p> <p>PC4. Contribute creative ideas during the animation process</p>
Knowledge and Understanding (K)	
B. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. The objective/purpose that the end-product intends to achieve</p> <p>KA2. The profile of the target audience for the end-product</p> <p>KA3. Responsibilities and scope of work for various departments</p> <p>KA4. The expectations of the Director, Animation Supervisor and the Producer with respect to the process, techniques to be used and guidelines with respect to characters and look and feel of the end-product</p>

	<p>KA5. Limitations on the time and resources and issues that might arise during production</p> <p>KA6. The production requirements and quality that needs to be reflected in the final output</p> <p>KA7. The timelines within which the product needs to be delivered</p>
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. The fundamentals and principles of Animation and film-making</p> <p>KB2. Stop motion animation techniques</p> <p>KB3. Principles of movement and timing</p> <p>KB4. How to develop/portray the character in accordance to the script</p> <p>KB5. Principles of human anatomy and how they can be applied to animation</p> <p>KB6. How to observe and study human behavior and expressions to help visualise concepts</p> <p>KB7. How to enact and emote; and thereby animate characters in accordance to the demands of the script and animatic</p> <p>KB8. Properties of the characters and materials that are being used in the animation</p> <p>KB9. How to work with graphics and animation software including Autodesk Maya, XSI, 3D studio max and Blender</p> <p>KB10. Design standards and specifications that needs to be complied with to produce the final output</p> <p>KB11. Applicable health and safety guidelines</p>
<p>Skills (S) (Optional)</p>	
<p>C. Core Skills/ Generic Skills</p>	<p>Reading Skills</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA1. Read and understand the script and character descriptions</p> <p>SA2. Read the work plan and production schedule to ensure that progress is in line</p> <p>Oral Communication (Listening and Speaking skills)</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. Suggest creative ideas to the Director and Animation supervisor</p> <p>SA4. Communicate clearly and collaborate effectively with colleagues who are working with the previous or next scenes/shots</p> <p>SA5. Understand the modifications required from the Director, Animation supervisor and Producer</p> <p>SA6. Discuss the challenges faced during production and discuss ways to address such challenges in future projects</p>
<p>D. Professional Skills</p>	<p>Plan and Organize</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. How to plan individual timelines and deliver on schedule</p> <p>SB2. Work effectively as a member of the team and help realise overall timelines</p>

	SB3. Prioritise work-products and tasks based on requirements
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB4. Address comments and make changes SB5. Seek assistance and guidance from the Director, Art Director and Supervisors, where required
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB6. Improve work-products and performance based on feedback received and through self-appraisal

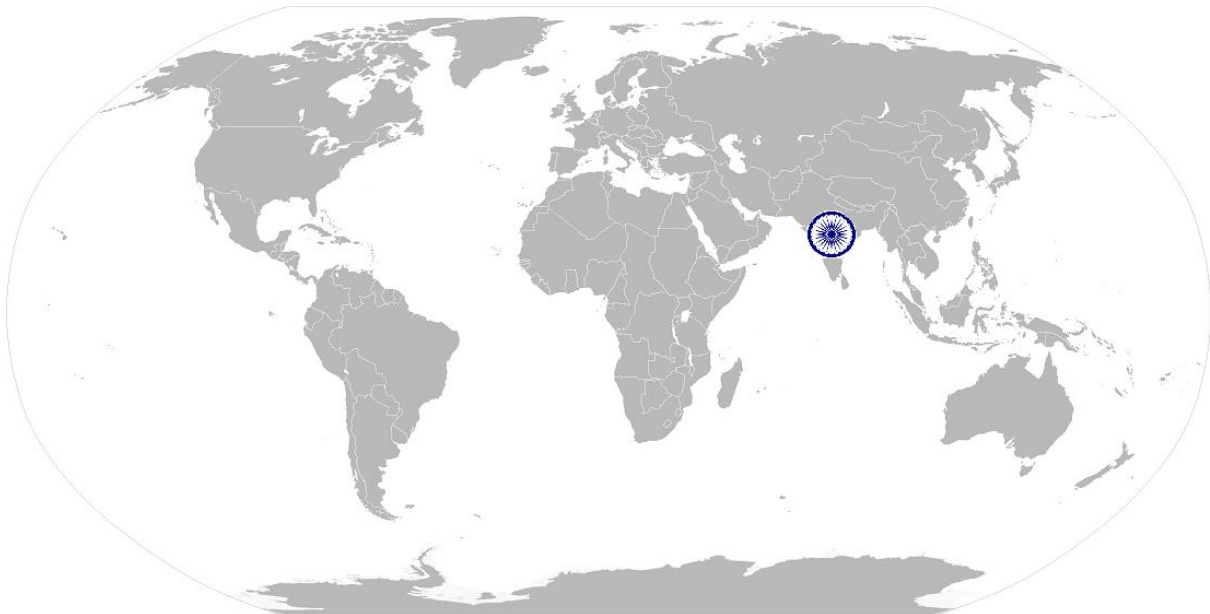


MES/ N 0706

Produce Stop Motion Animation

NOS Version Control

NOS Code	MES/ N 0706		
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



SSC	QPCode	Name of the QP	NSQF Level	Equipment Name	Min. no. of Equipment required (per batch of 30 trainees)	Unit Type	Is this a mandatory Equipment at the Training Center (Yes/No)	Dimension/Specification/Description of the Equipment/ ANY OTHER REMARK
Media & Entertainment	MES/Q0701	Animator	4	High End Graphics Computer With Single Monitor	15		Yes	HP/Dell /lenovo/Assembled
Media & Entertainment	MES/Q0701	Animator	4	2D Animation Light Box	15		Yes	
Media & Entertainment	MES/Q0701	Animator	4	Ups	1		Yes	15 KVA UPS
Media & Entertainment	MES/Q0701	Animator	4	Headphones	15		Yes	Multimedia headphones
Media & Entertainment	MES/Q0701	Animator	4	2.1 Multimedia Speakers	1		Yes	
Media & Entertainment	MES/Q0701	Animator	4	Autodesk Maya/Max Student Version Software	1		Yes	
Media & Entertainment	MES/Q0701	Animator	4	Cyber Shot Camera	1		Yes	10 Megapixels Camera with HD Recording
Media & Entertainment	MES/Q0701	Animator	4	Web Camera	1		Yes	