

SKILLS FRAMEWORK FOR MEDIA		
SKILLS MAP - SENIOR 3D ARTIST*(MODELLING/RIGGING/TEXTURING, DIGITAL LIGHTING, DIGITAL COMPOSITING)		
Sector	Media	
Sub-sector	Games, Film and Video, TV and Broadcast	
Track	Visual Graphics	
Sub-track	3D Art	
Occupation	Visual Graphics Professional	
Job Role	Senior 3D Artist*(Modelling/Rigging/Texturing, Digital Lighting, Digital Compositing)	
Job Role Description	<p>The Senior 3D Artist leads the execution of 3D art processes for games, animated films and live-action films. He/She is responsible for overseeing the production of specific portions of the 3D art requirements based on his area of specialisation. He develops complex 3D art elements and reviews and refines the deliverables of the junior team members. He also assembles the entire allocated asset requirements and presents it to the creative leadership for review and integration.</p> <p>He may lead the development of 3D art assets in one or more of modelling, rigging, surfacing and texturing, digital lighting and compositing specialisations within 3D art, where he would be responsible for delivering assets developed by himself as well as guide junior team members in delivering 3D assets as per desired standards.</p> <p>The work involves delivering on individual goals for art asset development as well as guiding others in delivering creative outcomes as part of a team in a project environment. He spends most of his time in creative ideation and execution of project deliverables as well as in discussions to align expectations with the team.</p> <p>He should have strong sense of design, layout, colour and composition. He should be able to guide and coach less experienced team members and communicate effectively in order to deliver his responsibilities. He should be well organised to work effectively in a project environment.</p>	
Critical Work Functions and Key Tasks	Critical Work Functions	Key Tasks
	Establish creative requirements for the project	Analyse script, storyboards and animatic to understand the 3D art requirements of the production
		Guide research direction to generate ideas for 3D art requirements of production
		Guide the creative thought process by using illustrations during creative briefings
		Create list of 3D art requirements for the entire production by each shot
	Develop skills and portfolio	Develop various available asset creation techniques to diversify skillsets and deliver across a variety of projects
		Enhance own portfolio with assets created from research, work done on previous projects as well as individual exploratory projects to showcase own suitability for specific project requirements
		Explore complex asset creation techniques to enhance own skill-set
	Plan art asset development	Support the creation of project plan for the team by providing time estimates for specific tasks
		Allocate work to junior team members based on specialisations or skill-sets and in alignment with the project plan
		Identify tools and pipeline requirements for allocated work
	Manage projects	Support project to meet schedules, budget, manpower and technical quality targets
		Assist the design, art and technical teams continuously to define requirements and iteratively build solutions
		Assist users, technical staff and management to determine and resolve issues associated with project implementation
		Support regular project reviews to recommend schedule changes, cost or resource adjustments
	Specialisation in Modelling/Texturing/Rigging	
	Develop 3D models for animation	Collaborate with the art team and the creative leadership to understand the creative vision for character design
		Collaborate with animation team to understand the modelling and rigging requirements for character animation
		Guide junior team members in the creation of simple 3D models and textures for 3D layout elements and simpler characters
		Create 3D models of characters based on the approved concept art for production by utilising a variety of digital design tools and techniques
		Develop textures for the surfacing of 3D characters and other digital assets based on the approved concept art
		Develop skeletal rigs, muscle systems and 3D Morph Targets to enable accurate animation of character models using 3D modelling tools
		Refine layout models, character models, textures and rigs iteratively in collaboration with the art and animation teams

	Specialisation in Digital Lighting			
	Execute lighting processes	Analyse script and storyboards to understand the mood and look of the shot to determine the kind of lighting required to light up the shot		
		Research various lighting options available to achieve the creative vision of the shot		
		Determine the positioning, colour and intensity of virtual lights to achieve the desired lighting		
		Develop light-rigs for the project to align the technical execution and the artistic vision of the project		
		Utilise lighting reference maps captured during live-action footage recording to align computer generated (CG) elements with the technical execution and artistic vision of the project		
		Utilise a variety of digital lighting tools to execute the lighting of animated shots to achieve the creative vision of the shot		
		Refine the lighting of each shot iteratively based on inputs from the creative leadership		
	Specialisation in Digital Compositing			
	Execute compositing of production assets	Oversee retrieval and storage of raw CG elements, live action footage, blue or green screen footage and motion capture data for the purpose of compositing		
		Execute compositing of CG elements using digital compositing tools and techniques		
		Perform colour corrections on individual elements to align the appearance of the overall shot		
Utilise 3D tracking tools and techniques for the integration of CG elements into live-action shots for visual effects (VFX) integration in live-action films				
Present composited sequences for review periodically to creative leadership				
Refine composited sequences iteratively based on creative inputs from reviews				
Skills and Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)	
	3D Modelling	Level 3 [^]	Communication	Intermediate
	Colour Grading	Level 3	Interpersonal Skills	Intermediate
	Compositing Visuals	Level 3 ^{^^}	Creative Thinking	Intermediate
	Concept Creation	Level 4	Teamwork	Intermediate
	Digital Lighting	Level 3 ^{^^^}	Decision Making	Intermediate
	Research	Level 3		
	Rigging for Animation	Level 3 [^]		
	Surfacing and Texturing	Level 3 [^]		
Programme Listing	For a list of Training Programmes available for the Media sector, please visit: www.skillsfuture.sg/skills-framework/Media			

The information contained in this document serves as a guide.
 NOTE: *Text in brackets refer to specialisations included in the job role
 NOTE: ^Skills needed for Modelling/Rigging/Texturing
 NOTE: ^^Skills needed for Digital Compositing
 NOTE: ^^Skills needed for Digital Lighting