

Specification of Competency Standards
for the Information & Communications Technology Industry
Unit of Competency

Functional Area - Operations Management

Title	Perform lighting
Code	107954L3
Description	This unit of competency applies to all Digital Media Technology (DMT) practitioners who are involved with lighting in computer animation production. In order for scenes to come to life, they are lit in different ways that can give a feeling of happiness, of sorrow, of fear etc. Digital lights must be placed in the scene to illuminate models, exactly as lighting rigs on a movie set would illuminate actors and actresses. Additionally, adjusting the interior and exterior lighting with incorporation of other lighting options to bring the model or scene into life and effect that is needed.
Level	3
Credit	3
Competency	<p>Performance Requirements</p> <p>1. Knowledge for performing lighting</p> <ul style="list-style-type: none"> • Possess literacy skills that can read and interpret relevant sources of information such as: modelling requirements, script, animatic characters etc. • Possess good communication skills to work with different members of the production team, particularly texture colleagues • Possess good knowledge of light principles and application of lights in computer graphics • Possess good knowledge of the organisation guidelines for animation production <p>2. Perform lighting:</p> <ul style="list-style-type: none"> • Comprehend the project brief, storyboard, storyline and work with colleagues to understand the lighting requirements of the scene, particularly texture designers and lighting designer • Take into account the lighting needs of the scene to planning light effects, including but not limited to the following: <ul style="list-style-type: none"> ○ Illumination ○ Key light ○ Shadows ○ Interior shots ○ Exterior shots (sunlight) ○ Light entrance to a room ○ Direction of light • Determine the suitable lighting method to use for scene, such as: <ul style="list-style-type: none"> ○ Simulated light technique ○ Real physical lighting (photometric light) • Select appropriate lighting software and tools and load the model and/or scene to prepare for work • Select suitable technique to use, such as but not limited to the following: <ul style="list-style-type: none"> ○ Three point lighting ○ Radiosity ○ Light Tracer ○ Photon mapping • Manipulate and combine lighting options to achieve the required effects, include but not limited to the following: <ul style="list-style-type: none"> ○ Point/Omni light ○ Directional light

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	<ul style="list-style-type: none"> ○ Spot light ○ Volume light ○ Ambient light ● Adjust exterior or interior lighting of the scene to achieve the balance of day temperature and the mood, respectively which also direct attention of view ● Render and repeat adjustments of settings until it meets the requirement and export for next stage of production workflow <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> ● Apply industry best practices and use current technologies to create the right effects for scene or character model
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none"> ● Work with various stakeholders to comprehend the lighting requirements for the scene or character model and explore various options to create the desired lighting effects ● Inspect different and consider all aspects of the scene or character model to plan and select the right software and tools to produce the required lighting effects ● Select the correct lighting techniques and combined with various lighting options for the scene or character model to create the required effects
Remark	