

**DIPLOMA IN
ANIMATION AND GAME DESIGN**

Awarded by : Raffles Singapore
Intakes : January, April, July, and October
Duration : 6 months (Full-time)

Core Modules

3D Techniques	<p>This course aims to develop skills in creating 3D models, illuminating the scene, materials, creation, texturing, effects, creating camera controls and basic rendering. Students will learn advanced computer modeling skills using Maya software system and the practical component of the course will take the student through the steps and techniques required to create realistic 3D objects.</p> <p>Credit Points: 10</p>
Anatomy	<p>This module aims to provide students with a sound anatomical foundation of skeletal structure and proportion, musculature, critical landmarks and points of articulation for both humans and animals. The focus will be on orthogonal and conceptual drawing, measurement, proportion, armature construction, dynamic and neutral posing, concentrating heavily on primary and secondary form. Once established, students will learn how to construct sculptural anatomy figurine with details such as skin textures, wrinkles, scales, etc and professional polish finishing using a variety of sculpting techniques.</p> <p>Credit Points: 10</p>
Animation Principles	<p>The module introduces students to the classic principles in animation design. Developed by Disney animators, Ollie Johnston and Frank Thomas, the principles form the basis of motion based animated works. Through theoretical and technical studies, students will be guided to explore and relate laws of physics, emotional timing, and character appeal to animation designs. The guidance will take the form of lectures, tutorials, technical demonstrations, practicals, and critique sessions. The components of the modules include terminology and history of animation, classic animation principles, basic concepts in 2D computer animation production such as keyframes, tweening, etc.</p>

	Credit Points: 10
Design Fundamentals	<p>The module introduces students to fundamental concepts and knowledge in visual design practice that form the basis of two-dimensional visual communication works. Through theoretical and technical studies, students will be guided to explore and relate basic design principles to effective interaction of visual elements in design compositions. The guidance will take the form of lectures, tutorials, technical demonstrations, practicals, and critique sessions. The components of the module include design elements, figure and ground relationship, colour theory, design principles, visual interactions and hierarchy, etc.</p> <p>Credit Points: 10</p>
Digital Illustration	<p>The module introduces students to fundamental knowledge and skill sets, as well as professional practices, in digital illustration for visual communication. Using the industry standard vector editing app, students will be guided to explore both the technical and aesthetic aspects of vector based drawing and painting, with emphasis on creative visual effects and effective composition. The guidance will take the form of lectures, tutorials, technical demonstrations, practicals, and critique sessions. The components of the module include vector shape and stroke creation, manipulation and experimentation, vector graphic effects, digital typography, etc.</p> <p>Credit Points: 10</p>
Digital Image Processing	<p>This module will introduce the fundamental aspects of image enhancement and manipulation with the use of imaging software such as Adobe Photoshop. Students will improve their visualizing technique and produce complex digital images, exploring technical and aesthetic aspects of the image manipulation processes such as digital image creation with an emphasis on photo-illustration, and hybrid illustration techniques, image capture, compositing, retouching, stylistic treatments, shading, and simulated three-dimensional imagery aspects of the manipulation processes most widely used in the visual communication industry.</p> <p>Credit Points: 10</p>
Digital Photography	<p>The module provides students with essential knowledge and skill sets to gain fundamental understanding of image capture through digital photography. In the module, students will be guided to explore both the technical and aesthetic aspects of photography as a contemporary medium of expression in visual communication. The guidance will take the form of lectures, tutorials, technical demonstrations, practicals, and critique sessions. The components</p>

	<p>of the module include familiarisation of digital photographic equipment, technical correlations of shutter speed, aperture, and ISO in exposure, common genres of photography, natural and studio lighting, digital photography workflow, etc.</p> <p>Credit Points: 10</p>
Drawing Fundamentals	<p>The module introduces students to fundamental knowledge and skill sets in drawing. With emphasis on observational skills, students will be guided to explore the technical and aesthetic aspects of drawing, ranging from compositional techniques to contemporary practices. The guidance will take the form of lectures, tutorials, technical demonstrations, practicals, and critique sessions. The components of the module include observation of light and shadow, tonal range, shading techniques, perspective drawing, gesture and figure drawing, conceptual drawing, etc.</p> <p>Credit Points: 10</p>