DIPLOMA IN
ANIMATION AND GAME DESIGN

Awarded by : Raffles College of Higher Education, Singapore
Intakes : January, April, July, and October
Duration : 6 Months (Full-time)

Core Modules

Design Fundamentals

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.

Credit Points: 10

Anatomy

The module introduces students to anatomy as a foundation of figure building and character design in animation. In addition to basic observation drawing and visualisation skills, students will study major systems of human and animal anatomy such as form, function, proportion, structure, and mechanics through theoretical and practical guidances that take the form of lectures, technical workshops, practical experimentations, and critique sessions. The components of the module include observation skills, structural systems (skeletal, muscle, articulation, etc) in human and animal anatomy, sculpting and detailing techniques in clay modeling, etc.

Credit Points: 10

Digital Illustration

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.

Credit Points: 10

Digital Photography

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 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.

Credit Points: 10

Animation Principles

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.

Credit Points: 10

Drawing Fundamentals

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.

Credit Points: 10

Digital Image Processing

The module introduces students to fundamental knowledge and skill sets, as well as professional practices, in digital image processing for visual communication. Using the industry standard graphic editing app, students will be guided to explore both the technical and aesthetic aspects of digital image creation, enhancement, and manipulation, with emphasis on creative visual effects and effective composition. The guidance will take the form of lectures, tutorials, technical demonstrations, practical experimentations, and critique sessions. The components of the module include image adjustment, retouching, and transformation; painting and masking techniques; filter effects, etc.

Credit Points: 10

3D Techniques

The module introduces students to fundamental knowledge and skill sets, as well as professional practices, in 3D graphic creation and manipulation. Using the industry standard 3D computer graphics software, students will be guided to explore both the technical and aesthetic aspects of 3D model making and rendering, with emphasis on creative and realistic representation. The guidance will take the form of lectures, tutorials, technical demonstrations, practicals, and critique sessions. The components of the modules include techniques and principles in modeling, shading, texturing, lighting, camera control, rendering, etc.

Credit Points: 10