

3D Environment Creation Diploma

Diploma Description:

This diploma focuses on creating 3D Environments. The diploma covers step by step the stages of 3D environmental scenes whether internal or external from hard surface modeling till rendering

Diploma outcomes

- Learn digital sculpting and hard surface modeling
- Understand how 3d lighting works and its interaction with materials
- Learn how to texture your 3d models using different techniques and software
- Create Full rich 3D environment modeled, sculpted, textured, lighted and rendered

Diploma Prerequisite

3D Animation introduction course *or* knowledge with the animation basics

Diploma Contents

Class 1 (Layout and Composition)

Class 2 (Lighting and look)

- Lighting Types

Class 3

- Lighting setups and Adjustments
- Shadows

Class 4 (Material development)

- Using Ai Standard shader
- Using SSS

Class 5

- shading nodes
- nodes attributes

Class 6 (Digital Sculpting)

- Introduction Zbrush interface and tools

Class 7

- Working with materials, poly-painting and Zspheres

Class 8

- Sculpting Techniques

Class 9 (Maya hard surface Modeling)

- Polygon Modeling overview
- Types of polygons
- Editing polygons

Class 10

- Re-topology
- UV Unwrapping

Class 11 (3D Texturing)

- Texturing using Mari and substance painter

Class 12 (Terrain generation)

- Generating terrains using Maya & Zbrush

Class 13

- Modeling Environment project workshop

Class 14 (Rendering)

- Camera- exposure - depth of field - focal length
- Rendering in layers
- Rendering in passes

Class 15

- Project Submission and Feedback

Grading

Grades are based on class exercises, assignments and final project as follows

- Attendance: 10 %
- Class exercises: 15 %
- Assignments: 25%
- Final Project: 50 %