

5BSc(GA)3 – 3D Design with MAYA

Maximum Marks 100

Distribution of Marks: 50 Th. + 30 Prac. + 20 IA

Objectives:

- To impart knowledge of Modeling
- To impart training of idea generation for 3D Designing
- To impart skills of Light and Shadow
- To impart knowledge of Modeling Techniques.

	Lectures	Tutorial	Seminar	Workshop	Demo	Field Visit
<p>Unit 1: Introduction to MAYA</p> <p>Introduction to MAYA, Basic Maya Interface, Creating a Scene, Manipulating a Scene in 3D, Texturing an Object, Lighting a Scene, Rendering a Still Frame.</p>	7	2	1	-	1	-
<p>Unit 2: Lighting & Modeling</p> <p>Lighting and Camera - The art and techniques of lighting, Light links, How to create a desk lamp, How to create a camera shot Polygon Modeling and Texturing - Modeling with Polygon Tools , Working with Symmetry, Using Image Planes, Block Modeling, Sculpturing Polygon Objects, UV Texturing.</p>	8	2	2	1	2	-
<p>Unit 3: Animation & Design in Maya</p> <p>Animation in Maya, Keyframe, Motion studies, Motion Curves, Storytelling And Design - The Project, Storytelling, Design, Color and Composition, Storytelling terms, Project Preparation.</p>	7	3	1	-	2	1
<p>Unit 4: Modeling with NURBS</p> <p>Modeling with NURBS - NURBS topology, NURBS Modeling Tools, Attaching surfaces, Rebuilding Surfaces, Textures Coordinates Animating a NURBS Character - Creating the Skeleton, Using Deformers, Using reference footage</p>	6	2	2	-	1	-
<p>Unit 5: Rendering</p> <p>Types of Rendering in Maya, Material and light Interaction, Render Layers, Render with Alpha Channel.</p>	7	2	1	1	1	-

Assignments:

1. Prepare 3D Animation for Film
2. Exercise of Light and Texture for 3D Design
3. Prepare 3D Character for new media.

Reference:

1. The Yucatan : A Guide to the Land of Maya Mysteries Plus Sacred Sites at Belize, Tikal & Copan - by Antoinette May
2. John Kundert – Gibbs, Eric Mick Larkins, Eric Keller, Boaz Livny, Mark E.A. De Saura, Mastering Maya 7 , Wiley Kunzen Dort, Dariush Derakhshani, Publishing Edition 2006.
3. Maya - by Peter Schmidt (Editor), Enrique Nalda (Editor), Mercedes De LA Garza, Orefici
4. Maya 8 : The Complete Reference, Tom Meade, Shinsaku Arima
5. Maya Character Modeling and Animation: Principles and Practices, Tereza Flaxman
6. Introducing Maya 8: 3D for Beginners, Dariush Derakhshani
7. Understanding 3D Animation Using Maya, John Edgar Park