

**Pravara Rural Education Society's  
Pravara Rural College Of Architecture, Loni  
Autodesk 3ds Max Design Essentials Training**

Total Duration: 30 Hours

### **Aim:-**

Autodesk 3Ds Max Design Essentials Training provides a thorough grounding in 3Ds Max Design Software. On completing the course you will be able to produce basic 3D modeling, apply material, rendering the scene and create animation.

### **Objectives:-**

The primary objective of this course is to teach students the essentials of working in 3D using an array of features and tools. This course teaches new users the basics of creating, embellishing, and animating 3D scenes. After completing this course, student should be able to do:

- Model objects using a variety of techniques
- Design and apply materials
- Adjust basic lighting
- Animate simple objects
- Build and animate simple, effective environments
- To enhance the computing skills of the students.

### **Course syllabus:-**

#### **Chapter 1: INTRODUCTION**

- Introduction – The 3DS Max Interface
- Navigate the 3DS Max User Interface and Workspace
- Transforming Objects Using Gizmos
- Graphite Modeling Tools Set
- Command Panel
- Time Slider and Track Bar
- File Management

#### **Chapter 2: 3DS Max First Project**

- Setting Up a Project Workflow
- Clock Modeling
- Spline Modifier
- Bringing It All Together

#### **Chapter 3: Modeling in 3DS Max:**

Architecture Model - Part 1

- Units Setup

- Importing a CAD Drawing
- Creating the Walls
- Creating the Doors
- Creating the Window
- Adding the Floor and Ceiling

#### **Chapter 4: Modeling in 3DS Max:**

- Architecture Model - Part 2
- Modeling the Couch
- Modeling the Lounge Chair

#### **Chapter 5: Introduction to Animation**

- Animating the Ball
- Refining the Animation

#### **Chapter 6: Animation Principles**

- Anticipation and Momentum in Knife Throwing

#### **Chapter 7: Character Poly Modeling -Part 1**

- Setting Up the Scene
- Soldier Modeling

#### **Chapter 8: Character Poly Modeling -Part 2**

- Completing the Main Body
- Creating the Accessories
- Putting On the Boot
- Creating the Hands

#### **Chapter 9: Character Poly Modeling -Part 3**

- Creating the Head
- Merging and Attaching the Head's Accessories

#### **Chapter 10: Introduction to the Materials: Interiors and Furniture**

- The Slate Material Editor
- Material Types
- Mental Ray Material Types
- Shades
- Mapping the Couch and Chair
- Mapping the Window and Doors

#### **Chapter 11: Textures and UV Workflows: The Soldier**

- UV Unwrapping
- Seaming the Rest of the Body

- Applying the Color Map
- Applying the Bump Map
- Applying the Specular Map

## **Chapter 12: Character Studio: Rigging**

- Character Studio Workflow
- Associating a Biped with the Soldier Model

## **Chapter 13: Character Studio: Animation**

- Animating the Soldier

## **Chapter 14: Introduction to Lighting: Interior Lighting**

- Three-Point Lighting
- 3DS Max Lights
- Lighting the Still Life in the Interior Space
- Selecting a Shadow Type
- Atmospheres and Effects
- Light Lister

## **Chapter 15: 3DS Max Rendering**

- Rendering Setup
- Cameras
- Safe Frames
- Ray traced Reflections and Refractions.
- Rendering the Interior and Furniture

## **CHAPTER 16: MENTAL RAY**

- Mental Ray Renderer
- Final Gather with Mental Ray
- Mental Ray Materials

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