**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:

✓ Model objects using a variety of techniques  
✓ Design and apply materials  
✓ Adjust basic lighting  
✓ Animate simple objects  
✓ Build and animate simple, effective environments

**Pre-requisites**

This guide is designed for new users of 3Ds Max Design. It is recommended that you have a working knowledge of:

• Microsoft® Windows® 7, Microsoft® Windows® 8 or Microsoft® Windows® 10.

**TRAINING PROGRAMME DAY 1**

**Chapter 1: Getting Started**

• Touring the 3ds Max Design User Interface  
• Creating and Animating Simple Objects (Lab)  
• Working with Scene Files  
• Transforming Objects  
• Applying Modifiers (106)

**Chapter 2: Modeling**

• Learning Low Poly Modeling Basics  
• Creating and Editing Shapes  
• Using 2D Shapes to Build 3D Objects  
• Using Compound Objects  
• Exploring Various Modeling Techniques (Lab)
TRAINING PROGRAMME DAY 2

**Chapter 3: Animation**

- Learning General Principles
- Working with Keyframes
- Animating Different Types of Objects
- Working with the Track View Editor
- Understanding Animation Controllers
- Working with Object Hierarchies
- Animating Bipeds
- Practicing Basic Animation (Lab)

**Chapter 4: Materials and Mapping**

- Creating Materials
- Working with the Material Editor
- Differentiating Between Materials and Textures
- Using Maps
- Mapping Coordinates
- Creating and Applying Materials and Textures (Lab)

TRAINING PROGRAMME DAY 3

**Chapter 5: Rendering**

- Creating and Positioning Cameras
- Learning about Camera Parameters and Concepts
- Animating Cameras
- Understanding and Creating Ambient Light
- Using Standard Lights
- Adjusting Shadow Parameters
- Adding Secondary Lights
- Achieving Convincing CG Lighting with mental ray©
- Setting up Scenes and Saving Renders
- Using Rendering Tools Efficiently
- Recording Different Scene States
- Rendering Scenes using Batch Render
- Completing a Project or Scenario (Lab)