

**ZENUS INFOTECH INDIA PVT. LTD.**  
**CURRICULUM OF 3Ds MAX**

Course Duration: 6/8 Weeks\*

**Getting to Know 3ds Max Touring the**

**Interface**

The Viewports

Getting to Know the Command Panel

Working with Objects

Transforming Objects

Copying an Object

Understanding the Perspective Viewing

Tools

Using Multiple Viewports

**Introducing 3ds Max**

Objects

Understanding Standard Primitives

Adjusting Objects' Parameters

Accessing Parameters

Modeling Standard Primitives with

Modifiers

Using the Modifier Stack Tools

Making Clones That Share Properties

Using Various Modifiers

Understanding Extended Primitives

Working with Groups

**Creating Shapes with**

**Splines**

Drawing using Splines

Lathing a Spline

Modifying a Shape Using Sub-object

Levels

Flipping Surface Normal

Creating Thickness with a Spline

Combining and Extruding Splines

Introducing Other Spline Types

Editing Splines

**Editing Meshes and Creating Complex**

**Objects**

Polygon Modeling Techniques

Using Graphite Modeling Tools

Creating buildings using modifiers

**Working with External**

**Design Data**

Importing AutoCAD Plans into 3ds Max

Extruding the Walls

**Creating AEC Objects Creating a**

**Parametric Wall**

Adjusting the Wall's Parameters

Adding Doors and Windows to Walls

Creating a Parametric Window

Creating Stairs

Creating Foliage

## **Organizing and Editing**

### **Objects**

Naming Objects

Organizing Objects by Layers

Setting Up Layers

Assigning Objects to Layers

Assigning Color to Layers

Lofting an Object

Lofting a Shape Along a Path

Using Different Shapes Along the Loft  
Path

Extruding with the Sweep Modifier

Aligning Objects

### **Light and Shadow**

Understanding the Types of Lights

Adding a Spotlight to Simulate the Sun

Rendering a View

Adding Shadow Effects

Softening Shadow Edges

### **Shading and Texturing**

Understanding Bitmap Texture Maps

Diffuse Color Maps

Understanding Surface Properties

Adding Materials to Objects

Understanding Material Libraries

Editing Materials

Using Bump Maps

Understanding Mapping Coordinates

Adjusting the UVW Mapping Gizmo

Assigning Materials to Parts of an Object

Creating a Multi/Sub-Object Material

## **Using the 3ds Max**

### **Camera**

Understanding the 3ds Max Camera

Adding a Camera

Editing the Camera Location with the  
Viewport Tools

Setting Up an Interior View

Creating an Environment

Working with Walkthrough-Assistant

## **Creating Animations Using Animation**

### **controls**

Using Keyframe animation

Bouncing a Ball

Adding Camera Motion

Adjusting the Camera Path

Creating Preview Animation

Compressing and Expanding Time

Rendering the Animation

## **Mental Ray Concepts Understanding**

### **Mental Ray**

Understanding Global Illumination

Understanding Final Gather

Assigning the Mental Ray Renderer

Using the Rendered Frame Window

Controls

### **Gamma Correction**

Understanding Gamma and Linear

Workflow

Applying gamma correction

### **Materials**

Understanding Autodesk materials

Understanding Arch & Design materials

Creating various materials

### **Rendering**

Improving Rendering Quality

Rendering an Exterior Scene

Rendering an Interior Scene

### **VRay Introduction**

What is V-Ray and how to setup V-Ray

V-Ray Image Saving Options

### **Global Illumination in V-Ray**

Irradiance Map

Light Cache

Quasi Monte Carlo/ Brute Force

Environmental Lighting

### **Image Sampling**

Fixed

Adaptive DMC

Adaptive Subdivisions

### **VRay Lights**

VRayLight

VRayAmbientLight

VRayIES

VRay Sun

### **VRay Camera**

VRayDomeCame

VRayPhysicaCam

Shutter Speed

### **VRay Materials**

VRay2SidedMtl

VRayMtl

VRayFastSSS2

VRayMtlWrapper

### **Rendering Scenes**

Rendering an interior scene using V-Ray

Rendering an exterior scene using V-Ray

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