

Autodesk® 3ds Max® Design software provides a comprehensive 3D modeling, animation, and rendering solution used by architects, designers, civil engineers, and visualization specialists.



#### • Introduction to 3ds Max Design

- Getting started with 3ds Max Design
- Touring the Interface
- Getting the View you want
- Working with Custom UI and Default Switcher
- System Requirements

#### • Introducing 3ds Max Object

- Understanding Standard Primitives & its Parameters
- Understanding Extended Primitives & its Parameters

#### • Transform tools

- Working with Objects (Move, Rotate and Scale)
- Duplicating Objects
- Making Clones and Copies

#### • Working with Groups

#### • Toolbar option

- Selection Filters
- Select Object
- Selection Region
- View Coordinates
- Snaps & Selection Sets
- Mirror, Align, and Manage Layers

#### ■ 3ds max settings and preferences

##### • Settings and Preferences

- Viewport Configuration & Lightings
- Illuminate Scene with Hardware
- Unit Setups
- Project Setting
- Merge, Importing and Exporting Objects & Files
- Back Ups and File Crash

#### ■ Deforming Objects & Using Modifiers

##### • Applying basic 3d modifiers

- Bend, Taper, Twist, Noise, Relax, Skew
- Affect Region, Displace, Lattice, Mirror, Push, Ripple, Stretch, Squeeze, and Spherify, Shell, Slice and Wave.

#### ■ Aligning Objects

##### • Compound Objects

- Boolean, Array

#### ■ Introducing AEC Objects & Shapes

##### • AEC Extended Objects

- Foliage, Stair, Doors, Windows
- 2D-Shapes, About Start New Shape.
- Introducing Extended Splines.

#### ■ Editing Shapes

##### • Editable spline

- Importing files from Autocad

#### ■ Editing Shapes II

- Loft, Spacing Tools, Railing, and Wall

#### ■ Introducing 2D Modifiers

##### • 2d Modifiers

- Edit Spline Modifier
- Lathe, Extrude, Bevel, Bevel Profile, Sweep, Fillet/Chamfer, Normalize Spline.

#### ■ Modeling complex objects

##### • Editable Poly

- Editable Poly, importing files From Revit.

#### ■ Projects

#### ■ Introduction to Texturing

##### • Introduction to Material Editor

- Introduction to Material Editor, Tools in M.E, Assign Material to selection, assigning 2D maps, Shader Basic & Blinn Basic Parameters.

- Get Material, Save Material Library, Maps Rollout, Material / Map Navigation, Rendering Map, Extended Parameters

#### • Introduction to Mental ray and its shaders

- Shader Basics & Arch&Viz Shaders

#### ■ Project

#### ■ Introduction to Lightings

##### • Introduction to Lights

- Standard lights – Omni, Target Spot, and Free Spot, Target Direct, Free Direct, Sky Light.

##### • Photometric Lights

- Target , Free Light

##### • Light Settings

- Setting Up of Exterior and Interior Lightings.

##### • Environment and Effects

- Physical Sky
- Exposure Control
- Gamma Control

#### ■ Project

#### ■ Introduction to Camera

##### • Camera

- Navigating the Camera using keyboard, – Camera and Its Types - Target, Free – Multi Pass Effect, Depth of Field, Motion Blur

#### ■ Introduction to Animation

##### • Introduction to Animation

- Animating Camera in a path, Animating Camera in Free Movement.

#### ■ Simulation

##### • Simulation

- Water Simulation
- Cloth Simulation

#### ■ Project

#### ■ Introduction to Rendering

##### • Introduction to Rendering (Mental Ray) I

- Mental Ray

#### ■ Introduction to Rendering

##### • Introduction to Rendering (Mental Ray) II

- Final Gather, Global Illumination, Photons

#### ■ Projects