

## **AutoCAD 3D and Rendering**

Architectural Modeling in 3D

### **Directed Towards:**

Architects, Civil Engineers, Mechanical Engineers, Interior Designers, Landscape Architects, draftsman, Designers, and College Students, and in general directed at those who need create accurate 3D models.

### **Requirements:**

Working knowledge of AutoCAD 2D

### **General Objectives:**

Get the necessary tools to build efficiently, detailed and accurate three-dimensional models.

### **Specific Objectives:**

Use multiple 3D modeling tools.

Browse 3D models: elevations, sections, isometric, perspective views.

Print views.

Apply materials and lighting of scenes.

Achieve photo-realistic images and walkthroughs.

## **COURSE CONTENT**

### **3D Interface**

Workspaces

3D Interface

3D Dashboard

Viewports

Steering wheel

VPOINT

DDVPOINT

### **Visualizing**

Hide command

Visual Styles

3D Coordinates

Track in Z Direction

3D Orbit

Gizmo

### **User Coordinate System**

3 Point UCS

Plan UCS

Naming and saving UCS

Rotating a UCS

### **3D Modeling**

Extrude  
Presspull  
Loft  
Sweep  
Revolve  
Thicken  
Solids  
Helical Shapes  
Planesurf  
Booleans  
Solid Editor

### **Surfaces**

Mesh box  
Surfnetwork  
Surf extend  
Surf offset  
Surf Trim  
Surf Blend  
Project geometry  
Convert to surface  
Facetres  
Mesh smooth  
Mesh refines  
Isolines

### **Sections**

Section Plane command  
Slice  
Flatshot

### **Print**

Layouts  
Viewports

### **Cameras**

Camera Properties  
Camera Distance  
Swiveling a Camera  
Walk and Fly  
Animation Paths

**Lights**

Point Lights  
Spot Lights  
Photometric Lights  
Distance Lights  
Geographic Location  
Sky Background Illumination  
Shadows

**Materials**

Applying Materials  
Material Scale  
Materials by Layer  
New Materials  
Material Mapping  
Opacity Materials  
Bump Map Materials

**Render**

Render Interface  
Save Files