AutoCAD - Basics & Intermediate

Duration : Theory : 24 hrs | Lab : 24 hrs

The primary obiective of this AutoCAD training course is to teach students the basic commands necessary for professional 2D drawing, design and drafting using AutoCAD

- **Overview of AutoCAD**
  - Advantages, System requirements, Screen Organization, Coordinate System, Startup dialog box, Setting Limits
- **Getting Started with AutoCAD**
  - Starting AutoCAD, AutoCAD's User Interface, Working with Commands, Opening an Existing Drawing File
- **User Interface**
  - Application Window, Menu Bar, Ribbon, Quick Access Toolbar, Infocenter
- **Object Creation**
  - Line, Erasing Object, Rectangle, Circle
- **Editing Tools**
  - Move, Copy, Rotate Scale, Mirror, Editing with Grips
- **Drawing Precision in AutoCAD**
  - Object Snap, Polar Tracking at Angles, Object Snap Tracking, Drawing with Snap and Grid
- **Organizing Your Drawing with Layers**
  - Creating New Drawings with Templates, Layers Concepts, Layer States, Changing an Object's Layer
- **Advanced Object Types**
  - Drawing Arcs, Polylines, Polygons, Ellipses, Editing Polylines
- **Adding Text**
  - Working with Annotation, Adding Text in a Drawing, Modifying Multiline Text, Formatting Multiline Text
- **Adding Dimensions**
  - Dimensioning Concepts, Adding Linear, Radial, Angular Dimensions, Adding Notes to Your Drawing
- **PROJECTS**

AutoCAD - Advanced & Productivity tools

Duration : Theory : 24 hrs | Lab : 24 hrs

Using advanced annotation, drawing with complex obiects (including polylines, regions and advanced text objects), defining blocks and attributes, using external reference files and image files, using layouts and advanced plotting features, creating sheet sets and enhancing productivity with simple customization.

- **Object Creation**
  - Bhatch, Boundary, Hatch edit, Polyline, Sketch, Multiline, Mtext editing, Editing Dimensions, Advance Hatch edit.
- **Advanced Text Objects**
  - Annotation Scale Overview, Using Fields, Controlling the Draw Order
- **Working with Tables**
  - Creating Tables, Modifying Tables , Working with Linked Tables, Creating Table Styles
- **Dynamic Blocks**
  - Working with Dynamic Blocks, Creating Dynamic Block Definitions, Dynamic Block Authoring Palettes
- **Attributes**
  - Inserting Blocks with Attributes, Editing Attribute Values, Defining Attributes, Redefining Blocks with Attributes, Extracting Attributes
- **External References**
  - Attaching External References, Modifying External References, Xref Specific Information
- **Other Tools for Collaboration**
  - eTransmit, Hyperlinks, Point cloud support.
- **Introduction to Sheet Sets**
  - Overview of Sheet Sets, Creating Sheet Sets, Creating Sheets in Sheet Sets, Adding Views to Sheets, Importing Layouts to Sheet Sets
- **Publishing and Customizing Sheet Sets**
  - Transmitting and Archiving Sheet Sets, Publishing Sheet Sets, Customizing Sheet Sets, Custom Blocks for Sheet Sets
- **Managing Layers**
  - Working in the Layer Properties Manager, Creating Layer Filters, Setting Up Layer States
- **Customizing the User Interface**
  - Using the Customize User Interface (CUI) Box, Creating Custom Toolbars, Creating Custom Tab
- **PROJECTS**

AutoCAD - 3D Modeling and Rendering

Duration : Theory : 24 hrs | Lab : 24 hrs

More AutoCAD users are venturing out ot two-dimensional drafting to explore 3D design. Thanks to may enhancements, 3D is an increasingly usetul and widespread tool. However, the leap into three dimensions requires some changes in thinking and drawing habits.

- **3D Foundations**
  - Introduction to the 3D Modeling Workspace, Basic 3D Viewing Tools, 3D Navigation Tools, Introduction to the user Coordinate system
- **Simple Solids**
  - Working with Solid Primitives, Solid Primitive Types, Working with Composite Solids, Press pull.
- **Creating Solids & Surfaces from 2D Obiects**
  - Complex 3D Geometry, Extruded Solids and Surfaces, Revolved Solids and Surfaces, Lofted Solids and Surfaces, Surface curve extraction.
- **Modifying in 3D Space**
  - 3D Grip Tools, Aligning Obiect in 3D Space, 3D Modify Commands
- **Advanced Solid Editing**
  - Editing Components of Solids, Editing Faces of Solids, Fillets and Chamfer on Solids
- **Additional 3d Editing Tools**
  - Creating a Shell, Imprinting Edges of Solids, Slicing a Solid along a Plane, Interference Checking, Converting Object to Surface
- **Refining the View**
  - Working with Sections, Working with Cameras, Managing View in 3D, Animating with Showmotion, Creating Showmotion Shots, Model documentation, Inventor import, Social media link.
- **Visualization**
  - Creating Visual Styles, Working with Materials, Specifying Light Sources, Rendering Concepts, Render online, cloud connectivity, Autodesk Exchange Apps.
- **Working with the User Coordinate System**
  - UCS Basics, The UCS X, Y and Z Commands, Saving a UCS by Name
- **PROJECTS**