



## AutoCAD Syllabus

AutoCAD (Fundamentals+Advanced)

### **Getting Started with AutoCAD**

- Starting AutoCAD
- AutoCAD's Screen Layout
- Working with Commands
- Opening an Existing Drawing File
- Saving Your Work
- AutoCAD's Cartesian Workspace

### **Basic Drawing & Editing Commands**

- Drawing Lines
- Erasing Objects
- Drawing Lines with Polar Tracking
- Drawing Rectangles
- Drawing Circles
- Viewing Your Drawing
- Undoing and Redoing Actions

### **Drawing Precision in AutoCAD**

- Using Object Snap
- Object Snap Overrides
- Polar Tracking Settings
- Object Snap Tracking
- Drawing with SNAP and GRID



## AutoCAD Syllabus

### **Making Changes in Your Drawing**

- Selecting Objects for Editing
- Moving Objects
- Copying Objects
- Rotating Objects
- Scaling Objects
- Mirroring Objects
- Editing Objects with Grips

### **Organizing Your Drawing with Layers**

- Creating New Drawings With Templates
- What are Layers?
- Layer State
- Changing an Object's Layer

### **Advanced Object Types**

- Drawing Arcs
- Drawing Polylines
- Editing Polylines
- Drawing Polygons
- Drawing Ellipses



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### **Getting Information From Your Drawing**

- Measuring Objects
- Working with Properties

### **Advanced Editing Commands**

- Trimming and Extending
- Stretching Objects
- Creating Fillets and Chamfers
- Offsetting Objects
- Creating Arrays of Objects

### **Inserting Blocks**

- What are Blocks?
- Inserting Blocks from Tool Palettes
- Inserting Blocks using Insert
- Inserting Blocks with DesignCenter

### **Setting Up a Layout**

- Printing Concepts
- Creating Viewports
- Setting up Layouts
- Guidelines for Layouts

### **Printing Your Drawing**

- Printing Layouts
- Printing a Check Plot



## AutoCAD Syllabus

### **Annotating Your Drawing (Text)**

- Working with Annotations
- Adding Text in a Drawing
- Modifying Multiline Text
- Formatting Multiline Text

### **Hatching**

- Hatching

### **Adding Dimensions**

- Dimensioning Concepts
- Adding Linear Dimensions
- Adding Radial and Angular Dimensions
- Editing Dimensions
- Adding Notes to Your Drawing

### **Working Effectively with AutoCAD**

- Setting up the Interface
- Using the Keyboard Effectively
- Working in Multiple Drawings
- Using Grips Effectively
- Additional Layer Tools





## AutoCAD Syllabus

### **Accurate Positioning**

- Coordinate Entry
- Locating Points with Tracking
- Construction Lines
- Placing Reference Points

### **Creating Blocks**

- Creating Blocks
- Editing Blocks
- Removing Unused Elements

### **Blocks in Tool Palettes**

- Adding Blocks to Tool Palettes
- Modifying Tool Properties in Tool Palettes

### **Creating Templates**

- Why Use Templates?
- Controlling Units Display
- Creating New Layers
- Adding Standard Layouts to Templates
- Saving Templates

### **Annotation Styles**

- Creating Text Styles
- Creating Dimension Styles
- Creating Multileader Styles



## AutoCAD Syllabus

### **Advanced Layouts**

- Creating and Using Named Views
- Creating Additional Viewports
- Layer Overrides in Viewports
- Additional Annotative Scale Features

### **DWF Printing and Publishing**

- DWF Plotting and Viewing
- Publishing Drawing Sets

### **Other Topics**

- How to Use Quick Calc
- Additional Zoom Commands
- Creating Model Space Viewports
- Advanced Object Selection
- Single-Line Text
- Other Text Tools
- Additional Dimensioning Tools
- Creating Boundaries
- Working with Regions
- Temporary Overrides

### **3D Foundations**

- Why use 3D?
- Introduction to the 3D Modeling Workspace



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- 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
- Working with Mesh Models

### **Creating Solids & Surfaces from 2D Objects**

- Complex 3D Geometry
- Extruded Solids and Surfaces
- Swept Solids and Surfaces
- Revolved Solids and Surfaces
- Lofted Solids and Surfaces

### **Advanced Solid Editing**

- Editing Components of Solids
- Editing Faces of Solids
- Fillets and Chamfers on Solids

### **Working Drawings from 3D Models**

- Creating Multiple Viewports
- 2D Views from 3D Solids