

# **AutoCAD Course Contents**

**Course Duration: One Month**

## **1. Introduction to AutoCAD**

- What is AutoCAD?
- Overview of AutoCAD interface
- Understanding different workspaces
- Navigating the drawing area
- Using command line and toolbars

## **2. Basic Drawing Commands**

- Drawing lines, circles, arcs, polygons
- Using coordinate systems (absolute, relative, polar)
- Drawing basic shapes with precision
- Using grid and snap settings

## **3. Editing Commands**

- Erase, copy, move, rotate, scale
- Trim, extend, offset
- Fillet and chamfer
- Stretch and mirror

## **4. Object Properties and Layers**

- Changing object properties (color, linetype, lineweight)
- Creating and managing layers
- Layer properties manager
- Freezing, locking layers

## **5. Advanced Drawing Techniques**

- Creating and using blocks

- Dynamic blocks basics
- Using arrays (rectangular, polar, path)
- Using grips for editing

## **6. Annotation and Dimensioning**

- Adding text (single line, multiline)
- Text styles and formatting
- Creating and editing dimensions
- Dimension styles
- Leaders and tables

## **7. Working with Layouts and Viewports**

- Model space vs paper space
- Creating layouts
- Setting up viewports
- Scaling viewports

## **8. Hatching and Gradient Fills**

- Applying hatch patterns
- Editing hatch boundaries
- Gradient fills basics

## **9. Advanced Tools and Features**

- Using external references (Xrefs)
- Working with images and PDFs
- Using parametric constraints
- Introduction to 3D modeling in AutoCAD

## **10. Printing and Plotting**

- Plot styles and settings

- Configuring plotters and printers
- Plot preview and output

#### **11. Customization and Productivity Tools**

- Customizing toolbars and ribbons
- Using shortcuts and aliases
- Introduction to AutoLISP (basic automation)

#### **12. Project Work and Real-World Applications**

- Sample project drawing
- Industry-specific tips (architecture, mechanical, civil)
- Best practices and workflow tips