

Syllabus of AutoCAD

AutoCAD 2014

(Fundamentals + Advanced)

Duration 3 month classes weekly three days

1. Creating a Simple Drawing

- **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

2. Making Your Drawings More Precise

- **Drawing Precision in AutoCAD**

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

- **Making Changes in Your Drawing**

- Selecting Objects for Editing

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

3. Drawing Organization and Information

- ***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
- ***Getting Information From Your Drawing***
 - Measuring Objects
 - Working with Properties

4. Creating More Complex Objects

- ***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

5. Preparing to Print

- **Setting Up a Layout**
 - Printing Concepts
 - Creating Viewports
 - Setting up Layouts
 - Guidelines for Layouts
- **Printing Your Drawing**
 - Printing Layouts
 - Printing a Check Plot

6. 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

7. Beyond the Basics

- **Working Effectively with AutoCAD**
 - Setting up the Interface
 - Using the Keyboard Effectively

- Working in Multiple Drawings
- Using Grips Effectively
- Additional Layer Tools

- **Accurate Positioning**

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

8. Creating and Organizing Blocks

- **Creating Blocks**

- Creating Blocks
- Editing Blocks
- Removing Unused Elements

- **Blocks in Tool Palettes**

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

9. Drawing Setup and Utilities

- **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

10. Advanced Layouts and Printing

- **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

11. 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

12. AutoCAD 2009 3D Drawing and Modelling 3D Foundations

- Why use 3D?
- 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

- 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