# AUTOCAD 2018 ESSENTIALS

## COURSE OUTLINE

### Class Description

The U.S.CAD AutoCAD “Essentials” training covers the essential topics for working with AutoCAD software. The teaching strategy is to start with a few basic tools that enable the student to create and edit a simple drawing, and then continue to develop those tools. More advanced tools are introduced throughout the training class, but the main focus is on the essential commands. During the course, you’ll learn how to:

- Understand the AutoCAD workspace and Interface.
- Using basic drawing, editing, and viewing tools.
- Organizing drawing objects on layers.
- Inserting reusable symbols (blocks).
- Preparing a layout to be plotted.
- Adding text, hatching, and dimensions.

### Prerequisites

It is recommended that delegates have Basic Windows Knowledge.

### Class Length: 3 days

### Course Topics

#### Getting Started with AutoCAD
- Starting the software
- User Interface
- Working with Commands
- Cartesian Workspace
- Opening an Existing Drawing File
- Viewing your Drawing
- Saving your Work

#### Basic Drawing & Editing Commands
- Drawing Lines
- Erasing Objects
- Drawing Lines with Polar Tracking
- Drawing Rectangles & Circles
- Undo and Redo Actions

#### Drawing Precision in AutoCAD
- Using Running Object Snaps
- Using Object Snap Overrides
- Polar Tracking at Angles
- Object Snap Tracking
- Drawing with Snap and Grip

#### Making Changes in Your Drawing
- Selecting Object for Editing
- Moving and Copying Objects
- Scaling and Mirroring Objects
- Editing with Grip

#### Organizing Your Drawing with Layers
- Creating New Drawings with Templates
- What are Layers?
- Layer States
- Changing an Object’s Layer

#### Advanced Object Types
- Drawing Arches & Polylines
- Editing Polylines
- Drawing Polygons & Ellipses

#### Analyzing Model and Object Properties
- Working with Object Properties
- Measuring Objects

#### Advanced Editing Commands
- Trimming & Extending Objects
- Stretching, Offsetting & Arraying Objects
- Creating Fillets & Chamfers
- Offsetting Objects
- Creating Array of Objects

#### Inserting Blocks
- What are Blocks?
- Working with Dynamic Blocks
- Inserting Blocks
- Inserting Blocks using Tool Palettes
- Inserting Blocks using DesignCenter

#### Setting Up a Layout
- Printing Concepts
- Working in Layouts
- Creating Layouts
- Creating Layout Viewports
- Guidelines for Layouts

#### Printing Your Drawing
- Printing Layout
- Print and Plot Settings

#### Text
- Working with Annotations
- Adding Text in a Drawing
- Modifying Multiline Text
- Creating & Modifying Tables

#### Hatching
- Hatching
- Editing Hatches

#### Adding Dimensions
- Dimensioning Concepts
- Adding Linear Dimensions
- Editing Dimensions