

AUTOCAD ESSENTIAL TRAINING

Objectives

The objective of this course is to teach users the basic commands and tools necessary for professional 2D drawing, design and drafting using AutoCAD / AutoCAD LT. After completing this course users will be able to:

- ✓ Use AutoCAD for daily working process.
- ✓ Navigate throughout AutoCAD using major navigating tools.
- ✓ Understand the concept and techniques to draw.
- ✓ Create multiple designs using several of tools.
- ✓ Create layers to control the objects' visibility.
- ✓ Explain drawing using annotations.
- ✓ Plot or print the drawing by scale.
- ✓ To use constraint for certain design.

Pre-requisites

This guide is designed for new users of AutoCAD. It is recommended that you have a working knowledge of:

• Microsoft® Windows® 7, Microsoft® Windows® 8 or Microsoft® Windows® 10.

TRAINING PROGRAMME DAY 1

Chapter 1: Getting Started

- Exploring AutoCAD User Interface
- Exploring AutoCAD Workspaces
- The AutoCAD Ribbon
- Setting Drawing Unit

Chapter 2: Basic Drawing Skills

- Navigating 2D Drawings
- Drawing Lines and Rectangles
- Cancelling, erasing, Undoing
- Drawing Circles, Arcs, Polygons
- Filleting and Chamfering Lines

Chapter 3: Using Drawing Aids

- Grid and Snap
- Ortho and Polar Snapping
- Polar Snap
- Running Object Snaps
- Object Snap Tracking

Chapter 4: Editing Entities

- Move and Copy
- Rotate and Scale
- Arrays, Grip Editing
- Trim and Extend
- Lengthen and Stretch
- Offset and Mirror

TRAINING PROGRAMME DAY 2

Chapter 5: Shaping Curves

- Drawing and Editing Curved Polylines
- Drawing Ellipses
- Drawing and Editing Splines
- Blending between Objects and Splines

Chapter 6: Controlling Object Visibility

- Changing Object Properties
- Setting the Current Layer
- Altering Objects' Layer Assignments
- Controlling Layer Visibility
- Applying Linetype
- Assigning Properties by Object or by Layer
- Managing Layer Properties

Chapter 7: Organizing Objects

- Defining Blocks, Inserting Blocks
- Redefining Blocks, Editing Blocks
- Working with Groups

Chapter 8: Hatching and Gradients

- Specifying Hatch Areas
- Associating Hatches with Boundaries
- Hatching the Patterns
- Hatching the Gradients

Chapter 9: Working with Blocks and Xrefs

- Working with Global Blocks
- Searching for Content Across Multiple Drawings
- Storing Content on Tool Pallets
- Referencing External Drawings and Images

TRAINING PROGRAMME DAY 3

Chapter 10: Creating and Editing Text

- Creating Text Styles
- Writing Lines of Text
- Writing and Formatting Paragraphs (MTEXT)
- Editing Text

Chapter 11: Dimensioning

- Styling Dimensions
- Adding Dimensions
- Editing Dimensions

Chapter 12: Keeping In Control with Constraints

- Working with Geometric Constraints
- Applying Dimensional Constraints and Creating User Parameters
- Making Parametric Changes to Constrained Objects

Chapter 13: Working with Layouts and Annotative

- Creating Annotative Styles and Objects
- Creating Layouts
- Adjust Floating Viewports
- Overriding layer Properties in Layout Viewports
- Drawing on Layouts

Chapter 14: Printing and Plotting

- Configuring Output Devices
- Creating & Using Plot Styles Tables
- Plotting in Modelspaces & Paperspace
- Exporting to an Electronic Format