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