

# Autodesk AutoCAD Fundamentals Training Course

## Course Overview

### Course Length: 16-Hours

- 16-Hours - 8 x 2-hour training sessions
- Remote training over MS Teams
- Sessions are recorded and download links for each session are provide for future use
- Training for up to 1-3 People
- Sessions can start within 7 days upon ordering
- Flexible sessions (i.e. consecutive or Monday, Wednesday, Friday, etc.)
- Courses are private and topics can be customised to suit
- Includes Certificate of Completion

### AutoCAD Fundamentals Training Course Guide Contents

#### Chapter 1: Getting Started with AutoCAD

- 1.1 Starting the Software
- 1.2 User Interface
- 1.3 Working with Commands
- 1.4 Cartesian Workspace
- 1.5 Opening an Existing Drawing File
- 1.6 Viewing Your Drawing
- 1.7 Saving Your Work

#### Chapter 2: Basic Drawing and Editing Commands

- 2.1 Drawing Lines
- 2.2 Erasing Objects
- 2.3 Drawing Vertical and Horizontal Lines
- 2.4 Drawing Rectangles
- 2.5 Drawing Circles
- 2.6 Undo and Redo Actions

#### Chapter 3: Projects: Creating a Simple Drawing

- 3.1 Create a Simple Drawing
- 3.2 Create Simple Shapes

#### Chapter 4: Drawing Precision in AutoCAD

- 4.1 Using Running Object Snaps
- 4.2 Using Object Snap Overrides

- 4.3 Polar Tracking at Angles
- 4.4 Object Snap Tracking
- 4.5 (Optional) Drawing with Snap and Grid

## Chapter 5: Making Changes in Your Drawing

- 5.1 Selecting Objects for Editing
- 5.2 Moving Objects
- 5.3 Copying Objects
- 5.4 Rotating Objects
- 5.5 Scaling Objects
- 5.6 Mirroring Objects
- 5.7 Editing with Grips

## Chapter 6: Projects: Making Your Drawings More Precise

- 6.1 Schematic Project: Electronics Diagram
- 6.2 Architectural Project: Landscape
- 6.3 Mechanical Project: Using Polar and Tracking
- 6.4 Mechanical Project: Surge Protector
- 6.5 Mechanical Project: Satellite

## Chapter 7: Organising Your Drawing with Layers

- 7.1 Creating New Drawings With Templates
- 7.2 What are Layers?
- 7.3 Layer States
- 7.4 Changing an Object's Layer

## Chapter 8: Advanced Object Types

- 8.1 Drawing Arcs
- 8.2 Drawing Polylines
- 8.3 Editing Polylines
- 8.4 Drawing Polygons
- 8.5 Drawing Ellipses

## Chapter 9: Analysing Model and Object Properties

- 9.1 Working with Object Properties
- 9.2 Measuring Objects

## Chapter 10: Projects: Drawing Organisation and Information

- 10.1 Architectural Project
- 10.2 Mechanical Project
- 10.3 Civil Project

## Chapter 11: Advanced Editing Commands

- 11.1 Trimming and Extending Objects

- 11.2 Stretching Objects
- 11.3 Creating Fillets and Chamfers
- 11.4 Offsetting Objects
- 11.5 Creating Arrays of Objects

## Chapter 12: Blocks

- 12.1 What are Blocks?
- 12.2 Inserting Blocks using the Blocks Palette
- 12.3 Inserting Blocks using the Tool Palettes
- 12.4 Working with Dynamic Blocks
- 12.5 Inserting Blocks using the DesignCenter

## Chapter 13: Projects: Creating More Complex Objects

- 13.1 Mechanical Project 1: Plate
- 13.2 Mechanical Project 2: Gasket
- 13.3 Mechanical Project 3: Plate
- 13.4 Mechanical Project 4: Rocker Arm
- 13.5 Architectural Project 1: Floor Plan
- 13.6 Architectural Project 2: Floor Plan
- 13.7 Civil Project: Parking Lot

## Chapter 14: Setting Up a Layout

- 14.1 Working in Layouts
- 14.2 Creating Layouts
- 14.3 Creating Layout Viewports
- 14.4 Named Views
- 14.5 Guidelines for Layouts

## Chapter 15: Printing Your Drawing

- 15.1 Printing Concepts
- 15.2 Printing Layouts
- 15.3 Print and Plot Settings

## Chapter 16: Projects: Preparing to Print

- 16.1 Mechanical Project
- 16.2 Architectural Project

## Chapter 17: Text

- 17.1 Working with Annotations
- 17.2 Adding Text in a Drawing
- 17.3 Modifying Multiline Text
- 17.4 Formatting Multiline Text
- 17.5 Adding Notes with Leaders to Your Drawing
- 17.6 Creating Tables

- 17.7 (Optional) Modifying Tables

## Chapter 18: Hatching

- 18.1 Hatching
- 18.2 Editing Hatches

## Chapter 19: Adding Dimensions

- 19.1 Dimensioning Concepts
- 19.2 Adding Linear Dimensions
- 19.3 Adding Radial and Angular Dimensions
- 19.4 Editing Dimensions

## Chapter 20: Projects: Annotating Your Drawing

- 20.1 Mechanical Project
- 20.2 Architectural Project 1
- 20.3 Architectural Project 2
- 20.4 Civil Project

## Chapter 21: Working Effectively with AutoCAD

- 21.1 Creating a Custom Workspace
- 21.2 Using the Keyboard Effectively
- 21.3 Object Creation, Selection, and Visibility
- 21.4 Working in Multiple Drawings
- 21.5 Copying and Pasting Between Drawings
- 21.6 Using Grips Effectively
- 21.7 Additional Layer Tools

## Chapter 22: Accurate Positioning

- 22.1 Coordinate Entry
- 22.2 Locating Points with Tracking
- 22.3 Construction Lines
- 22.4 Placing Reference Points

## Chapter 23: Projects: Productivity Tools

- 23.1 Schematic Project: Purifier Unit
- 23.2 Mechanical Project: 2 Views
- 23.3 Architectural/Civil Project: Formal Garden
- 23.4 Mechanical Project: Cover Plate
- 23.5 Architectural Project: Addition
- 23.6 Mechanical Project: Block
- 23.7 Mechanical Project: Plate

## Chapter 24: Parametric Drawing

- 24.1 Working with Constraints

- 24.2 Geometric Constraints
- 24.3 Dimensional Constraints

## Chapter 25: Working with Blocks

- 25.1 Creating Blocks
- 25.2 Editing Blocks
- 25.3 Removing Unused Elements
- 25.4 Adding Blocks to Tool Palettes
- 25.5 Modifying Tool Properties in Tool Palettes

## Chapter 26: Projects: Creating and Organizing Blocks

- 26.1 Mechanical Project: Control Panel
- 26.2 Architectural Project: Furniture Layout
- 26.3 Civil Project: Utility Layout

## Chapter 27: Creating Templates

- 27.1 Why Use Templates?
- 27.2 Controlling Units Display
- 27.3 Creating New Layers
- 27.4 Adding Standard Layouts to Templates
- 27.5 Saving Templates

## Chapter 28: Working with Layouts

- 28.1 Creating and Using Named Views
- 28.2 Advanced Viewport Options
- 28.3 Layer Overrides in Viewports
- 28.4 Annotative Scale Features

## Chapter 29: Annotation Styles

- 29.1 Creating Text Styles
- 29.2 Creating Dimension Styles
- 29.3 Creating Multileader Styles

## Chapter 30: Projects: Drawing Setup and Utilities

- 30.1 Interiors Project
- 30.2 Mechanical/Schematic Project
- 30.3 Civil/Map Project
- 30.4 Mechanical Project: Dimension Styles

## Chapter 31: External References

- 31.1 Attaching External References
- 31.2 Modifying External References
- 31.3 Xref Specific Information

## Chapter 32: Projects: Drawing

- 32.1 ISO A1 Title Block
- 32.2 Mechanical Project: Drill Press Base
- 32.3 Architectural Project: Office Tower
- 32.4 P&ID Project: Oil Lubrication System
- 32.5 Civil Project: Warehouse Site