# **AutoCAD** Fundamentals

3 Days | 21 LUs



Three-day, hands-on course covering the basics of AutoCAD, the world's leading design and drafting software.

Millions of professionals rely on AutoCAD to create and share precise drawings. Our experienced instructors will provide a comprehensive overview of AutoCAD functionality to get you started with computer-aided design. Learn how to navigate through an AutoCAD file and to draw and edit objects such as lines, arcs, circles, and rectangles. Become familiar with the concepts of layers and blocks; learn how to annotate drawings with text, dimensions, leaders, and hatching; and understand how to plot drawings using both model space and paper space.

Follow up with our AutoCAD Beyond the Basics course to learn more sophisticated tools and techniques.

#### **COURSE OBJECTIVES**

This course builds the skills needed to start using and working productively in AutoCAD. Using our proven instructor-led method, we will increase the efficiency of designers, engineers and drafters by providing them with the ability and confidence to use AutoCAD to create, layer, edit, modify, annotate, dimension, and prepare sheets for plotting.

To ensure confidence in your new skills, we extend your classroom training with 90 days of free follow-up support on all class material.

Note: This training course is not designed for users of the AutoCAD for Mac software.

#### **PREREOUISITES**

- Knowledge of basic design/drafting concepts, procedures, and terminology
- Knowledge of the Microsoft Windows operating system.

#### **TARGET AUDIENCE**

- New users from all disciplines interested in learning how to draft in AutoCAD
- Industry professionals needing a fundamental knowledge of AutoCAD in order to adopt additional AutoCAD based products (i.e. AutoCAD Architecture and AutoCAD MEP)

#### **AUTOCAD FUNDAMENTALS DAY 1**

### 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 and Editing Commands

Drawing Lines
Erasing Objects
Drawing Lines with Polar Tracking
Drawing Rectangles
Drawing 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 Grid

# Making Changes in Your Drawing

Selecting Objects for Editing Moving Objects Copying Objects Rotating Objects Scaling Objects Mirroring Objects Editing with Grips

#### **AUTOCAD FUNDAMENTALS DAY 2**

# Organizing Your Drawing with Layers

Creating New Drawings with Templates What are Layers Layer States Changing an Object's Layer

#### **Advanced Object Types**

Drawing Arcs Drawing Polylines Editing Polylines Drawing Polygons Drawing Ellipses

#### **Analyzing Model and Object Properties**

Working with Object Properties Measuring Objects

#### **Advanced Editing Commands**

Trimming and Extending Objects Stretching Objects Creating Fillets and Chamfers Offsetting Objects Creating Arrays of Objects

#### **Inserting Blocks**

What are Blocks
Working with Dynamic Blocks
Inserting Blocks
Inserting Blocks using the Tool Palettes
Inserting Blocks using the Design Center

Note: Outlined topics and daily schedule may be modified slightly per instructor's discretion and class structure.





# AutoCAD Fundamentals cont...

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#### **AUTOCAD FUNDAMENTALS DAY 3**

#### Setting Up a Layout

Printing Concepts Working in Layouts Creating Layouts Creating Layout Viewports Guidelines for Layouts

#### **Printing Your Drawing**

Printing Layouts
Print and Plot Settings

#### Text

Working with Annotations
Adding Text in a Drawing
Modifying Multiline Text
Formatting Multiline Text
Adding Notes with Leaders
to Your Drawing
Creating Tables
Modifying Tables

#### **Adding Dimensions**

Dimensioning Concepts Adding Linear Dimensions Adding Radial and Angular Dimensions Editing Dimensions

#### Hatching

Hatching Editing Hatches



