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# AutoCAD I

**3 Days**  
**24 AIA/CES**



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## Course Description

Students learn the features, commands, and techniques for creating, editing, and printing drawings with AutoCAD. Using hands-on exercises, students explore how to create 2D production drawings.

The doors open at 8:45 a.m. Class begins at 9:00 a.m. and ends at 5:00 p.m. with two fifteen minutes breaks and a one hour lunch. We have bagels and coffee served in the morning upon arrival. A book and a certificate of completion are included in this fee.

## Objectives

The primary objective of this course is to teach students the basic commands necessary for professional 2D drafting and design using AutoCAD

After completing this course, students will be able to:

- Navigate the AutoCAD user interfaces.
- Use the fundamental features of AutoCAD
- Use the precision drafting tools in AutoCAD to develop accurate technical drawings.
- Present drawings in a detailed and visually impressive way.

## Who Should Attend

This course is designed for new users of AutoCAD

## Prerequisites

Before attending this course, students should have a working knowledge of the following:

- Drafting, design, or engineering principles.
- Microsoft Windows

## **Course Outline**

### **Taking the AutoCAD Tour**

- Navigating the Working Environment
- Working with Files
- Displaying Objects

### **Creating Basic Drawings**

- Inputting Data
- Creating Basic Objects
- Using Object Snaps
- Using Polar Tracking and Polar Snap
- Using Object Snap Tracking
- Working with Units

### **Manipulating Objects**

- Selecting Objects in the Drawing
- Changing an Object's Position
- Creating New Objects from Existing Objects
- Changing the Angle of an Object's Position
- Creating a Mirror Image of Existing Objects
- Creating Object Patterns
- Changing an Object's Size

### **Drawing Organization and Inquiry Commands**

- Using Layers
- Changing Object Properties
- Matching Object Properties
- Using the Properties Palette
- Using Linetypes
- Using Inquiry Commands

### **Altering Objects**

- Trimming and Extending Objects to Defined Boundaries
- Creating Parallel and Offset Geometry
- Joining Objects
- Breaking an Object into Two Objects
- Applying a Radius Corner to Two Objects
- Creating an Angled Corner Between Two Objects
- Changing Part of an Object's Shape

### **Working with Layouts**

- Using Layouts
- Using Viewports

### **Annotating the Drawing**

- Creating Multiline Text
- Creating Single Line Text
- Using Text Styles
- Editing Text

### **Dimensioning**

- Creating Dimensions
- Using Dimension Styles
- Editing Dimensions
- Using Multileaders

### **Hatching Objects**

- Hatching Objects
- Editing Hatch Objects

### **Working with Reusable Content**

- Using Blocks
- Working with Design Center
- Using Tool Palettes

### **Creating Additional Drawing Objects**

- Working with Polylines
- Creating Splines
- Creating Ellipses
- Using Tables

### **Plotting Your Drawings**

- Using Page Setups
- Plotting Drawings

### **Standards Creation**

- Creating Drawing Templates
- Using Drawing Templates

**Note:** The suggested course duration is a guideline. Course topics and duration may be modified by the instructor based upon the knowledge and skill level of the course participants.