

AutoCAD – the Basics



Participants are introduced to the AutoCAD drawing environment and the necessary skills to begin creating and editing drawings. The focus of this course is on using accurate and efficient techniques to draw and modify basic shapes. No AutoCAD experience is necessary, but participants are expected to be comfortable opening, saving and closing files; moving, copying and deleting files; locating files in different folders and reading blueprints.

Exercises for the workshop are drawn from a variety of disciplines, including part design, facility layout, architectural drafting and schematics.

Topics in this three day course include:

Interfacing with AutoCAD

- Beginning AutoCAD
- Navigating the User Interface
- Choosing Commands
- Opening Drawings, Beginning New Drawings, Closing Drawings and AutoCAD

Using Accurate Drawing Techniques

- Picking Points
- Using Object Snaps
- Inputting Coordinates
- Using Dynamic Input
- Typing Numbers
- Aligning Points With Object Snap Tracking
- Obtaining Distances

Displaying Areas of a Drawing

- Viewing the Entire Drawing
- Enlarging or Reducing the Image on the Screen
- Viewing Adjacent Areas

Working With Object Properties

- Using the Properties Palette
- Creating and Assigning Layers
- Working With Colors, Linetypes and Lineweights

Creating and Editing Shapes

- Erasing Objects
- Drawing Lines, Circle, Polygons and Rectangles
- Moving and Copying Objects
- Adding Fillets and Chamfers
- Trimming and Extending Objects
- Joining Objects
- Offsetting Objects
- Stretching Objects
- Mirroring Objects
- Creating Patterns With Array
- Scaling and Rotating Objects
- Using Saved Shapes From Design Center and the Tool Palette
- Filling Areas With a Pattern (Hatch)

Adding Text and Dimensions

- Choosing An Annotation Scale
- Adding a Note Using Multiline Text
- Creating Horizontal, Vertical, Aligned and Angular Dimensions
- Adding Diameter and Radius Dimensions
- Creating Multiline Leaders

Printing

- Choosing the Printer, Area, Paper Size, Orientation and Color
- Adding a Sheet Format (Layout)
- Setting the Drawing Scale

Topics and duration may be modified by the instructor based on skill level and knowledge of the participants.