

# AutoCAD – The Basics



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. 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 drawing and modifying basic shapes.

Exercises for the workshop are drawn from a variety of disciplines, including part design, facility layout, architectural drafting and schematics. Participants for each workshop are surveyed to determine their areas of interest and when possible, exercises are tailored to match the needs of the workshop attendees.

Topics in this three day course include:

## Interfacing with AutoCAD

- Beginning AutoCAD
- Navigating The User Interface
- Choosing Commands
- Using Menu Search And Help
- 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 Snaps 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
- Offsetting Objects
- Stretching Objects
- Joining And Breaking 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 Note with Single and Multiline Text
- Creating Horizontal, Vertical And Aligned Dimensions
- Adding Diameter And Radius Dimensions
- Creating Multiline Leaders

## Printing

- Choosing The Printer, Area, Paper Size, Orientation And Color
- Adding A Sheet Format (Layout)

## Practice exercises

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