

COURSE OUTLINE

Drawing with AutoCAD, a leader in design documentation, students will learn how to draw their designs with automated calculation and annotations. We start the three day course by learning the fundamental features of AutoCAD, progressing through project setup, drawing and editing tools, and construction document management, finishing with documentation and print setup. Upon completion of the course you will receive an Official Certificate of Completion from Autodesk.

Class Duration: 3 days

Topics

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 & Editing Commands

- Drawing Lines
- Erasing Objects
- Drawing Vertical & Horizontal Lines
- Drawing Rectangles & 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 Grip

Making Changes in Your Drawing

- Selecting Object for Editing
- Moving and Copying Objects
- Rotating, Scaling, and Mirroring Objects
- Editing with Grip

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 & Polylines
- Editing Polylines
- Drawing Polygons & Ellipses

Analyzing Model and Object Types

- Working with Objects Properties
- Measuring Objects

Advanced Editing Commands

- Trimming & Extending Objects
- Stretching, Offsetting, & Arraying Objects
- Creating Fillets & Chamfers
- Offsetting Objects
- Creating Array of Objects

Blocks

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

Setting Up a Layout

- Working in Layouts
- Creating Layouts
- Creating Layout Viewpoints
- Named Views
- Guidelines for Layouts

Printing Your Drawing

- Printing Concepts
- Printing Layout
- Print and Plot Settings

Text

- Working with Annotations
- Adding Text in a Drawing
- Modifying Multi-line Text
- Formatting Multi-Line Text
- Adding Notes with Leaders
- Creating & Modifying Tables

Hatching

- Hatching
- Editing Hatches

Adding Dimensions

- Dimensioning Concepts
- Adding Linear Dimensions
- Adding Radial & Angular Dimensions
- Editing Dimensions

COURSE OUTLINE

Drawing with AutoCAD, a leader in design documentation, students will learn how to draw their designs with automated calculation and annotations. We start the three day course by learning the fundamental features of AutoCAD, progressing through project setup, drawing and editing tools, and construction document management, finishing with documentation and print setup. Upon completion of the course you will receive an Official Certificate of Completion from Autodesk.

Class Duration: 3 days

Topics

Working Effectively w/ AutoCAD

- Creating a Custom Workspace
- Using the Keyboard Effectively
- Object Creation, Selection, and Visibility
- Working in Multiple Drawings
- Copying & Pasting between Drawings
- Using Grips Effectively
- Additional Layer Tools

Accurate Positioning

- Coordinate Entry
- Locating Points with Tracking
- Construction Lines
- Placing Reference Points

Parametric Drawing

- Working with Constraints
- Geometric Constraints
- Dimensional Constraints

Working with Blocks

- Creating Blocks
- Editing Blocks
- Removing Unused Blocks
- Adding Blocks to Tool Palettes
- Modifying Tool Properties in Tool Palettes

Creating Templates

- Why Use Templates
- Controlling Units Display
- Creating New Layers
- Adding Standard Layouts to Templates
- Saving Templates

Working with Layouts

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

Annotation Styles

- Creating Text Styles
- Creating Dimension Styles
- Creating Multi-leader Styles

External References

- Attaching External References
- Modifying External References
- Xref Specific Information

General Topics

- Using Quickcalc
- Additional Zooming Commands
- Additional Text tools
- Additional Dimensioning Tools
- Creating Boundaries & Regions
- Modifying Length