

Days: 3

Prerequisites: Completion of AutoCAD Fundamentals or equivalent.

Audience: This course is ideal for designers who need an advanced understanding of AutoCAD.

Description: The AutoCAD Advanced training guide introduces advanced techniques and teaches you to be proficient in your use of AutoCAD. This is done by teaching you how to recognize the best tool for the task, the best way to use that tool, and how to create new tools to accomplish tasks more efficiently.

This training guide includes the following topics:

- Advanced Text Objects
- Working with Tables
- Defining dynamic blocks and attributes
- Outputting and publishing files for review
- Collaboration and automation tools
- Creating, publishing, and customizing sheet sets
- Managing Layers
- CAD Management and System Setup
- Enhancing productivity by customizing the AutoCAD interface
- Using macros and custom routines

OUTLINE:

CHAPTER 1 INTRODUCTION

Practice 1a Introduction

CHAPTER 2 ADVANCED TEXT OBJECTS

2.1 Annotation Scale Overview

- Working with Annotative Styles
- Viewing Annotative Objects at Different Scales
- Annotation Scale and Model Space
- Modifying Annotative Object Scales
- Practice 2a Annotation Scale

2.2 Using Fields

- Updating and Modifying Fields
- Field Settings
- Object Fields
- Fields in Blocks
- Fields in Attributes
- Practice 2b Fields
- Practice 2c Object Fields

2.3 Controlling the Draw Order

- Draw Order
- Draw Order of Hatching
- Masking Annotation Objects
- Adding a Wipeout
- Practice 2d Controlling the Draw Order

CHAPTER 3 WORKING WITH TABLES

3.1 Working with Linked Tables

- Using the Data Link Manager
- Updating Table Links

3.2 Creating Table Styles

- Cell Style Options
- Practice 3a Working with Tables

CHAPTER 4 PROJECTS - ADVANCED ANNOTATION

Practice 4a Fields and Tables

CHAPTER 5 DYNAMIC BLOCKS

5.1 Working with Dynamic Blocks

- Inserting Dynamic Blocks
- Modifying Dynamic Blocks5
- Practice 5a Inserting and Modifying Dynamic Blocks

5.2 Creating Dynamic Block Definitions

5.3 Dynamic Block Authoring Tools

- Block Editor Contextual Tab
- Parameters
- Actions
- Parameter Sets
- Constraints
- Labeling Parameters
- Testing the Block
- Construction Geometry
- Constraints in Dynamic Blocks
- Creating a Block Table
- Practice 5b Creating Dynamic Block Definitions

5.4 Additional Visibility Options

CHAPTER 6 ATTRIBUTES

6.1 Inserting Blocks with Attributes

- What are Attributes?
- How Attribute Values Are Entered
- Retain Attribute Display

6.2 Editing Attribute Values

- Editing Attributes One at a Time
- Editing Multiple Attribute Values
- Practice 6a Inserting and Editing Attribute Values

6.3 Defining Attributes

- Attribute Definition
- Associating Attributes with Blocks
- Practice 6b Defining Attributes

6.4 Redefining Blocks with Attributes

- Updating Blocks with New Attributes
- Practice 6c Redefining Blocks with Attributes

6.5 Extracting Attributes

 Practice 6d Extracting Object Data to a Table

CHAPTER 7 PROJECTS - ADVANCED BLOCKS & ATTRIBUTES

- 7.1 Dynamic Block Practice Desk Unit
- 7.2 Mechanical Attribute Project Amplifier
- 7.3 Architectural Attribute Project Door Schedule

CHAPTER 8 OUTPUT AND PUBLISHING

8.1 Output For Electronic Review

- Plotting Electronic Files
- Exporting DWF or PDF Files

8.2 Autodesk Design Review

- Viewing Markups in AutoCAD
- 8.3 Publishing Drawing Sets
 - Practice 8a Reviewing and Publishing Drawing Sets

CHAPTER 9 OTHER TOOLS FOR COLLABORATION

9.1 eTransmit

- Transmittal Setups
- Practice 9a eTransmit

9.2 Hyperlinks

- Using a Hyperlink
- Practice 9b Hyperlinks

CHAPTER 10 CLOUD COLLABORATION AND 2D AUTOMATION

10.1 Connecting to the Cloud

- Stay Connected Menu
- Autodesk 360 Log in and Settings
- Design Feed
- Exchange Apps

10.2 Sharing Drawings in the Cloud

- Upload Drawings
- Sharing Files
- Practice 10a Working in Autodesk 360

CHAPTER 11 INTRODUCTION TO SHEET SETS

11.1 Overview of Sheet Sets

- Understanding the Sheet Set Manager
- Practice 11a Overview of Sheet Sets

11.2 Creating Sheet Sets

• Sheet Set Properties

11.3 Creating Sheets in Sheet Sets

• Organizing Sheets in Subsets

11.4 Adding Views to Sheets

- Sheet Views Tab
- Practice 11b Introduction to Sheet Sets

11.5 Importing Layouts to Sheet Sets

- Create a Sheet Set from Existing Layouts
- Importing a Layout to a Sheet Set
- Practice 11c Importing Layouts to Sheet Sets

CHAPTER 12 PUBLISHING & CUSTOMIZING SHEET SETS

12.1 Transmitting and Archiving Sheet Sets

Archiving Sheet Sets

12.2 Publishing Sheet Sets

- Publish to DWFx
- Control Plotting Output
- Practice 12a Transmitting, Archiving, and Publishing
- Sheet Sets
- Sheet Set Properties
- Creating Custom Properties

12.4 Custom Blocks for Sheet Sets

- Creating a Title Label Block
- Creating a Callout Block
- Practice 12b Customizing Sheet Sets

CHAPTER 13 PROJECTS - SHEET SETS

13.1 Sheet Sets

CHAPTER 14 MANAGING LAYERS

14.1 Working in the Layer Properties Manager

- Displaying Columns in the Layer Properties Manager
- Layer Settings
- Practice 14a Working in the Layer Properties Manager

14.2 Creating Layer Filters

- Using the Filter
- Property Filters
- Group Filters

14.3 Setting Layer States

- Practice 14b Layer Filters and Layer States
- Practice 14c Setting Up Layer States (Mechanical)

CHAPTER 15 CAD STANDARDS

15.1 CAD Standards Concepts Creating a Standards File

15.2 Configuring Standards

- Plug-ins
- CAD Standards Status Bar Icon Notes

15.3 Checking Standards

- CAD Standards Settings
- Practice 15a Creating, Configuring, and Checking Standards

15.4 Layer Translator

- Settings
- Practice 15b Layer Translator

CHAPTER 16 SYSTEM SETUP

16.1 Options Dialog Box

- Options
- Practice 16a Options Dialog Box

16.2 System Variables

- Some Common System Variables
- Practice 16b System Variables

16.3 Dynamic Input Settings

Practice 16c Dynamic Input Settings

16.4 Drawing Utilities

- Renaming Named Objects
- Drawing Recovery and Repair
- Checking a Drawing's Status
- Practice 16d Drawing Utilities

16.5 Managing Plotters

- Add Plotter Wizard
- Plotter Manager
- Plotter Configuration Editor
- Practice 16e Managing Plotters

16.6 Plot Styles

- Concepts
- Types of Plot Style Tables
- Creating Plot Style Tables
- Attaching Plot Style Tables to Layouts
- Practice 16f Color Plot Styles
- Practice 16g Named Plot Styles

CHAPTER 17 INTRODUCTION TO CUSTOMIZATION

17.1 Why Customize?

Customization Guidelines

17.2 What Can Be Customized?

17.3 Creating a Custom Workspace

 Practice 17a Setting Up Workspaces

CHAPTER 18 CUSTOMIZING THE USER INTERFACE

18.1 Using the Customize User Interface (CUI) Dialog Box

- Overview of the CUI Interface
 18.2 Customizing the Ribbon
 - Customize User Interface Dialog Box
 - Ribbon Contextual Tabs
 - Ribbon Fold Panels

18.3 Customizing the Quick Access Toolbar

Multiple Quick Access Toolbars

18.4 Customizing Menus

- Controlling Menus in Workspaces
- Modifying Shortcut Menus

18.5 Keyboard Shortcuts

- Mouse Buttons
- Customizing Double-Click Actions
- Practice 18a Customizing AutoCAD

CHAPTER 19 MACROS & CUSTOM ROUTINES

19.1 Custom Commands and Macros

- Creating a New Command
- Command Macro
- Special Characters Used in Macros
- Button Image
- Practice 19a Custom Command Macros

19.2 Running Scripts

• Practice 19b Running Scripts

19.3 Action Recorder

19.4 Editing Action Macros

- Working with the Action Macro Manager
- Establishing a Base Point
- Specifying Playback Values
- Practice 19c Action Recorder

19.5 Loading Custom Routines

- Loading Routines
- APPLOAD Options
- Secureload
- Practice 19d Loading and Running an AutoLISP Routine