AutoCAD Level 3: Creating and Presenting 3D Models

Days: 3

Audience: Professionals who want unparalleled creative freedom, productivity, and precision for producing superb 3D modeling.

Prerequisites: Knowledge of basic computer navigation and basic design/drafting procedures and terminology. Must have taken AutoCAD Level 1 and AutoCAD Level 2 or have equivalent experience.

Description: In this course, you will learn the fundamental concepts and workflows for creating 3D models using AutoCAD. You will learn to create solid primitives, solid or surface models from cross-sectional geometry, or composite models from multiple solid models, and you'll learn to add the necessary features to detail, duplicate, and position 3D models.

You will learn to document a 3D design by creating 2D drawings for production and visualization, and you'll learn to convert 2D objects to 3D objects. You will learn to communicate design ideas using visual styles, lights, model walk-through tools, and renderings.

Course Objectives: In this course, you will:

- Fundamental concepts and workflows for creating 3D models using AutoCAD
- Represent a design by creating solid primitives, solid or surface models from cross-sectional geometry, or composite models from multiple solid models
- Complete a solid model design by adding the necessary features to detail, duplicate, and position 3D models
- Convert 2D objects to 3D objects
- Document a 3D design by creating 2D drawings for production and visualization
- Communicate design ideas using visual styles, lights, model walk-through tools, and renderings

OUTLINE:

LESSON 1: INTRODUCTION

LESSON 2: ADVANCED TEXT OBJECTS
- Annotation Scale Overview
- Using Fields
- Controlling the Draw Order

LESSON 3: WORKING WITH TABLES
- Working with Linked Tables
- Creating Table Styles

LESSON 4: PROJECTS - ADVANCED ANNOTATION

LESSON 5: DYNAMIC BLOCKS
- Working with Dynamic Blocks
- Creating Dynamic Block Definitions
- Dynamic Block Authoring Tools
- Additional Visibility Options

LESSON 6: ATTRIBUTES
- Inserting Blocks with Attributes
- Editing Attribute Values
- Defining Attributes
- Redefining Blocks with Attributes
- Extracting Attributes

LESSON 7: PROJECTS - ADVANCED BLOCKS & ATTRIBUTES

LESSON 8: OUTPUT AND PUBLISHING
- Output For Electronic Review
- Autodesk Design Review
- Publishing Drawing Sets

LESSON 9: OTHER TOOLS FOR COLLABORATION
- eTransmit
- Hyperlinks

AutoCAD Level 3: Creating and Presenting 3D Models

LESSON 10: CLOUD COLLABORATION AND 2D AUTOMATION
- Connecting to the Cloud
- Sharing Drawings in the Cloud
- Attach Navisworks Files
- Attach BIM 360 Glue Models

LESSON 11: INTRODUCTION TO SHEET SETS
- Overview of Sheet Sets
- Creating Sheet Sets
- Creating Sheets in Sheet Sets
- Adding Views to Sheets
- Importing Layouts to Sheet Sets

LESSON 12: PUBLISHING & CUSTOMIZING SHEET SETS
- Transmitting and Archiving Sheet Sets
- Publishing Sheet Sets
- Customizing Sheet Sets
- Custom Blocks for Sheet Sets

LESSON 13: PROJECTS - SHEET SETS

LESSON 14: MANAGING LAYERS
- Working in the Layer Properties Manager
- Creating Layer Filters
- Setting Layer States

LESSON 15: CAD STANDARDS
- CAD Standards Concepts
- Configuring Standards
- Checking Standards
- Layer Translator

LESSON 16: SYSTEM SETUP
- Options Dialog Box
- System Variables
- Dynamic Input Settings
- Drawing Utilities
- Managing Plotters
- Plot Styles

LESSON 17: INTRODUCTION TO CUSTOMIZATION
- Why Customize?
- Creating a Custom Workspace

LESSON 18: CUSTOMIZING THE USER INTERFACE
- Using the Customize User Interface (CUI) Dialog Box
- Customizing the Ribbon
- Customizing the Quick Access Toolbar
- Customizing Menus
- Keyboard Shortcuts

LESSON 19: MACROS & CUSTOM ROUTINES
- Custom Commands & Macros
- Running Scripts
- Action Recorder
- Editing Action Macros
- Loading Custom Routines