

Learning AutoCAD Mechanical 2010

Course Objectives

The primary objective of this course is to teach students the basic skills necessary to become proficient with professional 2D mechanical drawing, design, and drafting using AutoCAD Mechanical 2010.

After completing this course, students will be able to:

- Identify and use key components of the AutoCAD Mechanical 2010 user interface.
- Use the fundamental features of AutoCAD Mechanical 2010.
- Use the precision drafting tools in AutoCAD Mechanical 2010 to develop accurate technical engineering drawings.
- Demonstrate a high level of comfort and confidence with AutoCAD Mechanical 2010 through hands-on practice.

Who Should Attend / Prerequisites

This course is designed for new users of AutoCAD Mechanical. Before taking this course, the student should have a working knowledge of the following:

- A recent version of AutoCAD (recommended but not necessary)
- Drafting, design, or engineering principles.
- Microsoft® Windows® Vista or Microsoft® Windows® XP.

Course Outline

Getting Started

- Interacting with the User Interface
- Common Drawing Setup

Object Property and Layer Management

- Property Management
- Layer Control

Organizing Drawing Geometry

- Drawing Creation Workflows and Organization
- Structuring Data in Drawings
- Reusing and Editing Structured Data

Tools for Creating Key Geometry

- Core Design Tools
- Power Snaps
- Centerlines
- Construction Lines
- Designing with Lines
- Adding Standard Feature Data for Holes and Slots

Tools for Manipulating

Geometry

- Editing Tools
- Power Commands
- Associative Hide

Mechanical Part Generators

- Standard Parts
- Chains and Belts
- Shaft Generator
- Standard Shaft Parts
- Springs

Creating Drawing Sheets

- Model Space Views in Layouts
- Creating Drawing Sheets in Model Space
- Annotation Views When Using Structure
- Title Blocks and Drawing Borders

Dimensioning and Annotating Your Drawings

- Annotation and Annotation Symbols
- Creating Dimensions
- Editing Dimensions
- Hole Charts and Fits Lists

- Revision Lists

Bill of Materials, Parts Lists, and Balloons

- Part References
- Bill of Materials
- Inserting Parts Lists
- Ballooning Parts

Design Calculations

- Design Calculations

Leveraging Existing Data

- DWG Files
- IGES Files
- Inventor Link

Mechanical Options for the CAD Manager

- Standards-Based Design
- Configure Layer, Text, and Object Properties
- Configure the Annotation Tools
- Configure Component Properties, BOMS, Parts Lists, and Balloons

Course Duration: 4 Days

Tuition: \$950.00 / Student