AutoCAD Mechanical training course - AutoCAD Mechanical Essentials

Course Description

Teaches the features, tools and techniques for creating 2D mechanical drawings using AutoCAD® Mechanical. Using hands-on exercises representing real-world design scenarios, delegates learn how to efficiently create mechanical designs and engineering production drawings.

Course Duration

4 days.

Objectives

To teach new users of Autodesk Inventor how to:

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

Who Should Attend

New users of Autodesk Inventor.

Pre-requisites

Delegates should have a working knowledge of the following:

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

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Course Outline

AutoCAD Mechanical Design Concepts
- Interacting with the User Interface

User Interface
- Common Drawing Setup

Mechanical Layers and Layer Control
- Layers
- Layer Control

Workflows for Organizing and Creating Drawing Geometry
- Structuring Data in Drawings
- Reusing and Editing Structured Data

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

Tools for Manipulating Geometry
- Editing Tools
- Power Commands
- Associative Hide

Mechanical Part Generators
- Standard Parts
- Chain/Belt
- Shaft Generator
- Standard Shaft Parts
- Springs

Creating Drawing Sheets
- Creating Drawing Sheets in Model Space
- Model Space Views in Layouts
- 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
- Library
- DWG™ and IGES Files
- Inventor Link

Mechanical Options for the CAD Manager
- Standards-Based Design
- Configure Layer, Text, and Symbol Properties
- Configure the Annotation Tools
- Configure Component Properties, BOM, Parts Lists, and Balloons

Please note: Course topics may be modified by the instructor based upon knowledge and skill level of the course participants.

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