

Advanced AutoCAD Mechanical

Duration: 2/3 days
Target Audience: Existing Mechanical users who want to investigate additional productive commands.

Courseware Description

The AutoCAD Mechanical 2008 Intermediate courseware continues to build on the basic concepts of the AutoCAD Mechanical for the novice (AD15) courseware. Experienced AutoCAD Mechanical users will discover new tools to increase productivity and streamline their everyday tasks. This material is targeted toward the new and novice Autodesk Inventor user who must learn more about AutoCAD Mechanical. It is recommended as a two- to three-day course which focuses on the features, tools, and techniques that make the student productive on AutoCAD Mechanical in the shortest possible time.

Hands-on exercises throughout the course explore how to create production electrical controls drawings.

Objectives

This course is designed to teach experienced users of AutoCAD Mechanical many of the complex elements of using AutoCAD Mechanical for Mechanical Design.

The primary objective of the course is to teach the student the most powerful features and techniques for Annotations, Layouts, Standard Parts, Shaft Generator, Design Calculations, and how to work with Autodesk Vault. With an understanding of these features, students can begin to streamline the design process and shape AutoCAD Mechanical for their own use.

Who Should Attend

This course is designed to be a continuation of the AutoCAD Mechanical for novices (AD15) course.

Prerequisites

It is recommended that you first complete the AutoCAD Mechanical for novices courseware or have the equivalent experience using the software and that you have a working knowledge of Microsoft Windows XP, Microsoft Windows 2000.

Course Outline

Mechanical Structure

- Organizing Existing Drawings with Structure
- Creating Multiple Views for a Component
- Controlling Structure Workflow
- Inserting Structure into a Design
- Editing Structure Definitions
- Rearranging Components
- Reusing Designs
- Integrating Structure into Other Tools

Standard Features and Annotations

- Placing Standard Features
- Hole Features
- Threaded Features
- Slot Features
- Weld Symbols
- Surface Textures
- Edge Symbols
- Placing Text
- Feature Control Frames
- Feature Identifiers
- Datum Identifiers
- Datum Targets

Model Space and Layouts

- Creating Model Space Views on Layout Tabs
- Associative Details in a Layout
- Scaled Boundaries in Model Space
- Model Views on Layout Tabs
- Scale Overrides
- Creating Viewports from Scale Areas
- Zooming All Viewports to Defined Scales

Standard Parts

- Navigating the Parts Library
- Screw Assemblies
- Screw Template
- Standard Parts Tools
- Changing Representation
- Leader Notes
- Spring Design
- Spring Calculation Restrictions
- Sprockets and Pulleys
- Chains and Belts

Shaft Generator

- Basic Shaft Sections
- Shaft Contour Features
- Complex Shaft Segments
- Shaft Display
- Associative Shaft Views
- Shaft Standard Parts and features
- Placing Bearings
- Shaft Cut Features
- Shaft Breaks

Design Calculations

- Moment of Inertia
- Moment of Inertia with Predefined Profiles
- Calculating Deflection Line
- Estimating Screw Diameter
- Shaft Stresses
- Finite Element Analysis

Working with Autodesk Vault

- Access the Vault
- Check In and Check Out
- Check In Settings
- Attach from Vault
- Xref Manager
- Typical Workflow

Note: The course duration shown above is a guideline. Course topics and duration may be modified by the instructor based upon the knowledge and skill level of the course participants.

Pricing

1st Delegate £350.00 per day

2nd and Additional Delegates £250.00 per delegate per day

Maximum number of delegates 6 per course

The course is Autodesk Authorised with Courseware, and Certificate of Completion awarded