CADLearning™
by 4D Technologies

AutoCAD® Mechanical 2010 Compatible

Autodesk®

AutoCAD® Mechanical 2010 Tutorial Series

122 Video tutorials for the New or Upgrading User

Packaged with AutoCAD 2010 Tutorials for a total of 636 lessons.

Our instructor, Jim Swain, is a Solutions Engineer with Synergis Technologies in Pennsylvania. Prior to joining Synergis in 1997, he worked in the automotive and consumer electronics industries as a design engineer, and CAD administrator. Jim has over 25 years of CAD experience, including 15 years with AutoCAD.

Topics covered:

Prerequisites:

Requirements:

Disk version requires Windows XP or higher.
Internet Explorer 6.0+ Browser
Adobe Flash Player
DVD Drive
Pointing device
2 GB Drive Space
5 GB w/AutoCAD Tutorial

Online versions need only a high speed Internet connection, a browser and Adobe® Flash.

AutoCAD Mechanical Environment

- Getting Started
- AutoCAD Mechanical's Default User Interface
- AutoCAD Mechanical's Alternate User Interfaces
- AutoCAD Mechanical Help
- AutoCAD Mechanical's Layer Management: Basic Concepts
- AutoCAD Mechanical Layer Management
- AutoCAD Mechanical Layer Management Tools

Creating Designs

- Geometry Creation and Manipulation
- Drawing Rectangles and Squares
- Drawing Centerlines
- Drawing More Centerlines
- Drawing Zig Zag and Symmetrical Lines
- Drawing Section Lines
- Construction Line Tools
- Basic Construction Lines
- Construction Line Circles
- Projecting Construction Lines
- Contour Tracing
- Hatch Commands
- Adding Fillets
- Adding Chamfers
- Offset Command
- Move, Copy and Rotate Command
- Join and 2D Hide Commands
- Adding Standard Holes
- Adding Counterbored and Countersunk Holes
- Adding Slots
- Editing and Erasing Mechanical Objects
- Shaft Generator - Part 1
- Shaft Generator - Part 2
- Shaft Side Views and Section Views

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Creating Designs	Shaft Parts
	Spring Utilities
	Chain and Belt Design Tools
	Chain and Belt Design - Length
	Inserting Structural Steel Shapes
	Power Copy
	Power View
Managing and Using Content Libraries	Content Libraries
	Inserting Objects from Content Libraries
	Content Manager
	Creating Custom Content Libraries
	Adding Content to Custom Libraries
Annotations and Documentation	Annotation and Documentation Overview
	Power Dimensioning
	Power Dimensioning: Radial and Diametrical Dimensions
	Power Dimensioning: Angle and Chamfer Dimensions
	Power Dimensioning Dialog Box
	Power Dimensioning: Fits and Tolerances
	Power Dimensioning Settings
	Power Dimensioning: Multiple Dimensions
	Editing Automatic Dimensions
	Editing Power Dimensions
	Editing Dimensions: Joining, Inserting and Checking Dimensions
	Editing Dimensions: Breaking Dimensions
	Weld Representations
	Leader Notes
	Surface Texture Symbols
	Weld Symbols
	Creating Hole Charts
	Hole Chart Settings
	Title Blocks and Borders
	Dimension and Symbol Scale Factor
	Detail View
	Viewport Creation and Editing
	Scale Area Creation and Editing
	Creating Simple Hide Situations
	Editing a Simple Hide Situation
Designing Assemblies with Layer Groups	Layer Group Overview
	Layer Group Concepts
	Creating Layer Groups
	Layer Group Tools
	Additional Layer Group Tools and Techniques
Designing Assemblies with Structure	Structure Overview

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	Structure Concepts
	Structure Bill of Material Tools
	Creating Folders
	Creating an Assembly with Structure
	Creating Additional Structure Views
	Structure Annotation Views
	Browser Structure Tools
Documenting Parts and Assemblies	BOM Concepts
	Creating and Editing Part References
	Working with the Bill of Material Database
	Bill of Material Database Settings
	Creating and Editing Parts Lists
	Parts List Filters and Groups
	Parts List Settings
	Adding Balloons
	Balloon Settings
Analysis and Validation	Analysis Overview
	Deflection Line Calculations
	Shaft Calculations
	Finite Element Analysis
	Finite Element Analysis Meshing and Results
	Cam Profile Generator
	Cam Profile and Analysis
Interoperability with AutoCAD	Interoperability of AutoCAD and Mechanical
	AutoCAD to Mechanical
	Mapping AutoCAD Layers
	Removing Mechanical Structure
	Migrating Title Blocks and Parts Lists
Interoperability with Inventor	Documenting Inventor Models with Mechanical
	Creating Inventor Links
	Creating Projected Views
	Creating Section and Broken Views
	Creating Multiple Views and Detail Views
	Updating Inventor Link Drawings
	Drawing View Settings
	Documenting Inventor Assemblies
Implementing Preferences and Standards	Mechanical Preferences and Standards
	AM:Standards Settings
	AM:Structure Settings
	AM:Drawing Settings
	AM:Content Settings
	AM:Shaft Settings
	AM:Calculation Settings
Implementing Preferences and Standards	AM:Preferences Settings

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Associative Hide Settings
Power Snap Settings
Object Property Settings

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