



Duration 2 Days

Prerequisites:

- SolidWorks Essentials

Course Outline

Assembly Modeling teaches you how to maximize your use of the assembly modeling capabilities of SolidWorks mechanical design automation software.

The main topics covered include:

Lesson 1: Understanding Assemblies

SolidWorks Assemblies
Assembly File Structure
File References
External Reference Search Order
Solving Mates

Lesson 2: Advanced Mate Techniques

Advanced Mates
Case Study: SmartMates and Mate References
Adding Mate References
Design Library Parts
Capture Mate References
Advanced and Mechanical Mate Types
Case Study: Advanced Mates
Summary: Inserting and Mating Components
Multiple Mate Mode
Using Copy with Mates
Case Study: Copy With Mates
Mate Options

Lesson 3: Top-Down Assembly Modeling

Stages in the Process
Case Study: Building In-context Parts
Building Parts in an Assembly
In-Context Features
Propagating Changes
Saving Virtual Parts as External
External References
Breaking External References
Removing External References

Lesson 4: Assembly Features, Smart Fasteners, and Smart Components

Assembly Features and Smart Fasteners
Assembly Features
Stages in the Process
Smart Fasteners
Smart Components

Lesson 5: Using Configurations with Assemblies

Stages in the Process
Component Patterns
Creating Configurations Manually
Configuration Properties

Lesson 6: Display States and Appearance

Display States
Bulk Selection Tools
Case Study: Display States
Advanced Select
Envelopes
Appearances, Materials and Scenes
Case Study: Appearances and Materials

Lesson 7: Assembly Editing

Key Topics
Editing Activities
Case Study: Assembly Editing
Replacing and Modifying Components
Troubleshooting an Assembly
Replacing Components Using Save As
Mirroring Components
Hole Alignment
Controlling Dimensions in an Assembly
Sensors

Lesson 8: Layout-based Assembly Design

Case Study: Clamp
Blocks
Inserting Blocks
Creating a Part from a Block
Gear and Pulley Motion in Blocks
Case Study: Gears and Pulleys

Lesson 9: Large Assemblies

Lightweight Components
Large Assembly Mode
Case Study: Large Assembly Options
Using SpeedPak
Defeature
Using Configurations with Large Assemblies
Modifying the Structure of an Assembly
Assembly Visualization
Large Design Review
Tips for Faster Assemblies
Drawing Considerations

Please do not hesitate to contact us for registration and further information

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