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Course Outline

SOLIDWORKS Assembly Modelling	
Description	This course teaches how to maximize your use of the assembly modelling capabilities of SOLIDWORKS including 'Top-Down' Assembly modelling and managing large assemblies.
Prerequisites	Equivalent or in addition to SOLIDWORKS Essentials
Delivery Mode	Online

Introduction
About This Course

Lesson 1: Top-Down Assembly Modelling
Top-Down Assembly Modelling
Stages in the Process
Building Virtual 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 2: Assembly Features and Smart Fasteners
Assembly Features and Smart Fasteners
Stages in the Process
Assembly Features
Smart Fasteners

Lesson 3: Advanced Mate Techniques
Advanced Mates
Adding Mate References
Design Library Parts
Capture Mate References
Smart Components
Advanced and Mechanical Mate Types
Summary: Inserting and Mating Components
Multiple Mate Mode
Using Copy with Mates
Mate Options

Lesson 4: Using Configurations with Assemblies
Using Configurations with Assemblies
Stages in the Process
Component Patterns
Creating Configurations Manually
Configuration Properties
Using Configure Component
Configuration Publisher

Lesson 5: Display States and Appearances
Display States
Bulk Selection Tools
Advanced Select
Envelopes
Appearances, Materials, and Scenes

Lesson 6: Assembly Editing
Assembly Editing
Key Topics
Editing Activities
Replacing and Modifying Components
Troubleshooting an Assembly
Replacing Components Using Save As
Mirroring Components
Hole Alignment
Controlling Dimensions in an Assembly Sensors

Lesson 7: Layout-based Assembly Design
Layout-based Assembly Design
Key Topics
Blocks
Inserting Blocks
Creating a Part from a Block
Gear and Pulley Motion in Blocks

Lesson 8: Large Assemblies
Large Assemblies
Key Topics
Lightweight Components
Large Assembly Mode
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