Course Duration: 2 days

Prerequisites: SolidWorks Essentials

Description: Assembly Modeling teaches you how to maximise your use of the assembly modeling of SolidWorks mechanical design automation software

The topics covered in this course are:

Lesson 1: Top-Down Assembly Modeling
Top-Down Assembly Modeling
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
Configuration Properties
Using Configure Component
Creating Configurations Manually
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

Lesson 8: Large Assemblies
Large Assemblies
Key Topics
Lightweight Components
Large Assembly Mode
Selective Open with Hide
Using Quick View / Selective Open
Using SpeedPak
Defeature
Using Configurations with Large Assemblies
Modifying the Structure of an Assembly
Assembly Visualization
Tips for Faster Assemblies
Drawing Considerations