SOLIDWORKS ASSEMBLY MODELING

PREREQUISITES

- SolidWorks Essentials or equivalent experience.

LENGTH

2 Days

DESCRIPTION

- Assembly Modeling teaches students how to maximize their use of the assembly modeling capabilities of SolidWorks mechanical design automation software.

TOP-DOWN ASSEMBLY MODELING

- Methodology
- Building Parts in an Assembly
- Building Virtual Parts
- Saving Internal Parts as External
- In-Context Features
- Propagating Changes
- External References
- Breaking or Removing External References

ASSEMBLY FEATURES & SMART FASTENERS

- Assembly Features: Hole Series
- Toolbox: Smart Fasteners

ADVANCED MATE TECHNIQUES

- Adding Mate References
- Mate Options
- Multiple Mate Mode
- Advanced and Mechanical Mate Types
- Using “Copy with Mates”
- Capture Mate References
- Design Library Parts
- Smart Component Creation

USING CONFIGURATORS WITH ASSEMBLIES

- Component Patterns
- Using Configure Component
- Creating Configurations Manually
- Using Configurations with Large Assemblies
- Configuration Publisher

DISPLAY STATES & APPEARANCES

- Bulk Selection Tools
- Advanced Select
- Envelopes
- Appearances, Materials & Scenes

ASSEMBLY EDITING

- Modifying the Structure of an Assembly
- Replacing & Modifying Components
- Replacing Components Using Save As
- Controlling Dimensions in an Assembly
- Mirroring Components
- Assembly Equations
- Hole Alignment Analysis
- Sensors
- Troubleshooting Assembly Errors

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SOLIDWORKS ASSEMBLY MODELING

▶ LAYOUT-BASED ASSEMBLY DESIGN
- Creating, Modifying Blocks
- Various Use of Blocks
- Creating a Part From a Block

▶ LARGE ASSEMBLIES
- Large Assembly Mode
- Assembly Visualization
- Drawing Considerations
- Lightweight Components
- Selective Quick View / Selective Open
- Using SpeedPak
- Defeature
- Tips for Faster Assemblies