

Training: SOLIDWORKS Assembly Modeling (3 days)

Prerequisites: SOLIDWORKS Essentials

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

Introduction:

- About This Course

Lesson 1: Advanced Mate Techniques

- SOLIDWORKS Assemblies
- Assembly File Structure
- File References
- File Reference Example
- Solving Mates
- Advanced Mate Techniques
- Mate References
- Design Library Parts
- Capture Mate References
- Mates with Axes and Planes
- Multiple Selection Mate References
- Multiple Mate Mode
- Driven Mates
- Using Misaligned Mates
- Copying Multiple Components
- Fixed Components
- Summary: Inserting and Mating Components
- Advanced Mate Features
- Profile Center Mate
- Rack Pinion Mate

Lesson 2: Top-Down Assembly Modeling

- Top-Down Assembly Modeling
- Stages in the Process
- Making Changes to Dimensions
- Adding Features In-context
- Inserting a New Part into an Assembly
- Building In-context Features
- Propagating Changes
- Saving Virtual Parts as External
- External References
- Breaking and Locking External References
- Assembly Design Intent

- SOLIDWORKS File Utilities
- Removing External References

Lesson 3: Assembly Features and Smart Components

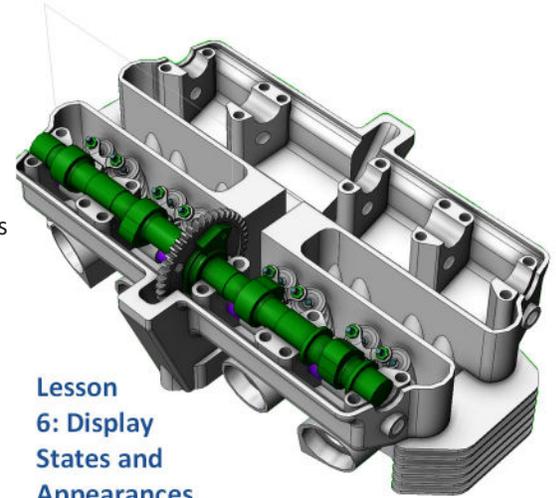
- Assembly Features and Smart Fasteners
- Assembly Features
- Hole Series
- Smart Fasteners
- Smart Components
- Flexible Components

Lesson 4: Assembly Editing

- Key Topics
- Mate Errors
- Replacing and Modifying Components
- Converting Parts and Assemblies
- Replacing Components Using Save As
- Reloading Components
- Component Patterns

Lesson 5: Using Configurations with Assemblies

- Using Configurations with Assemblies
- Creating Configurations Manually.
- Configuration Properties.
- Using the Modify Configurations Dialog
- Changing Configurations using the Context Toolbar
- Managing the Tree Display
- Assembly Evaluation Tools
- Controlling Dimensions in an Assembly
- Creating an Equality
- Equations With Functions
- Comments
- Sensors



Lesson 6: Display States and Appearances

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

Lesson 7: Large Assemblies

- Large Assemblies
- Key Topics
- Assembly Modes
- Assembly Visualization
- Lightweight Components Large Assembly Settings.
- Using SpeedPak
- Using Simplified Configurations
- Defeature
- Modifying the Structure of an Assembly
- Envelope Publisher
- Large Design Review
- Comparison of Modes and Methods2
- Tips for Faster Assemblies

Lesson 8: Facility Layout

- Facility Layout
- Publishing an Asset
- Using Magnetic Mates
- Modeling Connection Point Geometry