Training
SolidWorks Assembly Modelling

Description

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

Prerequisites

SolidWorks Essentials course

Duration

3 Days

Course Outline

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 • Multiple Selection Mate References • Multiple Mate Mode • Driven Mates • Using Misaligned Mates • Copying Multiple Components • Fixed 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** • 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 • Using the Mate Controller

Lesson 6	**Display States and Appearances** • Display States • 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 Mode • Using SpeedPak • Using Simplified Configurations • Defeature • Modifying the Structure of an Assembly • Envelope Publisher • Large Design Review • Comparison of Modes and Methods • Tips for Faster Assemblies • Drawing Considerations
Lesson 8	**Facility Layout** • Facility Layout • Publishing an Asset • Using Magnetic Mates • Modeling Connection Point Geometry
Lesson 9	**Using SOLIDWORKS Treehouse** • SOLIDWORKS Treehouse • Setting Treehouse Instances • Exporting Treehouse Data