

Course Duration: 3 days

Prerequisites: SolidWorks Essentials

Description: Advanced Part Modeling teaches you how to use multibody solids, sweeping and lofting features, and the more advanced shaping of SolidWorks.

Lesson 1: Sketching with Splines

Sketching Splines
Introducing: Spline
Introducing: Show Curvature Combs
Sketch Picture
Introducing: Sketch Picture
Review

Lesson 2: Multibody Solids:

How They Work

Multibody Solids
Multibody Techniques
Introducing: Solid Bodies Folder
Feature Scope
Patterning Bodies
Tool Body
Introducing: Insert Part
Introducing: Move/Copy Bodies
Combining Bodies
Introducing: Combine

Lesson 3: Uses of Multibody Solids

Common Bodies
Indent Feature
Introducing: Delete Body
Local Operations
Modeling Negative Space
Using Cut to Create Multibodies
Saving Solid Bodies as Parts and Assemblies
Introducing: Insert into New Part
Introducing: Save Bodies
Splitting a Part into Multibodies
Introducing: Split
Creating an Assembly
Introducing: Create Assembly
Using Split Part with Legacy Data

Lesson 4: Introduction to Sweeping

Sweeping
Case Study: Faux Raised Panel Door
Sweep with Guide Curves
Case Study: Bottle
Sweep Options
Sweep with Guide Curves
Introducing: Dome
Introducing: SelectionManager

Lesson 5: Working with Curves

Case Study: Modeling a Spring
Sweeping Along a 3D Path
3D Sketching
Introducing: Helix and Spiral
Introducing: Projected Curve
Introducing: Composite Curve
Introducing: Fit Spline
Applying the Label to the Bottle
Modeling Threads
Case Study: Creating a Curve Through a Set of Points
Sketch Blocks
Introducing: Sketch Blocks
Equation Driven Curves
Introducing: Equation Driven Curve
Introducing: Split Line

Lesson 6: Advanced Sweeping

Orientation and Twist Control
Align with End Faces
Sweeping Along Model Edges
Sweeping a Tool Body

Lesson 7: Lofts

Lofting and Sweeping: What's the Difference?
How Lofting Works
Basic Lofting
Introducing: Loft
Using Derived and Copied Sketches
Copying a Sketch
Derived Sketches
Introducing: Insert Derived Sketch
Centerline Lofting
Introducing: Split Entities
Cleaning Up a Model
Introducing: Delete Face
Introducing: Deviation Analysis
Advanced Lofting
Layout Sketches
Boundary Feature

Lesson 8: Other Advanced Tools

Advanced Fillets
Analyzing Geometry
Introducing: Display Curvature
Introducing: Intersection Curve
Introducing: Zebra Stripes
Introducing: Wrap Feature
Deform Feature
Introducing: Deform
Introducing: Knit Surface
Move Face and Delete Face
Introducing: Move Face
Performance Considerations



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