

Training: SOLIDWORKS Advanced Part Modeling (3 days)

Prerequisites: SOLIDWORKS Essentials

Description: Advanced Part Modeling teaches you how to use multibody solids, sweeping and lofting features, and SOLIDWORKS' more advanced shaping capabilities.

Introduction

- About This Course

Lesson 1: Multibody Design Techniques

- Multibody Parts
- Hide/Show Tree Items
- Multibody Design Techniques
- Solid Bodies Folder
- Feature Scope
- Patterning Bodies
- Tool Body Technique
- Combining Bodies
- Intersect with Solid Bodies
- Indent Feature
- Deleting Solid Bodies

Lesson 2: Saving Solid Bodies

- Multibody Part vs. Assembly
- Saving Bodies Functions
- Insert into New Part
- Modeling for Rapid Tooling
- Splitting a Part into Multiple Bodies

Lesson 3: Sketching with Splines

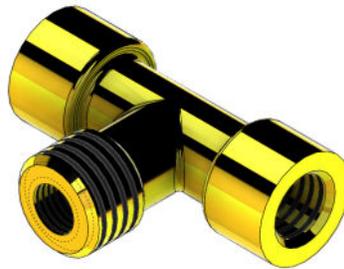
- Curves in Sketches
- Using Sketch Pictures
- Splines
- Adding Spline Relations
- Changing the Shape of a Spline
- Fully Defining Splines
- Evaluating Splines
- Analyzing Solid Geometry
- Fit Spline

Lesson 4: Introduction to Sweeping

- Sweeping
- Sweep with Guide Curves
- The Selection Manager

Lesson 5: 3D Sketching and Curve Features

- Curve Features
- Sweeping Along a 3D Path
- 3D Sketching
- Helix Curve
- Creating a 3D Curve from Orthogonal Views
- Projected Curve Feature
- Combining Curves
- Smoothing Transitions



Lesson 6: Threads and Library Feature Parts

- Bottle Features
- Saving a Library Feature
- Performance Considerations
- Creating the Sweep Path
- Sweeping Along Model Edges

Lesson 7: Advanced Sweeping

- Sweep Options
- Additional Sweep Settings
- Profile Orientation
- Intersection Curve Feature
- Visualizing Sweep Sections
- Solid Profile

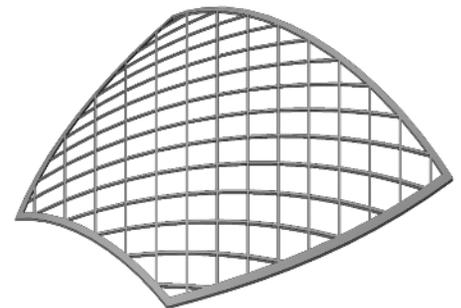
Lesson 8: Loft and Boundary Features

- Comparing Complex Features
- How Lofting and Boundary Work
- Loft Feature
- Boundary Feature

- Copying a Sketch
- Modify Sketch
- Derived Sketches
- Boundary Preview Options
- Sketch Block and Library Feature Profiles

Lesson 9: Advanced Loft and Boundary Features

- Additional Curves in Loft and Boundary
- Centerline Lofting
- Adding Sketch Segments
- Cleaning Up a Model
- Deleting Faces
- Evaluating Edges
- Face Fillets
- Curve Influence



Lesson 10: Advanced Filletting and Other Features

- Fillet Settings
- Fillet Parameters
- Constant Size Fillets
- Delete Face: Delete and Fill
- Partial Edge Parameters
- Fillet Options
- Variable Size Fillets
- Face Fillets
- FilletXpert
- Wrap Feature
- Direct Editing