



Advanced Part Modeling

Length: 1.5 days

Prerequisites: SolidWorks Essentials

Description: Advanced Part Modeling teaches you how to use multibody solids, create complex swept/lofted shapes, and utilize the more advanced shaping tools in SolidWorks.

Lesson 1: Multibody Solids

- ❖ Multibody Solids
- ❖ Bridging
- ❖ Extrude From
- ❖ Local Operations
- ❖ Combine
- ❖ Insert Part
- ❖ Move/Copy Bodies
- ❖ Indent Feature
- ❖ Using Cut to Create Multibodies
- ❖ Saving Solid Bodies as Parts and Assemblies
- ❖ Insert into New Part
- ❖ Feature Scope
- ❖ Save Bodies
- ❖ Splitting a Part into Multibodies
- ❖ Creating an Assembly
- ❖ Using Split Part with Legacy Data

Lesson 2: Sweeps

- ❖ Sweeping
- ❖ Sweeping Along a 3D Path
- ❖ 3D Sketching
- ❖ Helix and Spiral
- ❖ Projected Curve
- ❖ Composite Curve
- ❖ Fit Spline
- ❖ Creating a Curve Through a Set of Points
- ❖ Sweep Options
- ❖ Working with a Non-planar Path
- ❖ Analyzing Geometry using Display Curvature
- ❖ Zebra Stripes
- ❖ Modeling Threads
- ❖ Orientation and Twist Control
- ❖ Align with End Faces
- ❖ Sweeping Along Model Edges
- ❖ SelectionManager
- ❖ Sweeping a Tool Body

Lesson 3: Lofts and Splines

- ❖ Basic Lofting
- ❖ Using Derived and Copied Sketches
- ❖ Centerline Lofting
- ❖ Split Entities
- ❖ Delete Face
- ❖ Deviation Analysis
- ❖ Spline Sketching
- ❖ Advanced Lofting
- ❖ Sketch Picture
- ❖ Layout Sketches

Lesson 4: Other Advanced Tools

- ❖ Advanced Fillets
- ❖ Wrap Feature
- ❖ Deform Feature
- ❖ Knit Surface
- ❖ Move Face and Delete Face
- ❖ Using 3D Sketch with the Hole Wizard