



Duration 2 Days

Prerequisites:

- SolidWorks Essentials

Course Outline

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

The main topics covered include:

Lesson 1: 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 2: Uses of Multibody Solids

- Common Bodies
- Indent Feature
- Introducing: Delete Body
- Local Operations
- 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
- Summary
- Using Split Part with Legacy Data
- Modeling for Rapid Tooling

Lesson 3: Sketching with Splines

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

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
- Dome Feature
- Introducing: Selection Manager

Lesson 5: Working with Curves

- 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
- Sketch Blocks
- Equation Driven Curves
- 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: Boundary Feature and Lofting

- Boundary Feature vs Loft
- Introducing: Boundary Feature
- Using Derived and Copied Sketches
- Copying a Sketch
- Derived Sketches
- Introducing: Insert Derived Sketch
- 2-Direction Boundary Feature
- Layout Sketches
- Centerline Lofting
- Introducing: Split Entities
- Cleaning Up a Model
- Introducing: Delete Face
- Introducing: Deviation Analysis

Lesson 8: Other Advanced Tools

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

Please do not hesitate to contact us for registration and further information

e: sales@pentagonsolutions.com | t: +44 28 90455 355