SOLIDWORKS

invenio

Training
SolidWorks Advanced Part Modeling

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

Prerequisites SolidWorks Essentials course

Duration 3 Days

Course Outline

Introduction	About This Course
Lesson 1	**Multibody Design Techniques** • Multibody Parts • Hide/Show Tree Items • Multibody Design Techniques • Solid Bodies Folder • Local Operations • Feature Scope • Patterning Bodies • Tool Body Technique • Combining Bodies • Intersect with Solid Bodies • Indent Feature
Lesson 2	**Saving Solid Bodies** • Multibody Part vs Assembly • Saving Bodies Functions • Modeling for Rapid Tooling • Splitting Part into Multiple Bodies • Automating an Assembly
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 • Analysing Solid Geometry • Style Spline • 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 Part • Performance Considerations • Creating a Sweep Path • Sweeping Along Model Edges
Lesson 7	**Advanced Sweeping** • Sweep Options • Additional Sweep Settings • Profile Orientation • Intersection Curve Feature • Visualising Sweep Sections
Lesson 8	**Introduction to Loft and Boundary Features** • Comparing Complex Features • How Lofting and Boundary Work • Loft Feature • Boundary Feature • Copying and Modifying a Sketch • Derived Sketches • Boundary Preview Options • Sketch Block and Library Preview Options
Lesson 9	**Advanced Loft and Boundary Features** • Additional Curves in Loft and Boundary • Centerline Lofting • Loft Preview Options • Adding Sketch Segments • Cleaning up a Model • Deleting Faces • Evaluating Edges • Face Fillets • Curve Influence
Lesson 10	**Advanced Filleting and Other Features** • Fillet Settings and Parameters • Constant Size Fillets • Delete Face: Delete and Fill • Fillet Options • Variable Size Fillets • Face Fillets • FilletXpert • Other Advanced Features • Wrap Feature • Deform Feature • Direct Editing