



SOLIDWORKS PARTS, ASSEMBLIES & DRAWINGS

PREREQUISITES	LENGTH	DESCRIPTION
<ul style="list-style-type: none"> ■ Basic Mechanical design experience, SolidWorks and knowledge of the Windows operating system. <p>► SOLIDWORKS & THE USER INTERFACE</p> <ul style="list-style-type: none"> ■ SolidWorks User Interface ■ File References <p>► DESIGN PRINCIPLES OF SKETCHING</p> <ul style="list-style-type: none"> ■ Sketching and Guidelines ■ Sketch Relations and Dimensions <p>► PART MODELING</p> <ul style="list-style-type: none"> ■ Design Intent ■ Choosing the Best Profile and Sketch Plane ■ Boss and Cut Features ■ Using the Hole Wizard ■ Filleting ■ Design Library <p>► PATTERNING</p> <ul style="list-style-type: none"> ■ Reference Geometry ■ Linear, Circular and Mirror Patterns ■ Sketch Driven Patterns <p>► REVOLVED FEATURES</p> <ul style="list-style-type: none"> ■ Revolved Features ■ Material and Mass Properties 	<p>5 Days</p>	<ul style="list-style-type: none"> ■ The course enables students to build and enhance on their current knowledge within SolidWorks mechanical design automation software. This will allow effective parametric modeling of parts, assemblies and advanced drawing creation. <p>► SHELLING & RIBS</p> <ul style="list-style-type: none"> ■ Shell a part and add Ribs ■ Analyzing and Adding Draft ■ Fillets and Thin Features <p>► CONFIGURATIONS</p> <ul style="list-style-type: none"> ■ Creating and Using Configurations ■ Equations and Linking Values <p>► EDITING</p> <ul style="list-style-type: none"> ■ Editing Concepts ■ Repairing Sketch Issues ■ Making Design Changes ■ FilletXpert, DraftXpert, SimulationXpress <p>► BOTTOM-UP ASSEMBLY MODELING</p> <ul style="list-style-type: none"> ■ Bottom-Up Assembly Method ■ Creating a New Assembly ■ Position of the First Component ■ Feature Manager Design Tree & Symbols ■ Adding Components and Sub-Assemblies



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► **USING ASSEMBLIES**

- Creating, Analyzing, Managing Assemblies
- Exploded Assemblies, Explode Line Sketch
- Using Part Configurations in Assemblies
- Creating Drawing Views of Assemblies

► **DRAWING SHEETS & VIEWS**

- Model, Projected, Section, Detail and Broken View
Creation and Settings
- Center-Mark & Centerlines
- Annotations
- Blocks

► **BILL OF MATERIALS & TABLES IN
DRAWINGS**

- Creating and Managing a Bill of Materials
- Design Tables in the Drawing

► **DRAWING SHEET FORMATS & TEMPLATES**

- User Defined Properties in the Template
- Customizing a Sheet Format
- Defining the Title Block
- Update Sheet Formats

► **DIMENSIONS IN DRAWINGS**

- Creating, Moving and Deleting Dimensions
- Dimension Properties

► **DWG SUPPORT & eDRAWINGS**