

Solidworks Essentials and Part modelling – 4 days

Description	This course teaches you how to use SolidWorks mechanical design automation software to build parametric models of parts and assemblies, and how to make drawings of those parts and assemblies.
Prerequisites	Mechanical design experience; experience with the Windows™ operating system. To gain the most value from this course attendees should also complete the ‘Getting started’ Tutorials. These can be found by selecting ‘SolidWorks tutorials’ from the list under the ‘Help’ pull down menu in SolidWorks.

<p>Introduction About This Course</p> <p>Lesson 1: SolidWorks Basics and the User Interface What is the SolidWorks Software Design Intent File References Opening Files The SolidWorks User Interface</p> <p>Lesson 2: Introduction to Sketching Understand the importance of 2D Sketching. The correct use of dimensions, constraints, planes and construction items.</p> <p>Lesson 3: Basic Part Modelling Use 2D sketches to create 3D features. Learn how to modify and add to these features with powerful tools.</p> <p>Lesson 4: Symmetry and Draft Case Study: Ratchet Design Intent Boss Feature with Draft Symmetry in the Sketch Sketching Inside the Model View Options Using Model Edges in a Sketch Creating Trimmed Sketch Geometry Using Copy and Paste</p> <p>Lesson 5: Patterning Why Use Patterns? Reference Geometry Linear Pattern Circular Patterns Mirror Patterns Using Pattern Seed Only Sketch Driven Patterns</p>	<p>Lesson 6: Revolved Features Case Study: Handwheel Design Intent Revolved Features Building the Rim Building the Spoke Edit Material Mass Properties File Properties SolidWorks SimulationXpress</p> <p>Lesson 7: Shelling and Ribs Shelling and Ribs Analysing and Adding Draft Other Options for Draft Shelling Ribs Full Round Fillets Thin Features</p> <p>Lesson 8: Editing: Repairs Part Editing Editing Topics Sketch Issues FilletXpert DraftXpert</p> <p>Lesson 9: Editing: Design Changes Part Editing Design Changes Information From a Model Rebuilding Tools Sketch Contours Editing with Instant 3D</p> <p>Lesson 10: Configurations Configurations Using Configurations Creating Configurations Link Values Equations Configure Dimension / Feature Modelling Strategies for Configurations Editing Parts that Have Configurations Design Library</p>	<p>Lesson 11: Using Drawings More About Making Drawings Section View Model Views Broken View Detail Views Drawing Sheets and Sheet Formats Projected Views Annotations</p> <p>Lesson 12: Bottom-Up Assembly Modelling Case Study: Universal Joint Bottom-Up Assembly Creating a New Assembly Position of the First Component Feature Manager Design Tree and Symbols Adding Components Using Part Configurations in Assemblies Sub-assemblies Smart Mates Inserting Sub-assemblies Pack and Go</p> <p>Lesson 13: Using Assemblies Using Assemblies Analysing the Assembly Checking for Clearances Changing the Values of Dimensions Exploded Assemblies Explode Line Sketch Bill of Materials Assembly Drawings</p> <p>Appendix A: Templates Options Settings Document Templates</p>
--	---	--