



SolidWorks Essentials

2011 Training



COURSE OUTLINE

LESSON 1	Introduction	LESSON 8	Editing, Repairs
LESSON 2	Introduction to Sketching	LESSON 9	Editing, Design Changes
LESSON 3	Basic Part Modeling	LESSON 10	Configurations of Parts
LESSON 4	Modeling a Casting or Forging	LESSON 11	Design Tables and Equations
LESSON 5	Patterning	LESSON 12	Bottom-Up Assembly Modeling
LESSON 6	Revolved Features	LESSON 13	Using Assemblies
LESSON 7	Shelling and Ribs	LESSON 14	Using DimXpert and TolAnalyst

Duration: 4 days

Prerequisites: Mechanical design experience; experience with the Windows™ operating system.

<p>Lesson 1: Introduction</p> <ul style="list-style-type: none"> About This Course Windows XP Use of Color What is the SolidWorks Software? Design Intent File References Opening Files The SolidWorks User Interface 	<p>Lesson 2: Introduction to Sketching</p> <ul style="list-style-type: none"> 2D Sketching Stages in the Process Saving Files What are We Going to Sketch? Sketching Sketch Entities Basic Sketching Rules That Govern Sketches Design Intent Sketch Relations Dimensions Sketch Fillets Extrude 	<p>Lesson 3: Basic Part Modeling</p> <ul style="list-style-type: none"> Basic Modeling Terminology Choosing the Best Profile Choosing the Sketch Plane Details of the Part Boss Feature Sketching on a Planar Face Using the Hole Wizard Cut Feature Using the Hole Wizard View Options Filleting Detailing Basics Drawing Views Center Marks Model Dimensions Changing Parameters 	<p>Lesson 4: Modeling a Casting or Forging</p> <ul style="list-style-type: none"> Case Study: Ratchet Design Intent Boss Feature with Draft Symmetry in the Sketch Sketching Inside the Model View Options Keyboard Shortcuts Using Model Edges in a Sketch Creating Trimmed Sketch Geometry Using Copy and Paste Editing Features
<p>Lesson 5: Introduction</p> <ul style="list-style-type: none"> Why Use Patterns? Reference Geometry Linear Pattern Circular Patterns Mirror Patterns Using Pattern Seed Only Sketch Driven Patterns 	<p>Lesson 6: Introduction to Sketching</p> <ul style="list-style-type: none"> Case Study: Handwheel Design Intent Revolved Features Building the Rim Building the Spoke Edit Material Mass Properties File Properties COSMOSXpress Using the Wizard 	<p>Lesson 7: Basic Part Modeling</p> <ul style="list-style-type: none"> Shelling and Ribs Analyzing and Adding Draft Other Options for Draft Shelling Ribs Full Round Fillets Thin Features 	<p>Lesson 8: Modeling a Casting or Forging</p> <ul style="list-style-type: none"> Part Editing Editing Topics Check Sketch for Feature FilletXpert DraftXpert
<p>Lesson 9: Editing Design Changes</p> <ul style="list-style-type: none"> Part Editing Design Changes Information From a Model Rebuilding Tools Sketch Contours 	<p>Lesson 10: Configurations of Parts</p> <ul style="list-style-type: none"> Configurations Using Configurations Modify Configurations Editing Parts that Have Configurations Design Library 	<p>Lesson 11: Design Tables and Equations</p> <ul style="list-style-type: none"> Design Tables Link Values Equations Design Tables Existing Design Tables Modeling Strategies for Configurations More About Making Drawings In the Advanced Course... 	<p>Lesson 12: Bottom-Up Assembly Modeling</p> <ul style="list-style-type: none"> Case Study: Universal Joint Bottom-Up Assembly Creating a New Assembly Position of the First Component FeatureManager Design Tree and Symbols Adding Components Using Part Configurations in Assemblies Creating Copies of Instances Component Hiding and Transparency Component Properties Sub-assemblies Smart Mates Inserting Sub-assemblies Pack and Go
	<p>Lesson 13: Configurations of Parts</p> <ul style="list-style-type: none"> Using Assemblies Analyzing the Assembly Changing the Values of Dimensions Exploded Assemblies Explode Line Sketch Assembly Drawings In the Drawings Course... 	<p>Lesson 14: Design Tables and Equations</p> <ul style="list-style-type: none"> DimXpert Tolerance Types and Features DimXpert Selections Prismatic and Turned Parts Settings for DimXpert Auto Dimension Scheme Using Plus and Minus DimXpert Annotations and Drawings TolAnalyst Appendix Options Settings Document Templates 	