

## invenio

## Training SolidWorks Surface Modeling

Description	Surface Modeling teaches you how to build freeform shapes using SOLIDWORKS mechanical design automation software.
Prerequisites	SOLIDWORKS Essentials, Advanced Part Modeling
Duration	2 Days

## **Course Outline**

Introduction	About This Course
Lesson 1	<ul> <li>Understanding Surfaces</li> <li>Solids and Surfaces</li> <li>What is a Solid?</li> <li>Behind the Scenes</li> <li>Creating Solids from Surfaces</li> <li>Decomposing a Solid into Surfaces</li> <li>Additional Surface Concepts</li> <li>Take Aways</li> <li>Why Use Surfaces?</li> <li>Continuity Explained</li> <li>Workflow with Surfaces</li> </ul>
Lesson 2	<ul> <li>Introduction to Surfacing</li> <li>Similarities Between Solid and Surface Modeling</li> <li>Basic Surfacing</li> <li>Alternative to Trim</li> </ul>
Lesson 3	<ul> <li>Solid-Surface Hybrid Modeling <ul> <li>Hybrid Modeling</li> <li>Using Surfaces to Modify Solids</li> <li>Interchanging Between Solids and Surfaces</li> <li>Performance Implications</li> <li>Surfaces as Construction Geometry</li> <li>Making Copies of Faces</li> <li>Flattening Surfaces</li> </ul> </li> </ul>





Lesson 4	Repairing and Editing Imported Geometry         Importing Data         File Translation         Why Do Imports Fail         SOLIDWORKS Import Options         Importing a STEP File         Comparing Geometry         Addressing Translation Errors         Repairing and Editing Imported Geometry         Procedure for Rebuilding Fillets
Lesson 5	Blends and Patches
	Smoothing Patches     Boundary Surface
	Corner Blends
Lesson 6	Complex Blends
	Freeform Feature
Lesson 7	Advanced Surface Modeling
Lesson 7	Advanced Surface Modeling <ul> <li>Stages in the Process</li> <li>Modeling the Lower Half</li> </ul>
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Lesson 7 Lesson 8	Advanced Surface Modeling         • Stages in the Process         • Modeling the Lower Half         • Design Changes         Master Model Techniques         • Introduction to Master Models         • Surface Master Model Technique         • Working with a Solid Master Model

