

Training: SOLIDWORKS Surface Modeling (2 days)

Prerequisites: SOLIDWORKS Essentials, Advanced Part Modeling

Description: Surface Modeling teaches you how to build freeform shapes using SOLIDWORKS mechanical design automation software.

Introduction

- About This Course

Lesson 1: Understanding Surfaces

- Solids and Surfaces
- What is a Solid?
- Behind the Scenes
- Creating Solids from Surfaces
- Decomposing a Solid into Surfaces
- Additional Surface Concepts
- Why Use Surfaces?
- Continuity Explained
- Workflow with Surfaces

Lesson 2: Introduction to Surfacing

- Similarities Between Solid and Surface Modeling
- Basic Surfacing
- Alternative to Trim

Lesson 3: Solid-Surface Hybrid Modeling

- Hybrid Modeling
- Using Surfaces to Modify Solids
- Interchanging Between Solids and Surfaces
- Performance Implications
- Surfaces as Construction Geometry
- Making Copies of Faces
- Flattening Surfaces

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

- Complex Blends
- Freeform Feature

Lesson 7: Advanced Surface Modeling

- Stages in the Process
- Modeling the Lower Half
- Design Changes

Lesson 8: Master Model Techniques

- Introduction to Master Models
- Surface Master Model Technique
- Working with a Solid Master Model
- Specialized Features for Plastic Parts

