

Advanced Surface Modeling



Length: 1.5 days

Prerequisites: SolidWorks Essentials, Advanced Part Modeling

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

Lesson 1: Understanding Surfaces

- ❖ Solids and Surfaces
- ❖ Working with Surface Bodies
- ❖ Why Use Surfaces?
- ❖ Workflow with Surfaces

Lesson 2: Introduction to Surfacing

- ❖ Similarities Between Solid and Surface Modeling
- ❖ Basic Surfacing
- ❖ Revolved Surface
- ❖ Swept Surface
- ❖ Radiate Surface
- ❖ Cut with Surface
- ❖ Extend Surface

Lesson 3: Solid-Surface Hybrid Modeling

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

Lesson 4: Repairing and Editing Imported Geometry

- ❖ Importing Data
- ❖ Repairing and Editing Imported Geometry

Lesson 5: Advanced Surface Modeling

- ❖ Ruled Surfaces
- ❖ Lofting Surfaces
- ❖ Deviation Analysis
- ❖ Curve Through Reference Points

Lesson 6: Blends and Patches

- ❖ Complex Blends
- ❖ Smoothing Patches
- ❖ Freeform Feature
- ❖ Corner Blends

Lesson 7: Master Model Techniques

- ❖ Introduction to Master Models
- ❖ Surface Master Model Technique
- ❖ Working with a Solid Master Model
- ❖ SolidWorks Explorer