



SolidWorks Surfacing

Pre-Requisites:

- SolidWorks Advanced Part Modeling

Daily Schedule: Begin at 8:30 a.m., End at 4:30 p.m., 1 hour lunch

Length: 2 Days

Description: This class teaches users how to build freeform shapes using SolidWorks mechanical design automation software. Topics covered include: introduction to surfacing, solid-surface hybrid modeling, surface modeling, blends and patches, and master model techniques.

This course is taught from the official course curriculum from SolidWorks Corporation, with additional information from Graphics Systems instructors.

Introduction

- About This Course
- Using this Book
- Windows® XP
- Use of Color
- Toolbars
- Hide/Show Tree Items

Lesson 1: Understanding Surfaces

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

Lesson 2: Introduction to Surfacing

- Similarities Between Solid and Surface Modeling
- Basic Surfacing

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

Lesson 4: Repairing and Editing Imported Geometry

- Importing Data
- Repairing and Editing Imported Geometry

Lesson 5: Advanced Surface Modeling

- Stages in the Process
- Ruled Surfaces
- Lofting Surfaces
- Modeling the Lower Half
- Conclusion
- Design Changes

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

