

Course: SOLIDWORKS Surface Modelling

MFG

Description

Learn how to build freeform shapes using SOLIDWORKS mechanical design automation software. Learning Surface Modeling unlocks the full potential of SOLIDWORKS as a modelling tool. This course introduces the concept of modeling with surfaces.

Traning objectives

On completion of this course you will be able to create complex surface designs using Loft and Sweep. Repair imported geometry using SOLIDWORKS Surfacing tools. Use surfaces to help you create complex parts. Use a master part model to create different versions of your design.

Prerequisites

Mechanical design experience. Experience with Windows Operating System.

Completed the SOLIDWORKS Essentials training course, or equivalent. Completed the SOLIDWORKS Advanced Part Modelling training course, or equivalent.

At least one month using SOLIDWORKS software.

Skills you will acquire


Repairing Imported Geometry. Surface/Solid Hybrid Modelling. Master Model Techniques.

Who should attend

Consumer and product designers who have a requirement to create complex shapes and forms using SOLIDWORKS.

Delivery mode

 Face-to-face or Online

 Virtual Classroom

Duration

 2 days

Course Outline

Introduction

- About This Course Icons
- 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
- Modelling
- Basic Surfacing

Lesson 3: Solid-Surface Hybrid

Modelling

- Hybrid Modelling
- 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 Modelling

- Ruled Surfaces
- Lofting Surfaces
- Filled Surface
- Conclusion
- Design Changes

Lesson 6: Blends and Patches

- Complex Blends
- Smoothing Patches
- Boundary Surface
- 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