

# Training: SOLIDWORKS Sheet Metal (2 days)

**Prerequisites:** SOLIDWORKS Essentials

**Description:** Sheet Metal teaches you how to build sheet metal parts using SOLIDWORKS mechanical design automation software. Building standalone sheet metal parts, and converting conventional parts to sheet metal, including in assembly context, are covered.

## Introduction

- About This Course

## Lesson 1: Basic Flange Features

- Sheet Metal Methods
- Unique Sheet Metal Items
- Flange Method
- Base Flange/Tab
- Sheet Metal Parameters
- Editing Sheet Metal Parameters
- Sheet Metal Bend Features
- Flat-Pattern Feature
- Additional Flange Features
- Edge Flanges
- Editing the Flange Profile
- Edge Flanges on Curved Edges
- Miter Flanges
- Hem Feature
- Tab Features
- Cuts in Sheet Metal

## Lesson 2: Working with the Flat Pattern

- Working with the Flat Pattern
- Flat Pattern Settings
- Features for Manufacture
- Corner-Trim Feature
- Corners in the Formed State
- Closed Corner
- Corner Relief
- Break Corner/Corner Trim
- Producing the Flat Pattern
- Sheet Metal Cut List Properties
- Flat Pattern Drawing Views
- Flat Pattern View Properties
- Drawing Document Properties
- Sheet Metal Tables
- Cut List Properties as a Note
- Exporting the Flat Pattern

## Lesson 3: Additional Sheet Metal Techniques

- Additional Sheet Metal Methods
- Designing from the Flat
- Sketched Bend Feature
- Jog Feature
- Adding Features in an Unfolded State
- Unfold and Fold
- Swept Flange & Flat Pattern Options
- Lofted Bends

## Lesson 4: Converting to Sheet Metal

- Sheet Metal Conversion
- Insert Bends Method
- Imported Geometry to Sheet Metal
- Adding Rips
- Insert Bends
- Making Changes
- Welded Corner
- Converting Cones and Cylinders
- Convert to Sheet Metal

## Lesson 5: Multibody Sheet Metal Parts

- Multibody Sheet Metal Parts
- Multibodies with Base Flange
- Sheet Metal Parameters for Multibodies
- Cut List Item Properties for Multibodies
- Flat Pattern Drawing Views for Multibodies
- Cut List Balloon Annotations
- Exporting to DXF/DWGs with Multibodies
- Using Split with Sheet Metal Parts
- Patterning for Multibodies
- Using Edge Flanges to Merge Bodies
- Interfering Bodies

## Lesson 6: Forming Tools and Gussets

- Sheet Metal Forming Tools
- Forming Tools in the Design Library
- Form Tool Features in the Flat
- Part Document Properties
- Custom Forming Tools
- Split Line
- Forming Tool Feature
- Legacy Behavior for Forming Tools
- Form Tools in Drawings
- Sheet Metal Gusset

## Lesson 7: Additional Sheet Metal Functions

- Additional Sheet Metal Functions
- Cross-Breaks
- Vent Features
- Mirror Part
- Tab and Slot
- Process Plans
- Sheet Metal Costing

## Appendix A: Sheet Metal Tables

- Tables
- Customizing Tables

