

Autodesk Inventor Sheet Metal Design

Duration:**2 Days**

Students learn the fundamental principles of sheet metal design using Autodesk® Inventor®. Users learn how to create and manage sheet metal designs. The guide focuses on basic sheet metal concepts and techniques, and builds on them to include complex modeling practices for forming sheet metal parts, assemblies, and drawings. Hands-on exercises representing real-world, industry-specific design scenarios are included.

Objectives:

To teach users the skills needed to create and document sheet metal parts.

After completing this class, users will be able to:

- Describe terms and sheet metal processes that are used in the industry.
- Review various construction techniques.
- Create and automate sheet metal design tools.
- Document sheet metal designs.

Who Should Attend & Prerequisites:

This class is designed for the current Autodesk Inventor user who wants to learn the essential tools and best practices for sheet metal design using Autodesk Inventor.

Users should have completed a Learning Autodesk Inventor class and have a working knowledge of the following:

- The Autodesk Inventor user interface and working environments.
- Parametric solid modeling concepts and mechanical engineering or design principles.
- Microsoft® Windows® XP or Microsoft® Windows® 2000.

Autodesk Inventor Sheet Metal Design:

Day 1

Sheet Metal Overview

- Introduction to Sheet Metal
- Sheet Metal Design Methods
- Sheet Metal Styles

The Sheet Metal Environment

- Faces
- Flanges
- Contour Flanges
- Hems

Sheet Metal Operations

- Cutting
- Sheet Metal Punching
- Corner Seams
- Folding
- Bending
- Creating Holes
- Creating Corner Rounds and Corner Chamfers
- Work Features
- Pattern Features
- Mirror Features

Day 2

Sheet Metal Design Techniques

- Sheet Metal Design Approaches
- Using Skeletal Models
- Using Legacy DXF™ and DWG™ Flat Layout Geometry
- Using Legacy 3D Geometry
- Complex Sheet Metal Creation Techniques
- Punch Library Setup

Using Flat Patterns

- Flat Pattern Creation and Cleanup
- DXF and DWG Export

Documenting Sheet Metal Designs

- Creating Sheet Metal Drawings
- Sheet Metal Documentation
- Bend and Punch Tables