



180 West Jamestown Road
Greenville, PA 16125
PHONE: 724-588-1340
FAX: 724-588-1341
Email: info@lakelandtechnical.com

Autodesk Inventor 2010 Sheet Metal Design

Course Objectives

The primary objective of this course is to teach students the skills needed to create and document sheet metal parts.

After completing this course, students 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 course 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 2010. Users should have completed a *Learning Autodesk Inventor 2010* course 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® Vista or Microsoft® Windows® XP.

Course Outline

Sheet Metal Overview

- Introduction to Sheet Metal
- Sheet Metal Design Methods
- Sheet Metal Rules

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
- Lofted Flanges, Rips, and Contour Roll Features

Sheet Metal Design Techniques

- Sheet Metal Design Approaches
- Using Skeletal Models
- Using Legacy DXF/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/DWG Export

Documenting Sheet Metal Designs

- Creating Sheet Metal Drawings
- Sheet Metal Documentation
- Notating Bends and Punches
- Cosmetic Centerlines and Bend Order

Course Duration: 2 Days

Tuition: \$500.00 / Student