Engineering Driven, Enterprise Focused

Adraft

# Autodesk Inventor 2010 Sheet Metal Design Course Outline

**Course Description:** This course is designed for Autodesk Inventor users who want to learn the essential tools and best practices for sheet metal design using Autodesk Inventor 2009.

**Objectives:** After completing this course, you will be able to

- Describe different terms and concepts of sheet metal design, create sheet metal parts using two different creation methods, and create and manage sheet metal styles.
- Explain the characteristics of a face, flange, contour flange, and hem sheet metal feature and create sheet metal parts consisting of those features.
- Create sheet metal designs by using various approaches to sheet metal design, employing skeletal modeling, using legacy flat pattern, and 3D models, and implementing custom sheet metal punch features.
- Create and edit flat pattern geometry and export your sheet metal parts or faces to DXF and DWG formats.

**Prerequisites**: Students should have completed the Autodesk Inventor 2009 Fundamentals course or have equivalent understanding of the Autodesk Inventor 2009 user interface and working environments. Recommended working knowledge of Microsoft Windows 2000 or XP, Parametric solid modeling concepts, and design or mechanical engineering experience is a plus.

## Topics:

**1. Sheet Metal Overview**
Introduction to Sheet Metal
Sheet Metal Design Methods
Sheet Metal Rules

**2. The Sheet Metal Environment**
Faces
Flanges
Contour Flanges
Hems

**3. Sheet Metal Operations**
Cutting
Sheet Metal Punching
Corner Seams
Folding
Bending
Creating Holes
Creating Corner Rounds & Chamfers
Work Features
Pattern Features
Mirror Features
Lofted Flanges, Rips &
Contour Roll Features

**4. Sheet Metal Design Techniques**
Sheet Metal Design Approaches
Using Skeletal Models
Using legacy DXF/DWG Geometry
Using Legacy 3D Geometry
Complex Sheet Metal Creation Techniques
Punch Library Setup

**5. Using Flat Patterns**
Flat Pattern Creation and Setup
DXF/DWG Export

**6. Documenting Sheet Metal Designs**
Creating Sheet Metal Drawings
Sheet Metal Documentation
Notating Bends and Punches
Cosmetic Centerlines and Bend Order

**AND MORE!**

**Duration:** 2 Days

**Classroom Tuition:** $550.00/student

*Group rates are available*

**Autodraft, Inc.** dba Adraft
email: info@adraft.com
www.adraft.com
ADRAFT, AN AUTODRAFT, INC. COMPANY

Rochester Office:
2815 Baird Road
Fairport, NY 14450-1244
Phone: (585) 389-1900
Fax: (585) 389-0953

Buffalo Office:
8201 Main Street, Suite 3
Williamsville, NY 14221
Phone: (866) 769-6163
Fax: (585) 389-0953

Syracuse Office:
126 Dwight Park Circle
Syracuse, NY 13209
Phone: (866) 769-6163
Fax: (585) 389-0953