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Autodesk Inventor 2012 Sheet Metal Design

Course Objectives

Inventor 2012 Sheet Metal Design introduces the concepts and techniques of sheet metal modeling with Autodesk Inventor. The topics presented in this course assume prior knowledge of 3D solid part modeling with Autodesk Inventor.

After completing this course, students will be able to:

- Create sheet metal parts.
- Edit sheet metal parts.
- Generate flat patterns.
- Document the designs in drawings.

Who Should Attend / Prerequisites

This course is designed for the current Autodesk Inventor user who wants to learn the concepts and techniques of sheet metal modeling with Autodesk Inventor. Users should have completed *Inventor 2012 Introduction to Solid Modeling* or an equivalent course and have a working knowledge of the following:

- Parametric solid modeling concepts and mechanical engineering or design principles.
- Microsoft® Windows® 7, Microsoft® Windows® Vista or Microsoft® Windows® XP.

Course Outline

Introduction to Sheet Metal Modeling
- Sheet Metal Concepts
- Sheet Metal Terminology
- Sheet Metal Environment
- Sheet Metal Design Process

Sheet Metal Base Features
- Applying Existing Sheet Metal Defaults
- Creating a Face as a Base Feature
- Creating a Contour Flange as a Base Feature
- Creating a Contour Roll as a Base Feature

Sheet Metal Secondary Features
- Sheet Metal Parameters
- Bend Relief Shapes
- Faces as Secondary Features
- Contour Flanges as Secondary Features
- Contour Rolls as Secondary Features

Flanges
- Creating Flanges
- Corner Relief Options

Bending Sheet Metal
- Hems
- Folds
- Bend Features

Corner Rounds and Chamfers
- Creating Corner Rounds
- Creating Corner Chamfers

Sheet Metal Cuts
- Creating Cut Features
- Creating Straight Holes
- Using Punch Tool Features
- Creating a Punch Tool
- Cuts Using Surfaces

Corner Seams
- Creating Corner Seams and Miters
- Creating Corner Rips
- Converting Corner Seams and Bends

Flat Pattern Environment
- Creating Flat Patterns
- Orienting Flat Patterns
- Punch Representations
- Bend Angle
- Flat Pattern Cleanup
- Exporting to DXF/DWG

Lofted Flange and Rips
- Lofted Flanges
- Rip

Unfold and Refold
- Unfold and Refold

Documentation and Annotation
- Sheet Metal Drawing Terminology
- Creating Sheet Metal Drawings
- Bend & Punch Notes
- Bend Tables
- Punch Tables
- Bend Order
- Cosmetic Centerlines

Converting Parts to Sheet Metal
- Converting Solid Model to Sheet Metal
- Non-Ruled Surfaces

Course Duration: 2 Days (14 Hours) **Tuition:** $650.00 / Student