

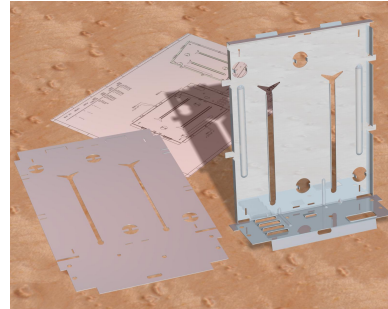
Sheetmetal Design using Creo Parametric

Overview

Course Code TRN-3407-T

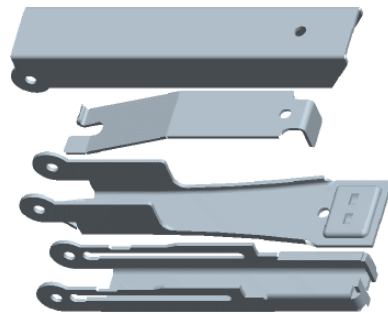
Course Length 2 days

Sheetmetal Design using Creo Parametric is a comprehensive training course that teaches you how to create sheetmetal parts in Creo Parametric. The course builds upon the basic lessons you learned in Introduction to Creo Parametric and serves as the second stage of learning. In this course, you will learn how to design sheetmetal parts and assemblies, including sheetmetal production drawings. All the functions needed to create sheetmetal parts, drawings, and assemblies are covered. Upon completion of this course, you will be able to create sheetmetal design models, create the flat state of the model, and document both in production drawings. At the end of each day, you use the Pro/FICIENCY skills assessments to reinforce your understanding of the course topics.



Course Objectives

- The Sheetmetal Design Process
- Sheetmetal Model Creation, Conversion, and Display
- Methods of Developed Length Calculation
- Primary Wall Features
- Secondary Wall Features
- Partial Walls
- Bend Relief
- Unbend and Bend Back Features
- Sheetmetal Bend Features
- Flat Patterns
- Sheetmetal Cuts
- Forms
- Notch and Punch Features
- Sheetmetal Environment Setup
- Sheetmetal Design Information Tools
- Sheetmetal Design Rules
- Detailing Sheetmetal Designs
- Sheetmetal Design Project



Prerequisites

- Introduction to Creo Parametric

Audience

- This course is intended for design engineers, mechanical designers, and industrial designers. People in related roles can also benefit from taking this course.
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Agenda

Day 1

Module	1	Introduction to the Creo Parametric Sheetmetal Design Process
Module	2	Sheetmetal Model Fundamentals
Module	3	Creating Primary Sheetmetal Wall Features
Module	4	Creating Secondary Sheetmetal Wall Features

Day 2

Module	5	Modifying Sheetmetal Models
Module	6	Sheetmetal Bends and Setting Up the Sheetmetal Environment
Module	7	Special Sheetmetal Tools
Module	8	Detailing Sheetmetal Designs
Module	9	Design Project

Course Content

Module 1. Introduction to the Creo Parametric Sheetmetal Design Process

- i. Creo Parametric Sheetmetal Design Process

Knowledge Check Questions

Module 2. Sheetmetal Model Fundamentals

- i. Sheetmetal Model Fundamentals
- ii. Understanding Developed Length
- iii. Creating a New Sheetmetal Part in Assembly Mode
- iv. Creating a New Sheetmetal Model in Part Mode
- v. Converting Solid Models to Sheetmetal

Knowledge Check Questions

Module 3. Creating Primary Sheetmetal Wall Features

- i. Understanding Sheetmetal Wall Features
- ii. Creating Flat Walls
- iii. Extruded Sheetmetal Wall Features
- iv. Revolved Sheetmetal Wall Features
- v. Blend Sheetmetal Wall Features
- vi. Creating Offset Walls
- vii. Sheetmetal Wall Sketching Tools
- viii. Advanced Primary Walls

Knowledge Check Questions

Module 4. Creating Secondary Sheetmetal Wall Features

- i. Understanding Secondary Walls
- ii. Creating Secondary Flat Walls
- iii. Using Flange Walls
- iv. Using Extruded Walls
- v. Wall Dashboard Options
- vi. Using Partial and Overextended Walls
- vii. Understanding Relief
- viii. Creating Twist Wall Features
- ix. Extending and Trimming Walls
- x. Using the Merge Feature

Knowledge Check Questions

Module 5. Modifying Sheetmetal Models

- i. Creating Bend Features
 - ii. Adding Transition to Bends
 - iii. Creating Planar Bends
 - iv. Creating Unbend Features
 - v. Creating Bend Back Features
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- vi. Creating Flat States
- vii. Previewing and Creating Flat Patterns
- viii. Creating Split Area Features
- ix. Sheetmetal Cuts
- x. Die Form Features
- xi. Punch Form Features
- xii. Utilizing Punch Model Annotations
- xiii. Flattening Forms and Unstamping Edges
- xiv. Creating Rip Features
- xv. Notches and Punches
- xvi. Creating Edge Bends
- xvii. Creating Corner Relief
- xviii. Patterning Walls
- xix. Mirroring Walls

Knowledge Check Questions

Module 6. Sheetmetal Bends and Setting Up the Sheetmetal Environment

- i. Bend Line Adjustments
- ii. Using Bend Tables for Bend Allowances
- iii. Fixed Geometry

Knowledge Check Questions

Module 7. Special Sheetmetal Tools

- i. Info Tools and Reports
- ii. Design Rules
- iii. Defaults and Parameters
- iv. Using Conversion Features

Knowledge Check Questions

Module 8. Detailing Sheetmetal Designs

- i. Adding the Flat and Formed States
- ii. Auto Ordinate Dimensions
- iii. Bend Line Notes
- iv. Bend Order Tables

Knowledge Check Questions

Module 9. Design Project

- i. Designing a Stapler
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