

## Sheetmetal Design using Creo Elements/Direct 18.0

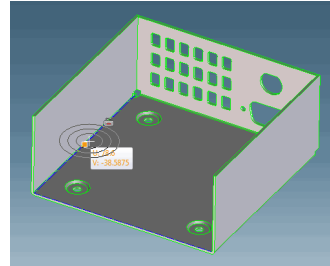
### Overview

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Course Code TRN-3422-T

Course Length 2 Days

In this Creo Elements/Direct 18.0 Sheetmetal course, you will learn about the Sheet Metal module. This module enables designers to design sheet metal parts correctly, and streamline their designs for manufacturing. You will also learn about the tools that simplify the sheet metal design process.



### Course Objectives

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- Understand the purpose of the Sheet Metal module.
- Configure the default shop for the Sheet Metal module.
- Create sheet metal parts.
- Modify sheet metal parts.
- Post-process sheet metal parts.

### Prerequisites

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- Must be able to interpret engineering drawings, and have an understanding of drafting concepts
- Must have experience in the development of 2-D design using a CAD system
- Must have experience in sheet metal design
- Must have had successfully completed the Basic Modeling course

### Audience

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- Designers
  - Mechanical engineers
  - Industrial designers
  - Tooling designers
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## Agenda

### Day 1

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Module	1	Introducing Sheet Metal
Module	2	Creating Sheet Metal Parts
Module	3	Punching, Stamping, and Modifying

### Day 2

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Module	4	Folding and Unfolding
Module	5	Modifying Sheet Metal Parts
Module	6	Post-Processing

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## Course Content

### Module 1. Introducing Sheet Metal

- i. Introducing Sheet Metal
- ii. Using Sheet Metal
- iii. Starting Sheet Metal
- iv. Setting Up Sheet Metal
- v. Setting Up a Bend Process
- vi. Setting Up a Hem
- vii. Setting Up Bend Reliefs
- viii. Setting Up Corner Reliefs

*Knowledge Check Questions*

### Module 2. Creating Sheet Metal Parts

- i. Creating Sheet Metal Part By Outline
- ii. Creating Sheet Metal Parts By Polyline
- iii. Adding to a Sheet Metal Part By Outline
- iv. Adding to a Sheet Metal Part By Polyline
- v. Adding a Lip
- vi. Defining Lip Shape
- vii. Creating an Offset
- viii. Adding a Hem
- ix. Stretching a Lip
- x. Aligning a Lip
- xi. Deleting a Lip
- xii. Creating Sheet By Solid

*Knowledge Check Questions*

### Module 3. Punching, Stamping, and Modifying

- i. Punching a Sheet Metal Part
- ii. Stamping a Sheet Metal Part
- iii. Interpreting Design for Manufacturability Rule Violations
- iv. Deleting Punch and Stamp Features
- v. Moving Punch and Stamp Features
- vi. Modifying Features
- vii. Inquiring Features

*Knowledge Check Questions*

### Module 4. Folding and Unfolding

- i. Folding and Unfolding Bends
  - ii. Folding Sheet Metal Parts
  - iii. Unfolding Part
  - iv. Refolding Part
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*Knowledge Check Questions***Module 5. Modifying Sheet Metal Parts**

- i. Introducing Sheet Metal Part Conversion
- ii. Attaching Material
- iii. Creating a Bend
- iv. Attaching a Bend
- v. Modifying a Bend
- vi. Modifying Material Thickness
- vii. Converting Orthogonal Side Face

*Knowledge Check Questions***Module 6. Post-Processing**

- i. Using Unfold
- ii. Using Bend Animation
- iii. Using Multi Unfold
- iv. Using Cost Estimation
- v. Using Inquire Material
- vi. Using Inquire Features

*Knowledge Check Questions*

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