

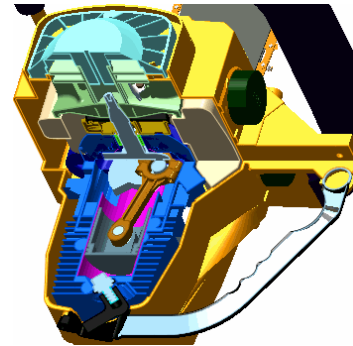
## Introduction to PTC Creo View MCAD 3.1

### Overview

Course Code	TRN-4760-T
Course Length	8 Hours

In this course, you will learn about Creo View and its role as a visualization solution for Product Data Management systems. You will learn how to visualize products and navigate through or query 3-D models, 2-D drawings, images, and documents. You will also learn how to deconstruct models to view how components fit together. In addition, you will learn how to create markups and save annotation sets to communicate design ideas and problems. Finally, you will learn how to create construction geometry.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



### Course Objectives

- Introduction to visualization
- Introduction to the Creo View user interface
- Navigate and orient 3-D models
- Query data and search for model components
- Change model appearances
- Work with model annotations
- Generate a Bill of Materials
- Explode model components
- Assemble components
- Section models
- Work with components and groups
- View 2-D drawings, images, and documents
- Create markups and annotation sets
- Take measurements
- Create construction geometry

NO	NAME	QUANTITY	UNIT	DESCRIPTION	REV
1	ASSEMBLY	1	ASSEMBLY	ASSEMBLY	1
2	BASE	1	PART	BASE	1
3	COVER	1	PART	COVER	1
4	GEAR	1	PART	GEAR	1
5	SHAFT	1	PART	SHAFT	1
6	BEARING	2	PART	BEARING	1
7	WASHER	2	PART	WASHER	1
8	NUT	2	PART	NUT	1
9	SCREW	2	PART	SCREW	1
10	SPACER	1	PART	SPACER	1
11	KEY	1	PART	KEY	1
12	WASHER	1	PART	WASHER	1
13	NUT	1	PART	NUT	1
14	SCREW	1	PART	SCREW	1
15	SPACER	1	PART	SPACER	1
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97	WASHER	1	PART	WASHER	1
98	NUT	1	PART	NUT	1
99	SCREW	1	PART	SCREW	1
100	SPACER	1	PART	SPACER	1

## Prerequisites

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- None

## Audience

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- This course is intended for all enterprise data users who use the Creo View MCAD client. People in related roles will also benefit from taking this course.
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## Agenda

### Day 1

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Module	1	Introduction to Visualization
Module	2	Getting Around in Creo View
Module	3	Viewing and Interrogating Models
Module	4	Deconstructing a Creo View Model
Module	5	Working with Components
Module	6	Viewing Drawings, Images, and Documents
Module	7	Working with Markups and Annotation Sets
Module	8	Working with Construction Geometry

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## Course Content

### Module 1. Introduction to Visualization

- i. Identifying Visualization Concepts
- ii. Identifying Visualized Intellectual Property Types
- iii. Visualization Use-Case Scenarios
- iv. Identifying Components in PTC's Visualization System
- v. Generating Creo View Viewables
- vi. Identifying Readable Visualization Object Types
- vii. Understanding Creo View File Types
- viii. Understanding Creo View's Basic Capabilities
- ix. Understanding Creo View's Advanced Capabilities

### Module 2. Getting Around in Creo View

- i. Understanding the Creo View User Interface
- ii. Viewing Area User Interface
- iii. Understanding the Ribbon
- iv. The Creo View File Menu User Interface
- v. Quick Access Toolbar User Interface
- vi. Primary Panel User Interface
- vii. Understanding the Upper Data Panel
- viii. Understanding the Lower Data Panel
- ix. Starting Creo View as a Standalone Client
- x. Starting Creo View from Windchill
- xi. Loading Viewables
- xii. Investigating Creo View Options

### Module 3. Viewing and Interrogating Models

- i. Visualizing and Interrogating a Creo View Model
  - ii. Views Group
  - iii. Orienting the Model
  - iv. Selecting and Searching Components
  - v. Selecting Components
  - vi. Finding Components
  - vii. Using Quick Search
  - viii. Searching Product Structure
  - ix. Color-Coded Search
  - x. Working with Search Results
  - xi. Managing Queries
  - xii. Changing the Display of the Model
  - xiii. Rendering Options
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- xiv. Displaying the Floor
- xv. Filtering Display and Other Items
- xvi. Hiding and Unhiding Components
- xvii. Editing Component Display Attributes
- xviii. Working with Model Annotations
- xix. Generating a Bill of Materials

#### **Module 4. Deconstructing a Creo View Model**

- i. Exploding Model Components
- ii. Translating Exploded Components
- iii. Rotating Exploded Components
- iv. Capturing and Restoring Component Location
- v. Preset Explode
- vi. Smart Explode
- vii. Working with Smart Explode Selection
- viii. Setting the Smart Explode Direction
- ix. Changing Smart Explode Options
- x. Saving and Exiting Smart Explode
- xi. Assembling Components
- xii. Sectioning an Assembly
- xiii. Orienting the Sectioning Plane
- xiv. Manipulating the Sectioning View
- xv. Advanced Sectioning Features
- xvi. Creating Quarter Cut Sections
- xvii. Capping the Section
- xviii. Setting Specific Components to Be Sectioned

#### **Module 5. Working with Components**

- i. Product Structure Versus Model Parts
- ii. Working with the Model Parts Context-Sensitive Menu
- iii. Working with the Model Parts Tab
- iv. Working with Structure Context-Sensitive Menus
- v. Working with the Structure Tab
- vi. Navigating to Parts Using the Structure Tree Group
- vii. Collecting and Isolating Multiple Parts
- viii. Working with Views
- ix. Working with Static Groups
- x. Working with Search Groups

#### **Module 6. Viewing Drawings, Images, and Documents**

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- i. Opening Non-Model Files with Creo View
- ii. Viewing Drawings
- iii. Viewing Images
- iv. Orienting Drawings and Images
- v. Working with Pages and Sheets
- vi. Viewing Documents
- vii. Working with Documents

### **Module 7. Working with Markups and Annotation Sets**

- i. Marking Up Creo View Viewables
- ii. Adding Annotation Objects
- iii. Note Annotations
- iv. Leader Line Annotations
- v. Shape Annotations
- vi. Freehand Annotations
- vii. GTOL Annotations
- viii. Stamp Annotations
- ix. Annotating a Document
- x. Taking Measurements
- xi. Working with Annotation and Measurement Elements
- xii. Picking a Target for Measurements
- xiii. Measuring Lengths
- xiv. Measuring Distances
- xv. Measuring Angles
- xvi. Measuring Diameter or Radius
- xvii. Measuring Area
- xviii. Measuring Mass Properties
- xix. Taking a Measurement Summary
- xx. Taking an Envelope Measurement
- xxi. Creating Annotation Sets
- xxii. Saving Annotation Sets to a PDM System
- xxiii. Retrieving Annotation Sets from a PDM System
- xxiv. Saving and Retrieving Annotation Sets using a Standalone Client

### **Module 8. Working with Construction Geometry**

- i. Creating Construction Geometry
  - ii. Creating Construction Geometry Workflow
  - iii. Working with Construction Geometry Elements
  - iv. Picking a Target for Construction Geometry
  - v. Creating a Construction Point
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- vi. Creating a Construction Axis
  - vii. Creating a Construction Plane
  - viii. Creating a Construction Coordinate System
  - ix. Creating a Construction Curve
  - x. Creating a Construction Line
  - xi. Saving and Loading Construction Geometry
  - xii. Using Construction Geometry as a Reference
  - xiii. Using Construction Geometry to Explode a Model
  - xiv. Using Construction Geometry to Section a Model
  - xv. Using Coordinate Systems to Project Distance Measurements
  - xvi. Working with Construction Geometry in Annotation Sets
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