

Pro/ENGINEER Wildfire 5.0 Update from Pro/ENGINEER Wildfire 3.0

Overview

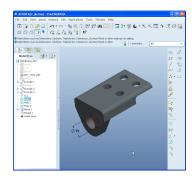
Course Code

TRN-2231-T

Course Length

2 Days

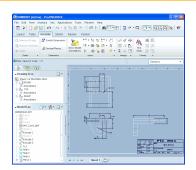
In this course, you will learn how to utilize the core functionality enhancements in Pro/ENGINEER Wildfire 5.0, when upgrading from Pro/ENGINEER Wildfire 3.0. First, changes to the interface will be explored, such as the new skin and screen colors. Next, you will become familiar with the enhancements to Sketcher geometry and tools, such as sketching parallelograms and chamfers, as well as using the sketcher diagnostic tools. Next, you will explore enhancements to Part mode, including creating trajectory ribs, pattern and UDF enhancements, the all-new resolve mode, and auto-round. You will also learn about Assembly enhancements such as the accessory window, the new reference viewer, improved simplified rep functionality, and mechanism enhancements to gears and belts. Next, you will examine the new ribbon interface and drawing tree for drawing mode, as well as numerous detailing enhancements. Finally, you will review Sheetmetal enhancements for flat and flange walls, in addition to patterning and mirroring wall features. At the end of each module, you will complete a skills assessment. The questions are used to help reinforce your understanding of the module topics and form the basis for review of any topics, if necessary.





Course Objectives

- Describe the Interface Enhancements for Pro/ENGINEER Wildfire 5.0
- Utilize the Sketcher Enhancements for Pro/ENGINEER Wildfire 5.0
- Utilize the Part Modeling Enhancements for Pro/ENGINEER Wildfire 5.0
- Utilize the Advanced Part Enhancements for Pro/ENGINEER Wildfire 5.0
- Resolve model failures in Pro/ENGINEER Wildfire 5.0
- Utilize the Assembly Modeling Enhancements for Pro/ENGINEER Wildfire 5.0
- Utilize the Advanced Assembly Enhancements for Pro/ENGINEER Wildfire 5.0
- Utilize the Drawing Enhancements for Pro/ENGINEER Wildfire 5.0
- Utilize the Sheetmetal Enhancements for Pro/ENGINEER Wildfire 5.0



Prerequisites

• Introduction to Pro/ENGINEER Wildfire 3.0 or equivalent experience.

Audience

• This course is intended for people who have already upgraded to Pro/ENGINEER Wildfire 5.0 from Pro/ENGINEER Wildfire 3.0.



Agenda

Day 1

Module	1	Interface Enhancements
Module	2	Sketcher Enhancements
Module	3	Part Modeling Enhancements
Module	4	Advanced Part Modeling Enhancements
Module	5	Resolving Failures

Day 2

Module	6	Assembly Enhancements
Module	7	Advanced Assembly Enhancements
Module	8	Drawing Enhancements
Module	9	Sheetmetal Enhancements



Course Content

Module 1. Interface Enhancements

- i. New Skin and Screen Colors
- ii. Navigator and Browser Enhancements
- iii. File Open Dialog Enhancements
- iv. Dashboard Updates
- v. Floating Input Windows
- vi. Menu Manager Enhancements
- vii. Viewing and Editing Model Properties
- viii. Insert Position Enhancements
- ix. Utilizing Undo and Redo Operations
- x. Parameters Dialog Box Enhancements
- xi. One-By-One Selection
- xii. Creating Layer States
- xiii. Managing and Editing Appearances

Knowledge Check Questions

Module 2. Sketcher Enhancements

- i. Sketcher Line Style and Color
- ii. Undo/Redo Reorient View
- iii. Sketching Rectangles and Parallelograms
- iv. Sketching Ellipses
- v. Sketching Chamfers
- vi. Thickening Edges
- vii. Utilizing Constraints
- viii. Sketching with On-the-Fly Constraints
- ix. Sketcher Dimension Enhancements
- x. Locking Sketcher Entities
- xi. Auto-Locking Dimensions
- xii. Default Diameter Dimensions
- xiii. Sketching Geometry Datums
- xiv. Sketcher Intent Object Referencing
- xv. Replacing Sketcher References
- xvi. Sketcher Diagnostic Tools

Knowledge Check Questions

Module 3. Part Modeling Enhancements

- i. Exact Relation
- ii. Group Enhancements
- iii. Creating Axes from Coordinate Systems
- iv. Measuring Volume Enhancements
- v. Lightweight Hole Display



- vi. Hole Profile Options
- vii. Tapered Holes and Pipe Threads
- viii. Cosmetic Thread Enhancements
- ix. Shell Enhancements
- x. Part Parent/Child Information Enhancements
- xi. Using Dynamic Edit
- xii. Creating Trajectory Ribs
- xiii. Creating Point Patterns
- xiv. Direction Patterning with Multiple Direction Types

Knowledge Check Questions

Module 4. Advanced Part Modeling Enhancements

- i. Asynchronous Curve Creation
- ii. Draft Enhancements
- iii. Swept Blend Enhancements
- iv. Intersect at Surface Round Transition
- v. Creating Curvature Continuous Rounds
- vi. Creating On-Surface Coordinate Systems
- vii. UDF Enhancements
- viii. Creating UDFs Using On-Surface Coordinate Systems
- ix. Using the Draft Analysis Option
- x. Remove Surface Feature
- xi. Merge Enhancements
- xii. Auto Round

Knowledge Check Questions

Module 5. Resolving Failures

- i. Understanding and Identifying Failures
- ii. Analyzing Geometry Failures
- iii. Analyzing Open Section Failures
- iv. Analyzing Missing Part References Failures
- v. Analyzing Missing Component Failures
- vi. Analyzing Missing Component Reference Failures
- vii. Analyzing Invalid Assembly Constraint Failures
- viii. Understanding Resolve Mode Tools
- ix. Recovering Models

Knowledge Check Questions

Module 6. Assembly Enhancements

- i. Axis Alignment Enhancements
- ii. Generic Instance Enhancements
- iii. Assembly Family Table Enhancements
- iv. Assembly Feature Enhancements



- v. Global Reference Viewer
- vi. Component Transparency Enhancements
- vii. Active Component Enhancements
- viii. Replace Component Enhancements
- ix. Component Operation Enhancements
- x. Repeating Component Placement
- xi. Restructuring Assemblies
- xii. Utilizing the Accessory Window
- xiii. Creating and Managing Explode States
- xiv. Animating Explode States
- xv. Creating Explode Lines

Knowledge Check Questions

Module 7. Advanced Assembly Enhancements

- i. Zone Enhancements
- ii. Clipped State Enhancements
- iii. Frozen Component Enhancements
- iv. Simplified Representation Enhancements WF4
- v. Simplified Representation Enhancements
- vi. Defining Simplified Reps using the Component Chooser
- vii. Envelope Enhancements
- viii. Creating and Using an All Solid Surfaces Shrinkwrap Envelope
- ix. Creating a Default Envelope Simplified Rep
- x. Mechanism Enhancements
- xi. Creating Generic Gear Connections
- xii. Creating Dynamic Gear Connections
- xiii. Creating Belt Connections

Knowledge Check Questions

Module 8. Drawing Enhancements

- i. Understanding the Drawing Ribbon User Interface
- ii. Exploring Drawing Ribbon Commands
- iii. Utilizing the Drawing Tree
- iv. Managing Drawing Sheets
- v. Showing, Erasing, and Deleting Annotations
- vi. Dimension and Tolerancing Enhancements WF4
- vii. Dimension Enhancements
- viii. GTOL Enhancements WF4
- ix. Detailing Enhancements
- x. Cross Section Enhancements
- xi. Full Unfold Cross Section Enhancements
- xii. Modify Model Edges Enhancement



- xiii. View Name Placement Enhancements
- xiv. Offset Notes Improvements
- xv. Tapered Thread Enhancement
- xvi. Converting Draft Entities Improvement
- xvii. Draft Datum Improvements
- xviii. Draft Entities Improvements
- xix. Bill Of Material Enhancements
- xx. Printing Enhancements

Knowledge Check Questions

Module 9. Sheetmetal Enhancements

- i. Annotation Planes for Bend Notes
- ii. Sheetmetal Default Accuracy and Thickness Parameter
- iii. User-Defined Flat Wall Sections
- iv. User-Defined Flange Wall Sections
- v. Add to Part Edge Option
- vi. Punch Form Enhancements
- vii. Utilizing Punch Model Annotations
- viii. Flatten Form Enhancements
- ix. Patterning Walls
- x. Mirroring Walls
- xi. Csys Follow Surface Option
- xii. Miscellaneous Wall Enhancements

Knowledge Check Questions