

Freeform Surface Modeling using Pro/ENGINEER Wildfire 3.0

Course Code	TRN-1851-T
Course Length	2 Days

Overview

In Pro/ENGINEER Wildfire 3.0 you can create freeform surface models using the interactive surface design extension (ISDX) modeling environment, often called Freeform Surfacing or Style surfacing. The Style tool is a spline-based freeform modeler that enables you to combine the parametric feature-based modeling approach with the unconstrained freeform surface modeling approach. This gives you the flexibility to design complex-shaped products in a single modeling environment.

In this course, you learn how to use the Style tool to create and manipulate freeform curves, freeform surfaces, freeform surface details, and advanced freeform surface models. You also learn how to integrate style features with other parametric features in design models.

Pro/FICIENCY assessments will be provided in order for you to assess your understanding of the course materials. The assessment results will also identify the class topics that require further review. At the end of the class, you will either take an assessment via your PTC University account, or your instructor will provide training on how to do this after the class.

After completing this course, you will be well prepared to design complex-shaped freeform surface models in Pro/ENGINEER Wildfire 3.0.

Prerequisites

- Pro/ENGINEER Wildfire 3.0 Update training.

Audience

Design engineers, mechanical designers, industrial designers, and related roles. The topics in this course are also available as Web-based training courses.

Topics

- Describing the Style modeling environment.
 - Creating and editing 2-D, 3-D, and planar style curves.
 - Analyzing and modifying curve shapes.
 - Creating style geometry using images, design references, and imported data.
 - Creating different types of style surfaces such as boundary, loft and blend surfaces.
 - Creating curves using techniques such as sketching, dropping curves on surfaces, and using the Curve from Surface option.
 - Manipulating curves and surfaces in complex models.
 - Creating continuous curves and surfaces.
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- Integrating freeform style features with other parametric features.
- Creating features such as scoops, bulges and recesses using Style.
- Overbuilding surfaces using four boundaries.
- Creating surfaces using the Create Boundaries technique.

Agenda

Day 1

Module 1	Introduction to Freeform Surface Modeling
Module 2	Creating Initial Freeform Geometry
Module 3	Developing Freeform Surface Models
Module 4	Defining Complex Freeform Shapes

Day 2

Module 5	Creating Smooth Freeform Surface Models
Module 6	Integrating Style Features
Module 7	Creating Detailed and Complex Freeform Models
Module 8	Project