

Top-Down Design using Pro/ENGINEER Wildfire 3.0

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| Course Code | TRN-2110-T |
| Course Length | 3 Days |

Overview

Pro/ENGINEER Wildfire 3.0 has a wide range of tools that support the top-down design process. Simply using these tools in your design does not constitute a top-down design. Top-down design is a process in which a product design is planned, structured and executed on from the top level.

In this course, you will first learn to use tools within Pro/ENGINEER that support top-down design process. Layouts, Skeletons, Publish Geometry and Copy Geometry features are fundamental ingredients to any top-down design process.

After learning how to use these tools, you will begin a top-down design project in which you are part of a project team tasked with developing a home security camera. Using the top-down design plan as your guide, you will complete the design by taking on the role of various project team members and completing their assigned design activities.

At the end of each day, you will complete Pro/FICIENCY skills assessment questions. These questions are used to help reinforce your understanding of the course topics and form the basis for daily review sessions.

After completing the course, you will have a better understanding of the top-down design process and how it can be implemented using Pro/ENGINEER Wildfire 3.0.

Prerequisites

- Introduction to Pro/ENGINEER Wildfire 3.0.
- Pro/ENGINEER Wildfire 3.0 Update from Pro/ENGINEER Wildfire 2.0.

Audience

This course is intended for any advanced Pro/ENGINEER users within a company. General users will learn about top-down design and the tools supporting it. Internal support people will learn how to best use top-down design.

Topics

- Using top-down design fundamentals.
 - Creating and using design layouts.
 - Creating and using skeleton models.
 - Creating and using copy geometry features.
 - Creating and using publish geometry features.
 - Creating a top-down assembly structure.
 - Using reference controls and investigation tools.
 - Planning and documenting a top-down design.
 - Distributing design tasks for concurrent development.
 - Importing and exporting ECAD data.
 - Using display styles.
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Agenda

Day 1

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| Module 1 | Introduction to Top-Down Design |
| Module 2 | Top-Down Design Tools in Pro/ENGINEER |
| Module 3 | Planning for Top-Down Design |
| Module 4 | Creating the Security Camera Layout |
| Module 5 | Creating the Security Camera Assembly Structure and Skeletons |

Day 2

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| Module 5 | Creating the Security Camera Assembly Structure and Skeletons (continued...) |
| Module 6 | Camera Assembly Structure and Distribution of Tasks |
| Module 7 | Arm and Base Assembly Design |

Day 3

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| Module 8 | The Camera Housing Design |
| Module 9 | Completing the Camera Design |
| Module 10 | Verification and Derivative Design |

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