



Training Agenda
Pro/TOOLKIT Using Pro/ENGINEER Wildfire 3.0

Day One Optional

Welcome and Introduction

Introduction of C

- Introduction
- Getting Started
- Using C
- How C Compiles and Interprets Code

Create/Edit C files

- Introduction
- Common error messages and solutions
- Using IDE to develop an application
- ✓ 1 Tasks will be completed

Basic Programming Skill

- Introduction
- Understanding Data Objects
- Understanding Variables, Constants, Data Types
- Understand Pointers, and Pointer Declaration and Usage
- Understanding Arrays and Structures
- Understanding how to Initialize Constants
- Understanding code assignment statements
- Understanding the String variable
- ✓ 5 Tasks will be completed

Creating Applications

- Introduction Class
- Including Classes
- Understanding Relational and Logical Operators
- Understanding the if/else statements (Conditional statements)
- Understanding Loops
- Understanding error handling
- Understanding how to use functions
- ✓ 4 Tasks will be completed

Day Two (26 Tasks)

Welcome and Introduction

Introduction of Pro/TOOLKIT

- Introduction
- Installing and Setup
- Application Types
- Object Types Class Types
- Error handling
- Pro/TOOLKIT API Wizard
- ✓ 1 Tasks will be completed

Visual Studio .NET – Using a C IDE

- Environment Variables
- Synchronous Project
- Multi-Process Project
- Simple Asynchronous Project
- Synchronous Debugging
- ✓ 2 Tasks will be completed

Synchronous Mode – Understanding Synchronous Mode

- Registering a Synchronous Application
- Required Functions
- Message Files
- Creating Menus and Buttons
- Running a Synchronous Application
- ✓ 9 Tasks will be completed

Model Objects – Understanding the Model Object

- Model Object Hierarchy
- Model Retrieval
- Pro/ENGINEER Modes
- Regeneration
- Erasing Models
- ✓ 10 Tasks will be completed

Day Three (12 Tasks)

Parameter Objects – Understanding Parameters

- Accessing Parameters
- Parameter Values
- Parameter Information
- Creating Parameters
- ✓ 10 Tasks will be completed

Feature Objects – Understanding Feature Objects

- Accessing Features
- Feature Information
- Feature Geometry

- Feature Status
- Listing Solid Features
- ✓ 2 Tasks will be completed

Day Four (21 Tasks)

Assembly Objects – Understanding Assemblies

- Assembly Structure
- Accessing Components
- Traversing Assemblies
- Recursive Assemblies
- ✓ 5 Task will be completed

Selection of Objects – Understanding Selection

- Interactive Selection
- Selection Filters
- Selection Environment
- Selection Functions
- Manual Construction
- ✓ 5 Task will be completed

Day Five (17 Tasks)

Drawing Objects – Understanding Drawing Objects

- Drawing Creation
- Drawing Solids
- Drawing Operations
- ✓ 12 Tasks will be complete

Events Objects – Understanding Events

- Notifications
- Bracket Events
- ✓ 2 Tasks will be complete

Deploying Applications – Understanding Deployment

- Creating Application for deployment
- Deploying and updateing
- Creating startup script
- ✓ 5 Tasks will be complete

Optional Modules

Module A – Supporting 64 Bit Systems

- Platform SDK Installation
- Environment Variables
- Visual Studio .NET Environment
- 64-bit Project Settings



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Breaks

There will be a 15 minute morning and late after noon intermission. Lunch will be taken for 1 hour approximately at noon.

Class Durations

The class is planned to approximately start at 9:00 am and end at 5:00 pm each day.

Equipment & Materials Supplied

Each student will receive an Introduction to C and a Pro/TOOLKIT Training Manual with a CD that includes the IDE application and all the training files.

Onsite Class

They can be laptops equipped with Pro/ENGINEER Wildfire 3.0 for all students if requested. Each laptop will have all training material and required software for training.

Customer can provide their own computers if desired. Clients should have the required software installed listed below.

- Windows Platform 32 or 64 bit Operating System
- Pro/ENGINEER (Wildfire 3.0)
- Visual Studio .NET
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Recommended PTC system requirements:

- Pentium III processor
- 2 GB RAM
- 3 GB or higher free space
- 2048 MB or higher Swap Space
- 2.4 GHz or higher CPU speed

To review complete PTC requirements please go to:

<http://www.ptc.com/partners/hardware/current/support/proewf3.htm>

All required software and training files are provided on site on a CD or USB smart drive with the exception of PTC Products.

Offsite Class

Each student will have a computer with all required software loaded for training.