



# Training Courses

This document provides an overview of available training courses. They cover a wide range of topics, from starter courses that introduce the .NET Framework to advanced topics such as architecture and design of modern Windows applications.

## Introduction to .NET

This 3 day instructor led course introduces the .NET framework and its foundations as well as the C# programming language.

### Audience

This course is targeted at Gupta developers who want to learn the basics of the .NET environment and the C# language. Knowledge of general programming concepts and the ability to write a program in any programming language is required.

### Topics covered

- History and evolution of .NET
- Anatomy of a .NET application
- Introduction to Visual Studio
- Object-oriented programming
- Constructors and Destructors
- Variables, Types, and Parameters
- Methods, and Parameter Passing
- Comparing Variables
- Type Conversions
- Namespaces and Assemblies
- Metadata
- Using the Base Class Library
- Generics
- Access Modifiers
- Properties
- Abstract classes and Interfaces
- Events and Delegates
- Garbage Collection
- Statics
- Exceptions

## Advanced .NET

This 1 day instructor led course builds on the introductory course and gives you an understanding of advanced .NET features. It also covers new features of the C# 3.0 programming language released as part of the .NET 3.5 Framework.

### Audience

This course is targeted at developers with a basic knowledge of C# and the .NET Framework. Basic knowledge of C# 2.0 (as in Visual Studio 2005) is required.

### Topics covered

- Nested Types
- Static Classes and Class Members
- Partial Classes
- Iterators
- Auto-Implemented Properties
- Initializers
- Implicitly Typed Local Variables
- Anonymous Types
- Extension Methods
- Lambda Expressions
- LINQ Basics

# Introduction to the Porting Project Framework

This 2 day instructor led course provides a general overview of the Porting Project Framework (PPJFW).

## Audience

This course is targeted at Gupta developers with a basic knowledge of C# and the .NET Framework. Attendants should also have a solid understanding of the SAL programming environment.

## Topics covered

- Porting Project Framework in General (Architecture etc.)
- Ported Applications
- SQL Support
- Visual Layer
- Reports

## Porting Project Framework Inside-Out

This 1 day instructor led course focuses on some specific issues in the Porting Project Framework (PPJFW). It prepares developers to embrace the conceptual differences between Gupta and .NET and shows them how to break new ground with .NET and the C# programming language.

### Audience

This course is targeted at Gupta developers with a basic knowledge of C#, the .NET Framework, and the Porting Project Framework.

### Topics covered

- Using the ComponentOne FlexGrid for .NET
- Data Binding

## Performance Issues in .NET

This 1 day instructor led course introduces you to various techniques for optimizing the performance of your .NET application.

### Audience

Developers who write Windows Forms and .NET applications will benefit from this course.

### Topics covered

- General Performance Rules
- Data Access
- User Interface
- Threading
- Background Processing
- Timer-based Execution
- Preserving Resources
- Common Language Runtime
- Resource Management
- Exceptions
- Release and Debug

## Modern Software Development with .NET

In this 2 day course you will get to know various techniques, tools, and methodologies that are common to modern software development in .NET.

### Audience

This course is for developers with a background in C# and .NET Framework programming who want to know more about what's available to make their day-to-day life easier.

### Topics covered

- Software Development Methodologies
- Agile Software Development
- The Scrum Methodology
- Building Blocks of an Agile Project (Source Control, Issue Tracking, Daily Builds etc.)
- Test-Driven Development
- Refactoring
- Mock Objects
- Model-View-Controller
- Inversion of Control

**For more details on any of these courses please contact us at:**

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