Object-Oriented Programming in C# (VS2015)

This thorough and comprehensive 5-day course is a practical introduction to programming in C#, utilizing the services provided by .NET. This course emphasizes the C# language. It is current to Visual Studio 2015. Important newer features such as dynamic data type, named and optional arguments, the use of variance in generic interfaces, and asynchronous programming keywords are covered in a final chapter. A supplement covers the fundamentals of Language Integrated Query (LINQ). This course is intended to be fully accessible to programmers who do not already have a strong background in object-oriented programming in C-like languages, such as C++ or Java. It is ideal, for example, for Visual Basic 6 or COBOL programmers who desire to learn C#.

This course introduces object-oriented concepts early, and C# is developed in a way that leverages its object orientation. A case study is used to illustrate creating a complete system using C# and .NET. Besides supporting traditional object-oriented features, such as classes, inheritance, and polymorphism, C# introduces several additional features, such as properties, indexers, delegates, events, and interfaces that make C# a compelling language for developing object-oriented and component-based systems. This course provides thorough coverage of all these features.

Course Objectives:

- Acquire a working knowledge of C# programming
- Learn how to implement programs using C# and classes from the .NET Framework
- Learn how to implement simple GUI programs using Windows Forms
- Gain a working knowledge of dynamic data type, named and optional arguments, and other new features in C# 4.0.
- Learn how to do asynchronous programming using new keywords in C# 5.0.
- Become aware of new features in C# 6.0

Audience: Programmers who need to design and develop C# for the .NET framework.

Prerequisites: The student should have programming experience in a high-level language.

Number of Days: 5 days