

This course is designed to help experienced VB programmers quickly come up to speed on the VB.NET language. It covers the essentials of the VB.NET language and how VB.NET relates to the .NET Framework.

Prerequisites: The student must be an experienced application developer or architect, with a background in Visual BASIC 6.0 or earlier, and object-oriented programming.

Minimum software requirements: Microsoft Windows 2000 or XP, Visual Studio.NET 2003 or Visual Studio 2005. Visual Basic 2005 Express Edition can also be used.

Minimum hardware requirements for all machines: Pentium PC running at 600 MHz; 256 Mb RAM; 3 GB free hard disk space before installation; Internet access; machines must be networked.

Microsoft PowerPoint and Internet access on instructor's workstation for presentation purposes.

Module 1: .NET: What You Need to Know

- .NET Executables and the CLR
- A .NET Testbed for VB.NET Programming
- Visual Studio .NET

Module 2: VB.NET for the Sophisticated Programmer

- First VB.NET Console Application
- Namespaces
- Data Types
- Control Structures
- Subroutines and Functions
- Conversions
- Console I/O
- Exception Handling

Module 3: Object-Oriented Programming in VB.NET

- Classes
- Access Control
- Methods and Properties
- Shared Data and Methods
- Inheritance
- Overriding Methods
- Polymorphism

Module 4: VB.NET and the .NET Framework

- Interfaces
- System.Object
- Collections
- Copy Semantics
- Generic .NET Interfaces
- Delegates
- Random Number Generation
- Events

Module 5: Introduction to Windows Forms

- First VB.NET Windows Application
- Windows Forms
- Controls
- Windows Events
- Menus
- Dialogs

Module 6: New Features in VB.NET 2.0

- Visual Studio 2005
- Partial Classes
- Generic Types
- Continue Statement
- IsNot Operator
- Operator Overloading
- Properties with Mixed Access Levels
- Built-In My Object
- Other New Features

Appendix A: Using Visual Studio.NET

- Overview of Visual Studio.NET
- Creating a Console Application
- Project Configuration
- Debugging