

PROGRAMMING VISUAL BASIC .NET

Course Description

This course teaches the fundamentals of Visual Basic programming, including syntax, event-driven programming, compiling applications with the native code compiler, working with controls, handling run-time errors, manipulating form and control properties, and much more. Further coverage teaches how to manage data with ActiveX Data Objects (ADO), create your own objects, manipulate object collections, add status bars and toolbars, optimize your interfaces and VBA code, and create benchmarks to test your application's speed.

Course Length: 3 Days

Course Tuition: \$750 (US)

Prerequisites

Fundamentals of Visual Basic .NET

Course Outline

- Classes and Objects
 - Using Objects to Organize a Complex World
 - Defining Classes
 - Constructing Objects
 - Creating and Using Properties
 - Creating and Using Methods
 - Raising and Handling Events
 - Finalization
- Windows Forms Controls
 - TabControl, Context Menu, TrackBar
 - NumericUpDown, DomainUpDown
 - Label, CheckBox, RadioButton
 - ListBox
 - Adding Controls Dynamically
 - Other List Controls
 - Anchoring and Docking
 - Using the Splitter Control
 - Dialog Controls
- Debugging Your Applications
 - Configuring the Debugging Environment
 - Debugging Syntax Errors
 - Configuring Debugging in Visual Studio .NET
 - Setting Breakpoints and Stepping through Code
 - Exploring the Debugging Windows
 - Writing to the Windows Event Log
- Handling Input/Output Tasks
 - Introducing the System.IO Namespace
 - Selecting Files
 - Handling Path Information
 - Working with Directories and Files
 - Reading and Writing Text Files
- Investigating .NET Data Structures
 - Introducing the System.IO Namespace
 - Selecting Files

- Inheritance and Interfaces

Object Oriented Programming
Supporting Inheritance
Creating a Derived Class
Overriding in Action
Customizing Controls with Inheritance
Using Interfaces
Implementing IComparable to Enable
Sorting

- Working with Strings and Dates

Working with Text: The String Class
Manipulating Text with the
StringBuilder Class
Working with Dates and Times
Handling Elapsed Times with the
TimeSpan Type

- Exception Handling

Perspectives on Exception Handling
Adding a Simple Try/Catch Block
Using an Exception Object
Catching Specific Exceptions
Using the Throw Keyword
Using the Finally Block

Handling Path Information
Working with Directories and Files
Reading and Writing Text Files

- Accessing Data

Overview of ADO.NET
The DataTable Object
Using the Connection and Command
Objects
Using the DataReader Object
Managing Data with the DataAdapter
and DataSet Objects
Choosing an ADO.NET Provider
Writing Code for Multiple Providers

- Interoperability

Use COM Components in .NET
Work with Platform Invocation Services
Call .NET Assemblies from Visual
Basic 6.0