

Visual Basic .NET: Introduction

Course length: 5 days

Course Description

Welcome to Visual Basic .NET : Introduction. Now that you have taken the course Visual Studio .NET: Introduction, you have a solid foundation for working with Visual Studio.NET to create .NET projects. In this course, you learn the Visual Basic .NET language from the ground up and use Visual Studio .NET to assist you in your learning as well as in the creation of end-user applications. It provides you with the basic skills required to develop functionally sound Visual Basic .NET applications.

Course Objective: You will learn Visual Basic .NET to create graphical user interface applications.

Target Student: This course is designed for programmers who have written code for at least three months using a procedural language (such as Fortran, Pascal, C, or Cobol) or an object-oriented programming language (such as Java, C++, Delphi, or Powerbuilder).

Prerequisites: To ensure your success, we recommend you first take the following courses or have equivalent knowledge:

- Visual Studio .NET: Introduction

Delivery Method: Instructor led, group-paced, classroom-delivery learning model with structured hands-on activities.

Performance-Based Objectives

Upon successful completion of this course, students will be able to:

- Create a user interface in a Windows Forms application.
- Work with data and variables.
- Control program flow by writing code that reacts to specific situations and produces the correct results for the situation.
- Work with classes to define new types of objects.
- Enhance user interface functionality by adding form components.
- Deploy your application so that it runs on other computers.
- Create Web applications such as Web Forms and Web Services.

Course Content

Lesson 1: Creating a User Interface in a Windows Forms Application

Topic 1A: Determine Form Properties

Topic 1B: Determine Form Controls

Topic 1C: Determine Control Properties

Topic 1D: Manipulate Grouped Controls

Topic 1E: Write Event Procedures

Lesson 2: Working With Data and Variables

Topic 2A: Declare Variables and Constants

Topic 2B: Determine and Set Scope

Topic 2C: Perform Mathematical Calculations



Topic 2D: Create an Array
Topic 2E: Create a Structure to Implement a Custom Data Type
Topic 2F: Create a Collection
Topic 2G: Create an Enumeration

Lesson 3: Controlling Program Flow

Topic 3A: Implement a Standard Module
Topic 3B: Manipulate Forms
Topic 3C: Create Functions
Topic 3D: Create Sub Procedures
Topic 3E: Write Decision Structures
Topic 3F: Write Loop Statements
Topic 3G: Debug Logic Errors
Topic 3H: Validate Data
Topic 3I: Implement Structured Exception Handling

Lesson 4: Working with Classes

Topic 4A: Create a Class
Topic 4B: Create a Property Procedure
Topic 4C: Create a Method
Topic 4D: Create and Handle a Custom Event
Topic 4E: Set an Object's Initial Values Using a Constructor
Topic 4F: Implement Overloading
Topic 4G: Write Sharable Code
Topic 4H: Create a Class Using Inheritance
Topic 4I: Provide Polymorphism Through Inheritance

Lesson 5: Enhancing User Interface Functionality

Topic 5A: Add a Menu to a Windows Form
Topic 5B: Add Dialog Box Controls
Topic 5C: Add a Toolbar
Topic 5D: Add a Status Bar
Topic 5E: Create a Form Using Visual Inheritance
Topic 5F: Create a User Control
Topic 5G: Retrieve Data from an External Data Source
Topic 5H: Manipulate Data in a Windows Forms Application
Topic 5I: Create an Application Configuration File

Lesson 6: Deploying Your Application

Topic 6A: Create a Deployment Project
Topic 6B: View Metadata
Topic 6C: Create and Deploy a Shared Assembly

Lesson 7: Creating Web Applications

Topic 7A: Create a Web Forms Application
Topic 7B: Create a Web Service Application
Topic 7C: Consume a Web Service Application

