

Course Name : VB.NET MASTERY: BASIC TO INTERMEDIATE SKILLS
Duration : 3 Days (Physical Classroom / Virtual Live Instructor)
Skill Level : Beginner

COURSE DESCRIPTION:

Discover the world of VB in our hands-on course made for beginners and those who've dabbled in programming. Our certified instructor will walk you through VB basics and more advanced stuff. No need for extra tools—we focus on understanding the language itself. You'll learn VB's rules, types of data, and how to make your programs work smoothly. We'll also cover Object-Oriented Programming and the cool things VB has had in versions 6 and up.

By the end of the course, you'll feel confident writing, fixing, and understanding VB code. It's great for anyone starting fresh or already into coding. Web developers using Angular, React, Vue, or Node will find it especially helpful. It lays a strong foundation for understanding how these frameworks work. Boost your programming skills by mastering VB and be ready for modern web development!

WHAT WILL YOU LEARN?

In this course, you'll learn the basics of VB programming from scratch. We'll start with the essential principles of programming, setting the stage for your journey with VB. You'll also explore server-side development in VB, especially using technologies like ASP.NET. By the end of the course, you'll be ready to create dynamic and interactive applications with VB. Whether you're just starting or want to improve your programming skills, this course gives you the knowledge and hands-on experience to confidently navigate the world of VB development.

PREREQUISITE:

Beginners. No programming experience is required.

METHODOLOGY:

This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

JOB SCOPE:

Upon completion of this course, candidates may pursue the following career paths:

- VB Developer
- Software Developer / Programmer
- Application Support Engineer
- Systems Analyst
- Quality Assurance (QA) Engineer
- Database Developer

MODULE 1: INTRODUCTION TO VB AND .NET FRAMEWORK

- Welcome
- VB Overview and Use Cases
- VB Compilation and Place in the Programming World
- Common Language Infrastructure and .NET Framework
- Installing and Using Visual Studio

MODULE 2: VB SYNTAX AND DATA TYPES

- Writing and Running a Simple VB Program
- Variables, Constants, Operators, Expressions, Statements
- Working with Data Types
- Type Conversion, Formatting, and Parsing

MODULE 3: CONTROL FLOW AND METHODS

- Writing and Running a Simple VB Program
- Variables, Constants, Operators, Expressions, Statements
- Working with Data Types
- Type Conversion, Formatting, and Parsing

MODULE 4: OBJECT ORIENTED PROGRAMMING

- Selection Statements and Loops
- Break, Continue, Goto Statements
- Logical and Conditional Operators
- Defining and Calling Methods
- Parameters, Return Values, Overloading, Optional Parameters

MODULE 5: ARRAYS AND COLLECTIONS

- Arrays and Multidimensional Arrays
- Indexers and Foreach Loops
- Generic Collections and Methods
- Stacks, Queues, Lists, Dictionaries, Sets, LINQ

MODULE 6: EXCEPTION HANDLING AND DEBUGGING

- Exceptions and Handling
- Exception Class and Custom Exceptions
- Debugger, Breakpoints, Debug, Trace Classes

MODULE 7: DELEGATES AND EVENTS

- Delegates
- Anonymous Methods and Lambda Expressions
- Multicast Delegates and Invocation Lists
- Events in VB

MODULE 8: GENERICS AND REFLECTION

- Generics
- Generic Constraints and Variance
- Generic Delegates and Events
- Reflection in VB

MODULE 9: FILE I/O AND SERIALIZATION

- Working with Files and Directories
- Text and Binary File Operations
- Serialization Concepts

MODULE 10: THREADING AND ASYNCHRONOUS PROGRAMMING

- Basics of Threads
- Synchronization and Locking Mechanisms
- Asynchronous Programming

CONCLUSION

- QA
- Useful References and Books
- Feedback