

**Price:** R5,900.00 excl. VAT  
**Duration:** 5 days  
**Code:** VBNET

# Visual Basic Programming

## Description

The Visual Basic Programming course focuses on application development using Visual Basic and the .NET Common Language Runtime (CLR). Topics covered include the Visual Basic language syntax, OO basics, classes, interfaces, and the .NET environment.

## Objectives

Delegates who complete the Visual Basic Programming course will be able to:

- Write VB.NET Console programs.
- Understand and debug VB.NET programs.
- Understand the principles of the Common Language Runtime.

## Intended Audience

The Visual Basic Programming course is suitable for developers who want to develop applications for the .NET framework.

## Prerequisites

Previous programming experience is essential.

## Course Contents

*The lecturer reserves the right to modify the contents of the course to suit the needs of the delegates.*

**Introduction to Visual Basic** • Common Language Runtime. • Differences between Visual Basic in the .NET environment and VB 6.0. • Upgrade and portability issues.

**Object Orientation in Visual Basic** • Concepts. • Base & derived classes. • Overloading vs Overriding. • Virtual methods. • Shadowing. • Member scope & access. • Constructors & destructors. • Statefull versus stateless.

**Program Structure and Project Types** • Console applications. • WinForms. • Deployment. • Assemblies. • Name spaces. • CLR system classes.

**Form Based Development** • WinForms. • Visual inheritance. • Menus. • Form events. • Dialogs. • MDI interfaces and execution.

**Common Programming Tasks** • File access. • External libraries. • System name spaces. • COM Interop library. • Using legacy components.

**ActiveX Controls** • Creation. • Inheritance. • Properties, methods and events. • Intrinsic controls. • Custom controls.

**Data Types, Expressions and Statements** • Data types. • Type safety. • New system data types. • Type conversion.

**Procedures, Functions and Program Statements** • Keywords. • Built-in. • Procedures and functions. • Optional parameters. • New constructs. • Exception handling.

**Database Development** • ADO.NET. • Providers. • ODBC, OLEDB and SQL Server. • System.Data.sqlClient. • Connection & Command objects. • Data Adapter, Reader, Set, Table objects. • Connected vs disconnected. • SQL & stored procedures. • Data controls, Grids, Lists and Combo boxes • Bound controls versus unbound controls.

**Miscellaneous** • Debugger. • VB.NET and XML. • OO Design Methodologies.