VBA Excel 2010

**Overview:**
Microsoft Excel is used to simplify business tasks, including the creation of spreadsheets, graphs, charts, and formulas that used to be difficult to create, and nearly impossible to maintain using pencil and paper. Now, you can go one step further to simplify your work in the Excel environment by automating many of the repetitive tasks that are part of the spreadsheet development using Visual Basic for Applications (VBA).

New Horizons’ VBA Excel 2010 course is a three-day training program filled with practical workshops where students will apply the VBA programming language to simplify many of the tasks performed using various tools and functions in Excel 2010.

**Target Audience:**
Programming in VBA Microsoft Excel 2010 is designed for users who wish to learn how to use the inbuilt programming language in Excel to enhance their worksheets and automate processes.

**At Course Completion:**
Upon successful completion of this course, students will be able to:
- create recorded macros in Excel
- use the macro recorder to create a variety of macros
- understand the Excel object model and VBA concepts
- work with the three main components of the VBA Editor window
- create command procedures
- create and use variables
- create and work with user-defined functions
- write code to manipulate Excel objects
- use a range of common programming techniques
- create a custom form complete with controls and event procedures
- create code to drive a user form
- create procedures that start automatically
- write a variety of error handling routines

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**Module 1: Recorded Macros**
- Understanding Excel Macros
- Setting Macro Security
- Saving A Document As Macro Enabled
- Recording A Simple Macro
- Running A Recorded Macro
- Relative Cell References
- Running A Macro With Relative References
- Viewing A Macro
- Setting A Macro
- Assigning A Macro To The Ribbon
- Assigning A Macro To The Toolbar
- Running A Macro From The Toolbar
- Assigning A Macro To The Ribbon
- Assigning A Keyboard Shortcut To A Macro
- Deleting A Macro
- Copying A Macro

**Module 2: Recorder Workshop**
- Preparing Data For An Application
- Recording A Summation Macro
- Recording Consolidations
- Recording Divisional Macros
- Testing Macros
- Creating Objects To Run Macros
- Assigning A Macro To An Object

**Module 3: Understanding VBA**
- Programming in Microsoft Excel
- VBA Terminology
- Understanding Objects
- Viewing The Excel 2010 Object Model
- Using The Immediate Window
- Working With Object Collections
- Setting Property Values
- Working With Worksheets
- Using The Object Browser
- Programming With The Object Browser
- The Best VBA Help Available

**Module 4: The VBA Editor**
- The VBA Editor Screen
- Opening and closing the editor
- Using the Project Explorer
- Working with the Properties Window
- Using the Work Area
- Viewing Other Panes
- Working with Toolbars
- Working with a Code Module
- Running Code from the Editor
- Setting Breakpoints in the Editor
- Stepping Through Code

**Module 5: Procedures**
- Understanding Procedures
- Where Procedures Live
- Creating a New Sub Routine
- Making Sense of IntelliSense
- Using the Edit Toolbar
- Commenting Statements
- Indenting Code
- Bookmarking in Procedures

**Module 6: Using Variables**
- Understanding Variables
- Creating And Using Variables
- Explicit Declarations
- The Scope Of Variables
- Procedure Level Scoping
- Module Level Scoping
- Passing Variable Object
- Passing Variables By Reference
- Passing Variables By Value
- Data Types for Variables
- Declaring Data Types
- Using Arrays

**Module 7: Functions in VBA**
- Understanding Functions
- Creating VBA Functions
- Using a VBA Function in a Worksheet
- Setting Data Function Types
- Using Multiple Arguments
- Modifying A VBA Function
- Creating A Function Library
- Referencing A Function Library
- Importing a VBA Module
- Using a Function in VBA Code

**Module 8: Using Excel Objects**
- The Application Object
- The Workbook Objects
- Program Testing with the Editor
- Using Workbook Objects
- The Worksheets Object
- Using the Worksheets Object
- The Range Object
- Using Range Objects
- Using Objects In A Procedure

**Module 9: Programming Techniques**
- The MsgBox Function
- Using MsgBox
- InputBox Techniques
- Using the InputBox Function
- Using the InputBox Method
- The IF statement
- Using IF For Single Conditions
- Using IF For Multiple Conditions
- The Select Case Statement
- Using The Select Case Statement For Loops
- Looping With Specified Iterations
- The Do...Loop Statement
- Looping With Unknown Iterations

**Module 10: Creating Custom Forms**
- Understanding VBA Forms
- Creating A Custom Form
- Adding Text Boxes To A Form
- Changing Text Box Control Properties
- Adding Label Controls To A Form
- Adding A Combo Box Control
- Adding Option Buttons
- Adding Command Buttons
- Running A Custom Form

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**Duration:** 24 Hours
Module 11: Programming UserForms
- Handling Form Events
- Initialising A Form
- Closing A Form
- Transferring Data from a Form
- Running Form Procedures
- Creating Error Checking Procedures
- Running A Form From A Procedure
- Running A Form From the Toolbar

Module 12: Automatic Startup
- Programming Automatic Procedures
- Running Automatic Procedures
- Automatically Starting A Workbook

Module 13: Error Handling
- Understanding Error Types
- The On Error Statement
- Simple Error Trapping
- Using The Resume Statement
- Using Decision Structures In Error Handlers
- Working With Err Object
- Error Handling In Forms
- Coding Error Handling In Forms
- Defining Custom Errors