
Course Level - Introduction

Course Introduction

Formalities / Course aims and objectives



Introduction to VBA

What is VBA?

Recording a Macro

Relative and Absolute Position

Editing a Macro

The Visual Basic Environment

The Visual Basic Editor

The Project Explorer

The Property Window

The Code Window

Other Windows

Running Macros from the Code Window

Special Macros

Macro Security

Program Flow Control

Decision Structures

If ... End if

Multiple Conditions

Select Case

Loop Structures

For ... Next

Multiple Loops

Using Step Values

For Each ... Next

Do ... Loop

While ... Wend

Terminating Loops

The Visual Basic Language

The Elements of the Language

Modules: Creating, Renaming, Deleting

Procedures: Creating

Procedure Scope

Procedure Arguments

Code Layout

Comments

Multi-line Statements

Multi-Statement Lines

Functions

Editor Options

Variables, Constants and Expressions

Using Variables

Declaring Variables

Variable Types

The Variant Type

Object Variables

Variable Scope

Use of Public, Private and Static

Variable names

Procedure Arguments

Operators and Expressions

Writing Expressions

Arrays: Fixed / Dynamic

Type Conversion

Constants

Objects, Properties, Methods and Events

Working with Objects

Collections

The Object Browser

Reading and Changing Properties

Setting Properties at Design Time

Changing Properties at Run-time

The Value Property

Using Methods with Objects

Declaring Argument Values for Methods

Argument Names and Argument Lists

With ... End With

Events

User Interaction & User Forms

Interacting with the User

InputBox

MsgBox: Statement and Function

Picking up MsgBox Return Values

Creating User Forms

Form Controls: Creating and Naming

Adding Code to Forms

Managing Controls through Code

Populating Controls at Run-Time

Testing and Using Forms

Showing User Forms

Managing Errors

- Types of Error
- Syntax Errors
- Run-time Errors
- Logic Errors
- Stepping Into or Through Code
- Creating Breakpoints
- Checking Variable Values
- Using the Immediate Window
- Using the Watch Window
- The Locals Window
- Viewing the Call Stack
- Handling Run-time Errors
- Preventing Errors from Appearing
- Managing Errors in Place
- Writing a General Error Handler

Custom Menus and ToolBars

- Creating New ToolBars
- Adding Buttons
- Deleting a ToolBar Icon
- Assigning Macros to ToolBar Buttons
- Customising Menus

Features Unique to Excel VBA

- Excel Objects
- The Application Object
- Application Properties
- ActiveWindow
- ActiveWorkbook
- ActiveSheet
- ActiveCell
- CutCopyMode
- Screen Updating
- Selection
- Username
- Version
- Visible Property
- Application Methods
- Calculate
- Quit
- Excel Collections
- The Workbooks Collection
- The Worksheets Collection
- The Cells Property
- Common Excel Objects
- Range
- CurrentRegion
- Font
- Worksheet Function
- Working with Excel Workbooks
- ThisWorkbook
- Sheets
- ActiveX Controls
- User-Defined Functions