

MS Excel VBA

Duration: 1 Day Using Watsonia manual INF472

- Outcome:** At the completion of this course participants will be able to:
- create recorded macros in Excel
 - use the macro recorder to create a variety of macros
 - create and work with user-defined functions
 - work with the main components of the VBA Editor window
 - understand the Excel object model and use the Immediate window
 - create command procedures
 - create and use variables
 - 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 custom form
 - customise the menu system
 - create procedures that start automatically.

Prerequisites This course is designed for participants who are proficient users of Excel 2003. Participants should have extensive experience in designing and creating workbooks and a good working knowledge of formulas, ranges, functions and multiple workbooks.

- Content:**
- **Recorded Macros**
 1. Setting Macro Security Levels
 2. Recording A Simple Macro
 3. Running A Recorded Macro
 4. Relative Cell References
 5. Running A Macro With Relative References
 6. Viewing A Macro Module
 7. Modifying A Recorded Macro
 - **Recorder Workshop**
 1. Preparing Data For An Application
 2. Recording A Summation Macro
 3. Recording Consolidations
 4. Recording Divisional Macros
 5. Testing Macros
 6. Creating Objects To Run Macros
 7. Assigning A Macro To An Object
 - **User-Defined Functions**
 1. User-Defined Functions Theory
 2. Creating Simple User-Defined Functions
 3. Using User-Defined Functions
 4. Using Multiple Arguments
 5. Modifying A Function
 6. Creating A Function Library
 - **Using The VBA Editor**
 1. Opening And Closing The Editor

2. Working With The Project Explorer
 3. Working With The Properties Window
 4. Working With The Work Area
 5. Working With A Code Module
 6. Running Procedures From The Editor
 7. Setting Breakpoints In The Editor
 8. Stepping Through A Procedure
- **Understanding VBA**
 1. VBA Terminology
 2. Accessing The Excel Object Model
 3. Using The Immediate Window
 4. Working With Object Collections
 5. Setting Property Values
 6. Working With Worksheets
 7. Using The Object Browser
 8. Programming With The Object Browser
 - **Procedures**
 1. Creating A Command Procedure
 2. Making Sense of IntelliSense
 3. Using The Edit Toolbar
 4. Commenting Statements
 5. Indenting Code
 6. Bookmarking In Procedures
 - **Using Variables**
 1. Creating & Using Variables
 2. Implicit And Explicit Declarations
 3. The Scope Of Variables
 4. Procedure Level Scoping
 5. Module Level Scoping
 6. Passing Variables By Reference
 7. Passing Variables By Value
 8. Data Types
 9. Declaring Data Types
 10. Using Arrays
 - **Using Excel Objects**
 1. Application Methods & Properties
 2. Workbook Methods & Properties
 3. Viewing Excel & The Editor Together
 4. Using Workbook Objects
 5. Worksheet Methods & Properties
 6. Using Worksheet Objects
 7. Range Methods & Properties
 8. Using Range Objects
 9. Project - Using Objects In A Procedure
 - **Programming Techniques**
 1. The MsgBox Function
 2. Sending Messages To The User
 3. InputBox Techniques
 4. Using The InputBox Function

5. Using The InputBox Method
 6. The IF Statement
 7. Using IF For Single Conditions
 8. Using IF For Multiple Conditions
 9. The FOR NEXT Statement
 10. Looping With Known or Specified Iterations
 11. The DO LOOP Statement
 12. Looping With Unknown Iterations
- **Creating Custom Forms**
 1. Creating A Custom Form
 2. Adding Text Boxes To A Form
 3. Changing Text Box Control Properties
 4. Adding Label Controls To A Form
 5. Adding A Combo Box Control
 6. Adding Option Buttons
 7. Adding Command Buttons
 8. Running A Custom Form
 - **Programming Custom Forms**
 1. Initialising A Form
 2. Closing A Form
 3. Project - Transferring Data From A Form
 4. Running Form Procedures
 5. Creating Error Checking Procedures
 6. Running A Form From A Procedure
 - **Custom Menus**
 1. Creating A New Menu
 2. Creating A Cascade Menu
 3. Adding Menu Commands
 4. Assigning Macros To Menu Commands
 5. Removing A Menu
 - **Automatic Startup**
 1. Programming Automatic Procedures
 2. Running Automatic Procedures
 3. Automatically Starting A Workbook