Excel 2016 ©
Introduction to VBA

SUTHERLAND TRAINING

caring, flexible, professional

Duration: 1 day

TARGET AUDIENCE

This one-day course is for Microsoft Excel © users who would like an introduction to Excel Visual Basic for Applications (VBA) programming.

LEARNING OUTCOMES

The course will provide skills and knowledge which will allow the attendee to begin with VBA programming.

PREREQUISITES

This course requires an advanced knowledge of Excel features and functions (refer to the Excel Intermediate and Advanced courses for a guide) and contains a significant amount of typing.

Understanding Excel VBA
Programming in Microsoft Excel
VBA Terminology
Displaying the Developer Tab
The VBA Editor Screen
Opening and Closing the Editor
Understanding Objects
Viewing the Excel 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
Accessing Help
Code Glossary

Starting with Excel VBA
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 Code
Stepping through Code

Procedures
Understanding Procedures
Where to write Procedures
Creating a new Sub Routine
Using IntelliSense
Using the Edit Toolbar
Commenting Statements
Indenting Code
Bookmarking in Procedures
Code Glossary
Creating relative names for Subtotals

Using Variables
Understanding Variables
Creating and Using Variables
Explicit Declarations
The Scope of Variables
Procedure Level Scoping
Module Level Scoping
Understanding Passing Variables
Passing Variables by References

Using Variables *(cont'd)*
Passing Variables by Value
Understanding Data Types for Variables
Declaring Data Types
Using Arrays
Code Glossary

Functions in VBA
Understanding Functions
Creating User-Defined Functions
Using a User-Defined Function
Creating a Function Library
Referencing a Function Library
Importing a VBA Module
Using a Function in VBA Code
Code Glossary

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
Code Glossary

Programming Techniques
The MsgBox Function
Using MsgBox
InputBox Techniques
Using the InputBox Function
Using the InputBox Method
The IF Statement
Using IF for Multiple Conditions
The Select Case Statement
For Loops
Looping with Specified Iterations
The Do Loop Statement
Looping with Unknown Iterations
Code Glossary

Creating Custom Forms
Understanding VBA Forms
Creating a Custom Form
Adding Text Boxes to a Form
Changing Text Box Control Properties

Creating Custom Forms *(cont'd)*
Adding Label Controls to a Form
Adding a Combo Box Control
Adding Option Buttons
Adding Command Buttons
Running a Custom Form

Programming User Forms
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
Code Glossary

Automatic Startup
Programming Automatic Procedures
Running Automatic Procedures
Automatically Starting a Workbook

Error Handling
Understanding Error Types
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
Code Glossary

Duration: 1 day
Class size: 4 max
Times: 9am to 4:30pm