

Microsoft Excel VBA Introduction

Overview

The skills and knowledge acquired in Microsoft Excel VBA Introduction are sufficient to be able to use and operate the software at an efficient level.

Target Audience

Microsoft Excel VBA Introduction is designed for users who are keen to extend their understanding and knowledge of the software.

Pre-requisites

Microsoft Excel VBA Introduction assumes the delegate has completed the Excel Fundamentals, Excel Intermediate and Excel Advanced courses or has equivalent knowledge.

Objectives

At the completion of Microsoft Excel VBA Introduction you should 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
- debug Excel VBA

Course Duration is 2 days

Course Code: EVBA

Topics

Recorded Macros

- Setting Macro Security Levels
- Recording A Simple Macro
- Running A Recorded Macro
- Relative Cell References
- Running A Macro With Relative References
- Viewing A Macro Module
- Modifying A Recorded Macro

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

User-Defined Functions

- User-Defined Functions Theory
- Creating Simple User-Defined Functions
- Using User-Defined Functions
- Using Multiple Arguments
- Modifying A Function
- Creating A Function Library

Using The VBA Editor

- Opening And Closing The Editor
- Working With The Project Explorer
- Working With The Properties Window
- Working With The Work Area
- Working With A Code Module
- Running Procedures From The Editor
- Setting Breakpoints In The Editor
- Stepping Through A Procedure

Understanding VBA

- VBA Terminology
- Accessing 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

Procedures

- Creating A Command Procedure
- Making Sense of IntelliSense
- Using The Edit Toolbar
- Commenting Statements
- Indenting Code
- Bookmarking In Procedures

Using Variables

- Creating & Using Variables
- Implicit And Explicit Declarations
- The Scope Of Variables
- Procedure Level Scoping
- Module Level Scoping

- Passing Variables By Reference
- Passing Variables By Value
- Data Types
- Declaring Data Types
- Using Arrays

Using Excel Objects

- Application Methods & Properties
- Workbook Methods & Properties
- Viewing Excel & The Editor Together
- Using Workbook Objects
- Worksheet Methods & Properties
- Using Worksheet Objects
- Range Methods & Properties
- Using Range Objects
- Project - Using Objects In A Procedure

Programming Techniques

- The MsgBox Function
- Sending Messages To The User
- InputBox Techniques
- Using The InputBox Function
- Using The InputBox Method
- The IF Statement
- Using IF For Single Conditions
- Using IF For Multiple Conditions
- The FOR NEXT Statement
- Looping With Known Or Specified Iterations
- The DO LOOP Statement
- Looping With Unknown Iterations

Creating Custom 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

Programming Custom Forms

- Initialising A Form
- Closing A Form
- Project - Transferring Data From A Form
- Running Form Procedures
- Creating Error Checking Procedures
- Running A Form From A Procedure

Custom Menus

- Creating A New Menu
- Creating A Cascade Menu
- Adding Menu Commands
- Assigning Macros To Menu Commands
- Removing A Menu

Automatic Startup

- Programming Automatic Procedures
- Running Automatic Procedures

- Automatically Starting A Workbook

Debugging

- Debugging