Access VBA - 2 days

Overview

Microsoft Access is the desktop database design product from the Microsoft Office professional suite. This course teaches experienced Access users about the greater advantages to be gained by combining the built-in features of Access with the programming

The course is designed to give delegates a thorough overview of programming within the Access environment, enabling them to improve the functionality and productivity of their Access databases, whilst providing a useful introduction to programming.

If you have mastered tables, queries, forms and reports in Access, it is maybe time to learn Access programming. This two-day course shows you how to use Access VBA to automate your databases, making your database development easier - and more fun!

Prerequisites

The course is aimed at those with no previous programming experience, who are looking to develop databases that go beyond what Access alone is capable of.

Delegates must have an excellent working knowledge of Microsoft Access. You must be able to create tables, queries, forms and reports.

Objectives

At the end of the course you will be able to:

Create macros to automate tasks, as well as understand their limits
Understand the Access object model, and make use of its properties, methods and events
Work with forms to create better user interface
Declare variables, and manipulate them
Write code using built in VBA functions
Write user defined functions, frequently used pieces of code

VBA Development Basics
- The Access Development Environment
- The Importance Of Splitting Databases
- Maintaining Links
- Using Queries For Reports And Forms
- Understanding Client/Server

Macros And VBA
- Macro Overview
- Creating Macros
- Assigning Macros
- Creating More Complex Macros
- Converting Macros To VBA Code
- Why You Shouldn't Use Macros

VBA Essentials
- Programming Environment Overview
- The Role Of Forms
- Creating A Startup Form
- Understanding Modules
- Code Behind Forms
- Naming Conventions

VBA Subroutines
- Creating A Subroutine
- Creating A Function
- Calling Procedures
- Passing Parameters
- Returning Values
- Scoping Procedures

VBA Variables
- Overview Of Variables
- Option Explicit
- Default Values
- Scoping Variables
- Local Variables
- Module-Wide Variables
- Passing Parameters
- Passing Parameters By Value

Debugging VBA
- Overview Of Debugging
- Setting A BreakPoint
- Stepping Through A Procedure
- Viewing The Call Stack
- Using The Locals And Immediate Windows
- Adding A Watch

Interactive VBA
- The Act Of Communicating
- Creating A Simple Input Box
- Simple Message Boxes
- Creating Larger Messages
- Breaking A Message Line
- Message Box Functions
- Responding To Different Buttons

Decisive VBA
- Decisions Overview
- Creating An In-Line If
- Creating A Block If
- Multiple If
- Using Case Statements
- Value Ranges In Case Statements

Looping VBA
- Program Loops
- Creating A While Loop
- Creating An Until Loop
- For Each Loops
- Exiting From Loops
- For Next Loops

The DOCMD Object
- Overview Of DoCmd
- Navigating With DoCmd
- Moving Through Records
- Filtering Records With DoCmd
- Opening A Form With DoCmd
- Opening A Report With DoCmd

ActiveX Data Objects
- Overview Of ADO
- Setting References Using VBA
- Creating A Table With ADO
- Removing A Table Using ADO
- Populating A Form Using ADO
- Dealing With An Empty Table

ADO Forms & Recordsets
- Overview Of ADO With Forms & Recordsets
- Navigating Records In A Form
- Finding A Record
- Updating A Record
- Deleting A Record
- Adding A New Record

Handling Errors In VBA
- Error Handling Overview
- Understanding Common Errors
- Creating A Simple Error Handler
- Understanding The Error Object Model
- More Elegant Error Handling
- Resuming From Errors
- Forcing An Error
- Creating Custom Errors