

# Microsoft Access Programming with VBA

**Course Duration: 3 Days**

**Course Price: £975 Per Person | One to One £1075**

**Onsite Price from: £1755 for 2 Delegates | Additional Delegates £100 Per Person, Per Day**

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## Designing a Database

- ... Describe the relational database design process
- ... Define database purpose
- ... Review existing data
- ... Determine fields
- ... Group fields into tables
- ... Normalise data
- ... Designate primary and foreign keys
- ... Determine table relationships

## Development Basics

- ... The Access development environment
- ... The importance of splitting databases
- ... Maintaining links
- ... Using the database splitter
- ... Using queries for reports and forms
- ... Access run-time
- ... Understanding client/server
- ... Quick reference

## Macros and VBA

- ... Macro overview
- ... Creating macros
- ... Assigning macros
- ... Creating more complex macros
- ... Converting macros to vba code
- ... Why you shouldn't use macros
- ... Quick reference

## VBA Essentials

- ... Programming environment overview
- ... The role of forms
- ... Creating a startup form
- ... Understanding modules
- ... Code behind forms
- ... Standard code modules
- ... Standard vs. class modules
- ... Naming conventions
- ... Quick reference

## VBA Subroutines

- ... Understanding modules in Access
- ... The anatomy of a module
- ... Creating a subroutine
- ... Creating a function
- ... Calling procedures
- ... Passing parameters
- ... Returning values
- ... Scoping procedures
- ... Quick reference

## Variable VBA

- ... Overview of variables
- ... Creating string variables
- ... Option explicit
- ... Working with numbers
- ... Dealing with overflows
- ... Working with decimals
- ... Working with dates
- ... Default values
- ... Scoping variables
- ... Local variables
- ... Module-wide variables
- ... Passing parameters
- ... Passing parameters by value
- ... Quick reference

## Interactive VBA

- ... The act of communicating
- ... Creating a simple input box
- ... Creating more elaborate input boxes
- ... Global positioning
- ... Simple message boxes
- ... Creating larger messages
- ... Breaking a message line
- ... Customising icons and buttons
- ... Message box functions
- ... Responding to different buttons
- ... Quick reference

## Decisive VBA

- ... Decisions overview
- ... Creating an in-line if
- ... Creating a block if
- ... Multiple if
- ... Multiple if using text
- ... Using case statements
- ... Value ranges in case statements
- ... Case statements with or
- ... Asking yes/no questions
- ... Quick reference

## Looping VBA

- ... Program loops
- ... Creating a while loop
- ... Taking care of counters
- ... Creating an until loop
- ... For each loops
- ... Exiting from loops
- ... For next loops
- ... Quick reference

## 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
- ... Closing a form
- ... Creating variable reports
- ... Quick reference

## **ActiveX Data Objects**

- ... Tables
- ... 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
- ... Quick reference

## **ADO Forms & Recordsets**

- ... Overview of ADO forms
- ... Navigating records in a form
- ... Finding a record
- ... Updating a record
- ... Deleting a record
- ... Adding a new record

## **Debugging VBA**

- ... Overview of debugging
- ... Setting a breakpoint
- ... Setting additional breakpoints
- ... Stepping through a procedure
- ... Viewing the call stack
- ... Using the locals and immediate windows
- ... Adding a watch
- ... Deleting a watch
- ... Quick reference

## **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
- ... Quick reference.