Introduction to Access VBA

Description

The *Introduction to VBA Programming in Microsoft Access* course is a hands-on two-day introduction to programming using VBA in Access. By the end of the course participants will have the essential skills required to write their own procedures and develop a simple Access application using VBA.

Course Objectives

The principal objectives of this <u>two-day</u> course are to:

- Familiarize the participants with the VBA environment in Access
- Show participants how to write their own procedures with VBA
- Demonstrate coding methods all beginning programmers should know

Who Should Attend

Any Access user who wants to learn to program with VBA.

Pre-requisites

Intermediate Access skills are recommended. No programming experience required.

Your Instructor

The instructor for this course is Steve Stricklen. He has over 20 years' experience programming and teaching Access VBA.

A lively and engaging trainer, Steve has developed a learning technique that is entertaining, multi-faceted, and highly motivating.

Course Content

Development Basics

- The Access Development Environment
- The Importance of Splitting Databases
- Maintaining Links
- Using The Database Splitter
- 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
- Standard Code Modules
- Standard Vs Class Modules
- Naming Conventions

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

Variables in 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 Arguments
- Passing Arguments by Value

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

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

Loops in VBA

- Program Loops
- Creating a While Loop
- Taking Care of Counters
- 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
- Closing a Form
- Creating Variable Reports

ActiveX Data Objects (ADO)

- 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

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

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