

## **MS Access 97 for Developers A Four Day Training Course**

### **Course Aims:**

This intensive course is designed to introduce new MS Access 97 developers to some of the more advanced features and facilities of this software. Designed to encourage confidence, control and creative use of MS Access by taking a structured look at some of the more advanced features, many using Visual Basic for Applications. New Access 97 features covered include writing Class Modules, programmatically changing menus and toolbars and linking into Outlook and other Office applications.

### **Course Outline:**

#### ***Database Definition & Integrity***

- What is a Database?
- Creating Microsoft Access 97 Databases
- Relational Database Terminology
- Defining Data Integrity; Field-Level Validation
- Enforcing Referential Integrity
- Microsoft Access Versus SQL Server

#### ***The VBA Programming Environment***

- Using Visual Basic for Applications instead of Macros
- Visual Basic for Applications' Development Environment
- Programming in the Visual Basic for Applications Language
- Code Compilation; Finding Bugs

#### ***Error Handling in Visual Basic For Applications***

- Using VB for Applications to Trap Errors
- Error Handlers & Other Error Routines

#### ***Manipulating Data Access Objects***

- Data Access Objects
- Opening D'bases & D'base Objects Programmatically
- Database and Recordset Objects
- Manipulating Data with VBA Methods
- Finding Records in Recordset; Editing Data in a Recordset
- Using Recordsets to Manipulate Imported Data
- Creating, Using and Deleting Queries from VBA
- Changing Database Definitions Through VBA
- Using SQL to Manipulate Database

#### ***Class Modules and Form Event Procedures***

- Class Modules; Using Form Events
- Code Behind Forms; Changing Form Properties
- Creating New Form Instances
- Solving Application Problems with Event Procedures

#### ***Optimising Access Databases***

- Optimising Memory; Performance Analyser
- Using Indexes & the Rushmoor™ Optimiser

- De-Normalising for Maximum Performance
  - Optimising Multi-User Systems
  - Optimising Storage & Other Enhancements
- #### ***Interacting with Other Applications Through OLE Automation***

- Using Automation
- Sending Database Data to MS Word
- Manipulating Excel Spreadsheet from Access 97
- Interacting with Outlook in Office 97
- Access 97 as an OLE Server;
- Running Other Applications

#### ***Microsoft Access 97 Security***

- Security System Overview
- Securing the Database; Key Objects to Secure
- Granting Permissions: Creation Strategies
- Manipulating Permissions Programmatically
- Encrypting the Database

#### ***Microsoft Access 97 Database Replication***

- What is Replication?; Access 97 Replication
- Replication Topologies

#### ***Using Microsoft Access in a Multi-User Environment***

- Multi-User Database Issues;
- Access Locking Options
- Transaction Processing Statements
- Handling Locking Errors in Access 97

#### ***Upsizing Access Databases to Microsoft SQL Server***

- When and Why to Upsize to SQL Server
- Preparing to Upsize; The Access Upsizing Tool
- Post-Upsizing Considerations

### **Target Audience:**

This course has been designed to help programmers and developers get "up and running" with Microsoft Access 97 as quickly as possible.

### **Assumed Knowledge:**

A good working knowledge of Windows, the MS Access interface, table creation, basic query and report writing functions, macro development and relational database concepts gained from practical experience in developing simple applications. Prior attendance on an "Access Advanced User" course plus programming experience is essential.