



## Course Outline

### Access 2007 Visual Basic for Applications (VBA) Programming

**Course Number:** ACC0704

**Course Length:** 3 Days

#### Introduction to Microsoft Access 2007

- A Brief History of Access
- Is Access the Only Database System?
- Developing Databases Without VBA Code

#### Access, VBA and Macros

- VBA in Access
- VBA versus Macros in Access

#### New Features in Access 2007

- Who Benefits
- New Look
- Development Environment
- Forms
- Reports
- Embedded Macros
- Access Data Engine
- Integration with SharePoint
- External Data Sources
- Security
- Convert with Confidence
- ADE and Creating Runtime Files
- What's Gone or Deprecated

#### Using the VBA Editor

- Anatomy of the VBA Editor
- Using the Object Browser
- Testing and Debugging VBA Code

#### VBA Basics

- VBA Objects
- Variables and VBA Syntax
- Other VBA Structures

#### Using the DAO to Access Data

- Data Access Objects
- Why Use DAO?
- New Features in DAO
- Referring to DAO Objects
- The DBEngine Object
- The Databases Collection
- DAO Object Properties
- Creating Schema Object with DAO
- Database Encryption with DAO
- Managing Access (JET) Security with DAO



## Course Outline

- Data Access with DAO
- Append Only Fields

### Using ADO to Access Data

- Ambiguous References
- Referring to ADO Objects
- Connecting to a Data Source
- Rolling Your Own Connection String
- Data Access with ADO
- Creating ADO Recordsets
- Creating Schema Recordsets
- Using ADO Events
- Testing the State Property
- Creating Schema Objects with ADOX
- Managing Security with ADO

### Executing VBA

- When events Fire
- VBA Procedures
- Evaluating Expressions in VBA
- Using Recordsets
- Using Multiple Recordsets
- Using VBA in Forms and Reports
- Debugging VBA
- Investigating Variables
- Common VBA Techniques
- String Concatenation Techniques

### VBA Error Handling

- Why Use Error Handling?
- Two Kinds of Errors: Unexpected and Expected
- Basic Error Handling
- Cleaning Up After an Error
- More on Absorbing Expected Errors
- Issues in Error Handling

### Using VBA to Enhance Forms

- VBA Basics
- Creating Forms the 2007 Way

### Enhancing Reports with VBA

- Introduction to Reports
- Creating a Report
- Working with VBA in Reports
- Important Report Events and Properties
- Report Properties
- Working with Charts
- Common Report Requests
- Layout View
- Report View



## Course Outline

### Customizing the Ribbon

- Ribbon Overview
- Custom Menu Bars and Toolbars
- Ribbon Customization
- Saving a Custom Ribbon
- Specifying the Custom Ribbon
- Creating an Integrated Ribbon
- Creating a Ribbon from Scratch
- Customizing the Office Menu
- Customizing the Quick Access Toolbar
- More Ribbon Tips

### Creating Classes in VBA

- A Touch of Class
- Why use Classes?
- Creating a Class Module
- Naming Objects
- Using Class Events
- Forms as Objects
- Variable Scope and Lifetime
- The Me Property
- Creating a Clone Method
- Creating and Using Collection Classes
- The Three Pillars

### Extending VBA with APIs

- Introducing the Win32 API
- Introducing Linking
- Linking Libraries in Access 2007
- Understanding C Parameters
- Err.LastDLLError
- Distributing Applications That Reference Type Libraries and Custom DLLs

### SQL and VBA

- Working with SQL Strings in VBA
- Using SQL When Opening Forms and Reports
- Using SQL to Enhance Forms
- The ReplaceOrderByClause and ReplaceWhereClause Functions

### Working with Office Applications

- Sharing Information is a Two-Way Street
- Working with Outlook
- Sending Information from Access to Excel
- Exchanging Data with Microsoft Word
- Sending Data to PowerPoint
- Pulling Data from Access

### Working with SharePoint

- Overview
- Access Features on SharePoint
- SharePoint Features in Access



## Course Outline

### Database Security

- Security for the ACCDB File Format
- Security for the MDB File Format

### Understanding Client-Server Development with VBA

- Client-Server Applications
- Choosing the Correct File Format
- Controlling the Logon Process
- Binding ADODB Recordsets
- Using Unbound Forms

### Working with the Win32 Registry

- About the Registry
- Using the Built-In VBA Registry Functions
- Using the Win32 Registry APIs

### Using the ADE Tools

- The Redistributable Access RunTime
- The Package Solution Wizard
- Save as Template
- Source Code Control Support

### Protecting Yourself with Access 2007 Security

- The Office Trust Center
- Disabled Mode
- Digital Signatures and Certificates
- Access Database Engine Service