

## **Access 2007 VBA**

<b>Days</b>	2
<b>Code</b>	DAC07VBA

### **Overview**

In “Access 2007 Programming Using VBA” you will learn how to extend the functionality of Access using a programming language called Visual Basic for Applications (VBA). With VBA you can create code which will allow you to automate the functionality of your database. You will learn how to use the individual elements of this powerful programming language in order to design, develop and run VBA code.

The target students for this course are those individuals who regularly use Access and wish to extend its capabilities through programming.

### **Prerequisites**

Before attending this course, students need to be able to: Understand database design and create tables, forms and reports. Have created queries and understand how to use query expressions.

### **Delegates will learn how to**

- Understand and use the VBA Development Environment
- Work with Procedures and Functions
- Understand and use Access Objects
- Work with Expressions, Variables, and Intrinsic Functions
- Control Program Execution with Decision statements and loops
- Work with the ADODB Recordset object
- Debug Code and create Error Handling statements

### **Course outline**

#### **Getting Started**

- Introduction to Programming in Access
- Why Program in Access?
- Understanding the Development Environment

- Using Visual Basic Help

## **Working with Procedures and Functions**

- Understanding Modules
- Creating a Standard Module
- Understanding Procedures
- Creating a Sub Procedure
- Calling Procedures
- Using the Immediate Window to Call Procedures
- Creating a Function Procedure
- Naming Procedures
- Organizing Code and Procedures
- Working with the Code Editor

## **Understanding Objects**

- Understanding Classes and Objects
- Navigating the Access Object Hierarchy
- Understanding Collections
- Using the Object Browser
- Working with the Application Object
- Understanding the Form Object
- Working with Properties
- Using the With Statement
- Working with Methods
- Understanding the DoCmd Object
- Working with Events
- Understanding the Order of Events

## **Using Expressions, Variables, and Intrinsic Functions**

- Understanding Expressions and Statements
- Declaring Variables
- Understanding Data Types
- Working with Variable Scope
- Working with Variable Lifetime
- Considering Variable Scope and Lifetime Together
- Using Intrinsic Functions
- Understanding Constants

- Using Intrinsic Constants
- Using Message Boxes
- Using Input Boxes

## **Controlling Program Execution**

- Understanding Control-of-Flow Structures
- Working with Boolean Expressions
- Using the If...End If Decision Structures
- Using the Select Case...End Select Structure
- Using the For...To...Next Structure
- Using the For Each...Next Structure
- Using the Do...Loop Structure
- Guidelines for use of Branching Structures

## **Working with Recordsets**

- Declaring and Creating Object Variables
- Working with the DAO Recordset Object

## **Debugging Code**

- Understanding Errors
- Using Debugging Tools
- Setting Breakpoints
- Setting Break Expressions
- Using Break Mode during Run Mode
- Stepping through Code
- Determining the Value of Expressions

## **Handling Errors**

- Understanding Error Handling
- Understanding VBA's Error Trapping Options
- Trapping Errors with the On Error Statement
- Understanding the Err Object
- Writing an Error-Handling Routine
- Working with Inline Error Handling

## **Appendix: Working with ADODB Recordsets**