

VBA Programming with Access 2003

Duration: 3 Days

Course Overview:

In this three-day course, students will learn how to create applications using Microsoft Access 2002-2003 coupled with the Visual Basic Application programming language. Understanding procedures, controlling programs, error handling, Data Access objects and working with Access Basic Objects highlights this informative course.

Students Learn To:

- Understand and Create Macros, Modules and Procedures
- Understand and Utilize Classes, Objects, Properties, Methods and Events
- Use Expressions, Statements, Variables, Functions, and Constants
- Use Message and Input Boxes
- Control Program Execution
- Understand Error Handling and Debugging Code

Who Should Attend: Power users of Microsoft Access or managers who must support PCs with Access installed.

Prerequisites: Microsoft Access Advanced or equivalent knowledge. No programming experience needed.

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 Expressions, Variables, and Intrinsic Functions (cont.)

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 ADODB Recordset Object
Specifying a Recordset Cursor Type
Locking Records for Updating
Specifying a Recordset Cursor Location - Optional
Using the CacheSize Property - Optional
Understanding Recordset Cursor Properties - Optional

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