

## Course Overview

In this 2-day course, you will learn how to use the Visual Basic programming (module) aspect of Microsoft Access. Through a series of exercises and examples you will write Visual Basic code to automate forms, queries, and reports, making it easier for non-Access users to use your database. You will also create custom functions that can be used throughout your database. You will learn how to create If statements and Select Case statements which enable your code to make decisions. You will create For loops and Do loops to execute a block of code multiple times. You will also learn how to declare and use variables to store information that changes every time your code is executed.

## Courses in the Microsoft Access Series

Access Level 1 & 2  
- 2 days -

Access Level 3  
- 2 days -

Access Level 4  
- 2 days -

Access Level 5  
- 2 days -

## Course Preparation

Prerequisite: *Access Level 4 or equivalent experience.* You should come to this class with a working knowledge of designing tables; setting table relationships; defining primary keys; understanding the concepts and design of queries, forms, and reports. This is a programming class targeted for the experienced Access user who is a beginning programmer.

## Course Topics

### Creating and Using Sub Procedures

- What is a Sub Procedure?
- Creating a Sub Procedure Linked to an Event
- Creating an Independent Sub Procedure
- Passing Arguments to Independent Procedures
- Defining Sub Procedure Scope
- Calling (Using) Sub Procedures

### Creating and Using Functions

- What is a Function?
- Using Built-In Access Functions
- Creating User-Defined (Custom) Functions
- Passing Arguments to User-Defined Functions
- Defining Function Scope
- Calling (Using) User-Defined Functions

### Responding to User Actions (Events)

- What are Events?
- What are Objects, Properties, and Methods?
- Writing Code to Respond to User Events
- Writing Code to Modify Properties

### Using Variables

- What are Variables?
- Declaring Variables
- Variable Naming Conventions
- Declaring Variable Datatypes
- Understanding Variable Scope and Lifetime

### Handling Run Time Errors

- Trapping Run-Time Errors
- Understanding Error Handling Code
- Creating Custom Error Messages

### Using Debugging Tools And Help

- Setting Breakpoints to Help Find Errors
- Stepping Through Code One Line at a Time
- Looking up Items in Help

### Branching/Conditional Structures

- What are Branching/Conditional Structures?
- Using the IF Statement
- Using the SELECT CASE Statement

### Looping Structures

- What are Loops?
- Using the DO Loop
- Using the FOR Loop