

## Course Overview

In this 2-day course, you will learn how to use the Visual Basic for Applications (VBA) programming language to customize an Access database. Through a series of exercises and examples, you will write VBA code to enhance 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 write IF statements and Select Case statements which enable your code to make decisions. You will learn about For Each, For Next, and Do loops to perform a process multiple times. You will also learn how to declare and use variables to store information that changes every time your code runs. Additionally, you will learn how to write error trapping code so your processes end gracefully if there is a problem. This is a programming class for the experienced user who is not a programmer.

## Course Preparation

Prerequisite Course: Access Advanced or equivalent experience.

## Course Topics

### About Objects, Events, Properties, and Methods

- Introducing Visual Basic for Applications
- Object Naming Conventions
- Referencing Objects
- About Events
- Accessing and Changing Properties
- Using Methods

### Writing Sub Procedures

- Writing a Sub Procedure for an Event
- Calling Other Sub Procedures
- Passing Arguments to Sub Procedures

### Various Short Topics

- Increasing the Code's Font Size
- Commenting Your Code
- Compiling Your Code
- Using the Help System
- Displaying a Message Box
- Breaking a Line of Code on Multiple Lines
- Getting Data from an Input Box

### Using Branching Statements

- About Branching Statements
- Using a Basic IF Statement
- Adding ELSEIF and ELSE to an IF Statement
- Writing a One-Line IF Statement
- IF Statements vs. SELECT CASE Statements
- Using a SELECT CASE Statement

### Writing Custom Functions

- Functions vs. Sub Procedures
- Creating a Standalone Module
- Passing Arguments to Functions
- Writing a Function
- Using Built-In Functions
- Common Built-In Functions
- Finding Help on Functions

### Using Constants and Variables

- About Constants
- About Variables
- Restricting the Data Type of Variables
- Declaring Variables
- Correcting Names using a Query
- Using Explicitly Declared Variables

### Debugging Code and Handling Errors

- Adding a Breakpoint
- Slowly Stepping through Code
- Removing a Breakpoint
- Adding Error-Handling Code

### Using Loops

- About the FOR EACH Loop
- Selecting Multiple Items from a List Box
- About the FOR NEXT Loop
- Prompting Three Times for a Password
- Extracting Only Numbers from Text
- About DO Loops