

# Course overview:

## Access VBA



### Overview and objectives

This content has been designed for a two day classroom course. On course completion, students will be able to:

- Identify components of and plan an application.
- Automate the application interface, automate dialog boxes, use Visual Basic for Applications (VBA) code elements, and automate navigation across forms.
- Create Switchboard forms and create and automate Splash Screen forms.
- Create macro groups, custom toolbars, menu bars, shortcut menus, and set the startup properties for toolbars and menus.
- Use different VBA programming elements, work with modules, and create procedures in modules.
- Use control and loop structures in VBA code, handle events by automating controls on forms, trap and resolve errors in code, add Web browser controls to forms, and work with MDE files

This course will help students to become proficient database application developers by using the features of Microsoft Access and Visual Basic for Applications

### Target audience

Students should have familiarity with personal computers and the use of the keyboard and mouse. They should have completed introduction, intermediate and advanced courses in Access or have equivalent practical experience. Specifically, students should be familiar with creating complex queries, creating advanced forms and reports, creating and using macros and creating and using data access pages.

### Course content

#### The VBA Programming

##### Environment

When to use VBA instead of macros  
VBA's development environment  
The programming environment  
The object browser  
Creating procedures

##### Programming in the VBA Language

Coding  
Using variables and expressions  
Branching and looping commands  
Indenting code  
Branching commands  
Using arrays and collections  
Typing in code  
Optional and named arguments  
Code compilation  
Finding bugs  
Types of error  
Debugging code

#### Error Handling in VBA

Ignoring errors  
Trapping errors  
Writing useful error handlers  
Logging errors

#### Manipulating Data with DAO and SQL

Data Access Objects  
Opening databases programmatically  
Database and recordset objects  
Manipulating data with VBA methods  
Finding records in a recordset  
Using recordsets to manipulate imported data  
Create, use, delete queries  
Changing to database definitions through VBA  
Using SQL to manipulate databases

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### **Manipulating Data with DAO and SQL (cont)**

SQL data modification statements  
Methods of running SQL from VBA code  
Accessing data from the Internet  
Web Forms

### **Class Modules and Form – Event Procedures**

Class modules  
Using class properties and methods  
Using form events  
Events and properties  
Code behind forms  
Soft validation  
Value derivation  
Tying forms/reports together  
Using form class modules