VBA Programming with Excel 2003

Duration: 2 Days

Course Overview:

In this hands-on intensive two-day course, students learn how to create advanced macros using the function power of the VBA programming tool. In addition, students will be instructed on advanced Pivot Table topics and learn how to debug common errors. This is a great course for the advanced user of Excel and for helpdesk or support staff working in an intensive Excel environment.

Students Learn: See the detailed outline below.

Who Should Attend: Anyone interested in learning higher-level techniques to optimize productivity using Excel 2003.

Prerequisites: Proficient knowledge of Excel 2003. Advanced knowledge of PivotTables helpful but not required.

Course Outline:

Getting Started
Introducing Visual Basic for Applications
Recording a Macro
Running a Macro

Editing a Macro in the Visual Basic Editor
Understanding the Development Environment
Using Visual Basic Help
Closing the Visual Basic Editor

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
Working with the Code Editor

Understanding Objects
Navigating the Excel Object Hierarchy
Understanding Collections
Using the Object Browser
Working with Properties
Using the With Statement
Working with Methods
Creating an Event Procedure

Using Expressions, Variables, and Intrinsic Functions
Understanding Expressions and Statements
Declaring Variables
Understanding Data Types
Working with Variable Scope
Using Intrinsic Functions
Understanding Constants
Using Intrinsic Constants
Using Message Boxes and Input Boxes
Declaring and Using Object Variables

Controlling Program Execution
Understanding Control-of-Flow Structures
Working with Boolean Expressions
Using the If...End If Decision Structures

Controlling Program Execution (cont.)
Using the Select Case...End Select Structure
Using the Do...Loop Structure
Using the For...To...Next Structure
Using the For Each...Next Structure
Guidelines for use of Control-of-Flow Structures

Working with Forms and Controls
Understanding UserForms
Using the Toolbox
Working with UserForm Properties, Events, and Methods
Understanding Controls
Setting Control Properties in the Properties Window
Working with the Label Control
Working with the Text Box Control
Working with the Command Button Control
Working with the Combo Box Control
Working with the Frame Control
Working with Option Button Controls
Working with Control Appearance
Setting the Tab Order
Populating a Control
Adding Code to Controls
Launching a Form in Code

Working with the PivotTable Object
Understanding PivotTables
Creating a PivotTable
Working with the PivotTableWizard Method
Working with PivotFields
Assigning a Procedure to a Custom Toolbar

Debugging Code
Understanding Errors
Using Debugging Tools
Setting Breakpoints and Stepping through Code
Using Break Mode during Run mode
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