

**Excel 2019 VBA**

**Course Number:** VBA-134
**Duration:** 3 days

**Overview**

Accelebrate's Excel 2019 VBA training teaches attendees how to automate Excel 2019 using Visual Basic for Applications.

**Important Note:** We also offer a [4-day](file:////training/vba-excel-2019-extended) course that course includes a day of time spent working on your actual VBA projects, existing and under development.

**Prerequisites**

All attendees must have prior knowledge of Excel 2019. Prior scripting or programming knowledge is very helpful but not required.

**Materials**

All Excel VBA training attendees receive comprehensive courseware.

**Software Needed on Each Student PC**

* A full installation of Microsoft Office 2019 (or at least Excel and Access), including Visual Basic support and Visual Basic Help.
* If you have purchased this course, please contact us for detailed setup instructions.

**Objectives**

All attendees will:

* Use the main features of the VBA Editor window and learn core VBA concepts.
* Build sub procedures and user-defined functions.
* Learn the Excel object model and write code to control Excel objects.
* Create and use variables.
* Use a wide array of standard programming techniques.
* Create a user interface (a custom form complete with a variety of controls and code to drive the user form).
* Create PivotTables programmatically.
* Learn and use multiple troubleshooting and debugging features.
* Incorporate error handlers to deal with unforeseen issues.

**Outline**

* Getting Started
	+ Introducing Visual Basic for Applications
	+ Displaying the Developer Tab in the Ribbon
	+ Recording a Macro
	+ Saving a Macro-Enabled Workbook
	+ Running a Macro
	+ Editing a Macro in the Visual Basic Editor
	+ Understanding the Development Environment
	+ Using Visual Basic Help
	+ Closing the Visual Basic Editor
	+ Understanding Macro Security
* 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
	+ 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
	+ Using 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
	+ 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 Using Worksheet Data
	+ Working with the PivotTable Objects
	+ Working with the PivotFields Collection
	+ Assigning a Macro to the Quick Access Toolbar
* Debugging Code
	+ Understanding Errors
	+ Using Debugging Tools
	+ Setting Breakpoints
	+ 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
* Conclusion