

## VBA with Microsoft® Excel®

**Duration: 1 Day** 

Method: Instructor-Led Training (ILT) | Live Online Training

#### **Course Description**

VBA (Visual Basic for Applications) enables you to enhance and extend the capabilities of Microsoft Excel and other applications in the Microsoft Office application suite. You can use VBA to perform tasks that would be difficult or impossible to do using only worksheet functions, and you can automate a wide range of tasks so they can be performed faster, more consistently, and with less effort than performing them manually. This course will give participants a good foundation for understanding, creating, and using VBA in their own Excel workbooks. Participants will learn how to use the macro recorder effectively, as well as how to write their own VBA code from scratch. They will use the tools built into Excel to explore and learn VBA's capabilities and to optimize and debug their code.

### Target Audience

This course is intended for:

- Want to gain the skills necessary to use VBA to automate tasks in Excel such as collecting data from external sources, cleaning, and manipulating data.
- May (also) want to learn how to create custom worksheet functions to streamline worksheet formulas and make complex worksheets easier to support, maintain, and understand.

### **Prerequisites**

To attend this course, candidates must have:

 Comfortable creating and working with Excel workbooks, including tasks such as entering worksheet formulas, using absolute and relative addressing, formatting cells, and creating pivot tables and charts.

**NOTE**: This level of skill could be acquired by taking the *Microsoft Excel for Office*  $365^{TM}$  (*Desktop or Online*) courses, Parts 1, 2, and 3.







### Course Objectives

Upon successful completion of this course, attendees will be able to:

- Identify general components of VBA and their appropriate use in solving business solutions.
- Record VBA macros to automate repetitive tasks.
- Write VBA code to create VBA subroutines and functions.
- Use various programming elements to solve problems through code, including variables, objects, conditional statements, and loops.
- Eliminate, avoid, or handle errors in VBA code, and optimize its performance.

### **Course Topics**

# Module 1: Using VBA to Solve Business Problems

- Use Macros to Automate Tasks in Excel
- Identify Components of Macro-Enabled Workbooks
- Configure the Excel VBA Environment

### Module 2: Recording a Macro

- Use the Macro Recorder to Create a VBA Macro
- Record a Macro with Relative Addressing
- Delete Macros and Modules
- Identify Strategies for Using the Macro Recorder

### Module 3: Writing VBA Code Directly

- Write VBA Code
- Discover Objects You Can Use
- Create a Custom Function

# Module 4: Solving Problems through Code

- Make Decisions in Code
- Work with Variables
- Perform Repetitive Tasks

#### Module 5: Improving Your VBA Code

- Debug VBA Errors
- Deal with Errors
- Improve Macro Performance

Appendix A: Controlling How and When Macros Run

**ACTIVITIES INCLUDED** 



