

# Microsoft Excel 2010 – Level 3 – VBA Macros

Length: 2 day

## Who should attend?

This course is intended for participants who are familiar with Microsoft Office Excel 2010.

## Prerequisites

Microsoft Office Excel 2010 - Level 2

## Course Objectives

Upon completion of the course, participants will be able to accomplish the following:

- Understand key concepts that will be used to build custom solutions using Microsoft Excel VBA Macros
- Become familiar with basic macro techniques for recording, writing, running, and maintaining macros
- Understand how Visual Basic for Applications is incorporated, used, and modified in Microsoft Excel
- Learn how to design and lay out a user form and controls to create a customized dialog box to simplify data entry
- Understand how to prepare an Excel Workbook containing macros and toolbars for deployment to other users and machines
- Learn to customize macros with VBA source code to automate data entry tasks and enable source code protection
- Learn to enhance source code with variables, constants, and logical operators
- Learn to handle the three types of errors that can be generated when working with source code
- Learn to access external data by using ActiveX Data Objects
- Learn how to use Excel as an automation server to control Excel objects externally outside of the application

## Course Content

### Building Solutions

Course Overview ; Solution Concepts ; Data Entry Concepts ; Macro Concepts ; Programming Concepts ;

### Macro Basics

Planning Macros ; Recording Macros ; Executing Macros ; Maintaining Macros ;

### VBA Programming Basics

Understanding Objects ; Using the Visual Basic Editor ; Understanding VBA Code ; Executing VBA Code ; VBA Help Reference ;

### VBA User Form Basics

Planning User Forms ; Designing User Forms ;

### Deployment Basics

Preparing for Deployment ; Code Security ; Creating Custom Toolbars ; Creating Custom Macro Buttons ;

### Customizing Macros

Prompting for User Input ; Automating Data Entry ; Recording Absolute vs. Relative References ; Protecting VBA Source Code ;

### Enhancing VBA Code

Writing Source Code ; Variables and Constants ; Writing Tips ; Logical Operators ; Flow Control ;



### **Handling Errors**

Handling Errors ; Syntax Errors ; Logical Errors ; Run-Time Errors ;

### **Accessing External Data**

External References ; ActiveX Data Objects Concepts ; Connecting to a Database ; Retrieving Records from a Database ;

### **Excel Automation**

Automation Concepts ; Working with Object Models ; Excel 's Object Model ; Automating Excel with VBScript ;

