

# Excel 2003 Level 3 VBA Macros

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2-day course

Course Code: S133V

Who should attend?

This course is intended for participants who are familiar with Excel 2003.

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Prerequisites

Excel 2003 Level 2

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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 a macro
- Understand how Visual Basic for Applications is incorporated, used, and modified in Microsoft Excel
- Learn how to design and layout 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 to use Excel as an automation server to control Excel objects externally outside of the application.

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Course Content

Building Solutions

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

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Macro Basics

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

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VBA Programming Basics

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

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VBA User Form Basics

Planning User Forms; Designing User Forms;

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Deployment Basics

Preparing for Deployment; Code Security; Creating Custom Toolbars; Creating Custom Macro Buttons; Attaching Toolbars; Customizing Macros

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# Excel 2003 Level 3 VBA Macros

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

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## Enhancing VBA Code

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

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## Handling Errors

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

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## Accessing External Data

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

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## Excel Automation

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

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