

# Microsoft Excel VBA Programming

**Audience** This course is intended for the person who has a strong familiarity with Microsoft Office Excel and who would like to begin learning how to automate this program. Students should know the basics of Excel and be able to create absolute and mixed cell references; use functions; work with multiple sheets in a workbook; freeze titles; set print titles and page breaks; create names; and link information in worksheets and workbooks. This course introduces the audience to the programming concepts involved in the Visual Basic language while applying those concepts to Excel.

**Description** The course uses a combination of lecture, hands-on practice, and independent exercises to introduce Visual Basic for Applications, a subset of the Visual Basic programming language. This course is designed to give experienced Excel users proficiency in creating procedures that run in response to specific events, working with control structures, developing user forms to accept or display data, validating the data entry in user forms, and debugging and handling errors in code.

**Objectives** Upon successful completion of the class, students should be able to:

- Understand what Visual Basic for Applications is and its uses
- Use the Object Browser
- Apply programming basics
- Work with decision and loop structures
- Develop user forms to accept or display data
- Set up validation for user form data entry
- Debug code errors

**Length** 1 day

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## I. Visual Basic Editor

- A. Visual Basic for Applications
- B. Object programming
- C. The Object Browser

## II. Programming Basics

- A. Data basics
- B. Scope of variables
- C. Scope of procedures

## III. Control Structures

- A. Decision structures
- B. Loop structures

## IV. Custom Dialog Boxes

- A. User forms
- B. Events

## V. Debugging and Error Handling

- A. Errors
- B. Debugging
- C. Error handling



