ON-LINE VBA CLASSES

Each class is a 90-minute live on-line session. Our instructor is live and can respond to your questions and comments during the class. Each class has a series of exercises that you can complete during the class or after it as optional homework assignments.

In addition to our classes, we provide Office Hours, an additional hour session where students can communicate with the instructor about specific questions and see the instructor's responses to other students' questions. The cost of Office Hours sessions are included in the cost of the classes.

VBA1: Introduction to Macros

Designed for those who are new to macro programming, this session covers recording macros, using the Relative References option and storing macros in the Personal Macro Workbook. The session introduces the VBA Editor and the VBA programming language so you can begin to modify your recorded macros.

Developer Tab

Personal Macro Workbook

Recording a Macro

Using Relative References

Adding a Macro to the Toolbar

VBA Editor

Introduction to VBA

VBA2: Cleaning Up a File with VBA

Reformatting, changing text to numbers, and adding formulas to worksheets are common Excel procedures, especially when you have to import data from another source. This session shows efficient ways to automate this problem. Using the SELECT, RANGE, and OFFSET statements, you'll learn the difference between selecting a cell and referencing it. The session also covers converting dates, numbers, and text and then reformatting them as needed.

Selecting a cell with Range.Select

Referencing a cell using Range

Reading a value from a cell using Range.Value

Writing a value into a cell using Range.Value

Referencing cells using Range.Offset

Introduction to Variables

Converting Data Types

Changing Formatting of a Cell

VBA3: Creating User-Defined Functions

Excel has over 150 built-in functions that you can use to create quite complex formulas. If you need to reuse a formula, you can create your own user-defined function and use it like any of the built-in functions. You'll learn the ins and outs of creating a user function: what you can and cannot do in a function, how to use variable types to control the output of a function, how to use IF-THEN-ELSE and SELECT CASE statements to control processing in your function and how to distribute a user function to others in your organization.

Function Rules

IF-THEN-ELSE

CASE Statement

Calling Functions in Excel and VBA

Distributing a User Function

VBA4-Using Cell Formulas in VBA

As your formulas grow more complex, it is easier to reuse a formula than to retype it again and again. First, the session will cover Loops—statements that let you repeat your code. The session covers the two most common loops: For…Next and While..Wend. The session will then show you how to create a relative and absolute formula and add it to your spreadsheet. You'll learn the R1C1 style of addressing to precisely control which cells your formula references. You'll also learn how to use the CELLS statement to add formulas with calculated cell references to make your code more multi-purpose.

Looping through a range of cells

Adding a formula to a cell using Range.Formula

Using the R1C1 style of addressing

Adding a formula to a cell using Range.FormulaR1C1

Referencing a cell using Cells

Creating an R1C1 formula

VBA5-Introduction to User Forms

You can communicate with a user with the built-in MsgBox statement and use the Input statement to request a value. If you want to get several values or display several values at a time, you'll want to create a User-Defined Form. This session will introduce forms: how to create a form, accept and store data, and display and hide forms. You'll get an introduction to the various controls you can put on a form, such as command buttons and lists.

Using the MsgBox and InputBox functions

Creating a Form

Displaying and Hiding a Form

Command Buttons

Text boxes

Public Variables

Lists and Combo Boxes

VBA6 – Excel VBA Tips and Tricks

The last session covers various techniques you can use in Excel VBA to make your code more efficient. First, you'll learn how to add Excel's built in functions to a VBA calculation using the WorksheetFunction statement. Then you'll create a function to find the last row of a list and use this value in loops. You'll learn how to use Constants, variables with fixed values, to make processing a list more efficient. You'll use Public Variables to load and store data for a User Form and make it easy to display a form until the user enters good data or cancels. And finally, you'll use Excel's R1C1 Reference style to easily create R1C1-based formulas.

Using WorksheetFunction to add Excel functions to your VBA code

Finding the Last Row of a List

Using Constants

Using Public Variables

Looping until Good Data

Copying and Pasting an R1C1 style formula