

VISUAL BASIC FOR APPLICATIONS

Developing Applications with MS Excel

This class is a follow-up to **Introduction to Visual Basic for Applications Using MS Excel**. Since this class covers the more advanced topics you'll need to start developing applications in Excel with VBA, students should have a familiarity with the Visual Basic Editor and a familiarity with basic programming concepts.

The class will begin with a review of programming concepts and then move on to common programming tasks with Excel, such as inserting user input in a cell, changing the location of the active cell, and changing cell and range properties programmatically. You'll learn to create forms and user-defined form controls, as well as how to initialize a form and pass values from a form to a module. The class will also cover user-defined types and file management tasks, such as opening, closing and saving files programmatically. You'll also learn useful application techniques, such as using constants for column names, cleaning up data files, virtualizing references, using calculated ranges in worksheet formulas, and how to use subroutines and functions to simplify your code and make it easier to maintain common tasks.

Online class: four three-hour sessions.

Prerequisites:

Experience using Microsoft Excel.

Experience equivalent to Introduction to Visual Basic for Applications Using MS Excel

Course Outline

Review of the Visual Basic Editor

- Accessing the Visual Basic Editor
- Examining Module Design
- Accessing VBA Help

Review of Programming Concepts

- Constants
- Variables
- Control Structures
- Subroutines
- Functions

Common Excel Tasks

- Putting User Input into a Cell
- Moving the Active Cell
- Changing Properties of a Cell, Range, Selection
- Custom Functions
- Cleaning up imported data

Types

User Forms

- Creating a Form
- Adding Controls to a Form
- Initializing a Form
- Passing values back to a module
- Using a Form to Get Input and Insert it into a Spreadsheet

File Management

- Open
- Close
- Save As
- Select Folder

Application Techniques

- Constants for Column Names
- Virtualizing References
- Entering Formulas with Calculated Ranges
- The WorksheetFunction Statement

Program Structure

- Using Subroutines and Functions to Create Easily Maintained Code