

# VBA

For Finance Professionals

## Summary

This hands-on course focuses on the skills needed to harness the power of macros to help automate worksheet processes. Participants will learn to design, build and error check macros that are robust and easy to use.

Participants will be introduced to best practices using VBA (Visual Basic – the programming language for macros) and the construction of powerful, error-free macros.



### Prerequisites

Participants should have some computer programming experience and a strong working knowledge of Excel.



### Timing

This course requires 8 – 16 hours, depending on the amount of material to be covered.

## Learning Topics

### 1. Use Macros in a Model

- ✓ Explore macros and Excel's development tools
- ✓ Identify activities and processes that are suitable for macros
- ✓ Learn to use the VBA Editor (i.e. the Code, Project, Properties and Immediate Windows)
- ✓ Develop subroutines and the ability to organize and execute actions within Excel with well-designed VBA code
- ✓ Learn best practices for recording macros and critical edits to ensure that macros operate for subsequent users
- ✓ Build an understanding of the key elements of Excel worksheet objects used in macros such as workbooks, worksheets and ranges

### 2. Write Code for Macros

- ✓ Design sample macros and reinforce best practices for programming robust and error-free VBA code
- ✓ Build and audit looping techniques to perform repetitive actions and automated decision choices
- ✓ Customize Excel using VBA in order to create highly tailored solutions such as custom functions and to control the user experience with features such as user input forms, special controls and macro buttons
- ✓ Test, audit and correct macros using the debugging and error detection tools within the VBA editor

### 3. Macro Creation

- ✓ Build and test sample macros that automate common capital markets activities and give the user a chance to explore various capabilities
- ✓ Create functional macros including a data scrubber, dynamic range creator, table formatting, graphing macros and automated data updates