# VBA FOR MICROSOFT EXCEL

Use Visual Basic for Applications (VBA) to increase productivity by automation in Excel.



An SGS Company







## **Prerequisites**

Participants will need to have attended the Microsoft Excel Advanced course or a working knowledge of the topics covered including recording Macros in Excel.

#### **Expected outcomes**

- Record macros using the recorder and create an application using the recorder.
- Create user-defined functions and work with the VBA editor.
- Understand VBA concepts and features, create procedures and sub routines.
- · Work with variables and objects.
- Use standard programming techniques and concepts.
- Create and program custom forms.

# Who should attend

This course is for people who wish to improve their skills by using Visual Basic for Applications (VBA) to increase productivity using automation in Excel.

# **Recorded Macros**

- · macro security
- macro Recorder overview
- · record a macro
- run a recorded macro
- relative recording
- · run a relative recording
- view the module
- · modify a recorded macro
- assign macros to the toolbar, buttons and ribbon

#### **Understand Excel VBA**

- · benefits of VBA
- VBA terminology
- Excel object model
- test in the immediate window

#### Using the VBA editor

- parts of the visual basic editor screen
- create a module page
- write and run a procedure

#### Working with objects

- the Application and Workbooks object
- Worksheets collection
- Range object
- write a procedure
- · compile code

# Working with code

- step through code
- breakpoints
- add comments
- indent code
- bookmarks
- import, export and copy code
- With structure
- print code

# User input and variables

- MsgBox statement
- understand variables
- variable data types
- create and use variables
- explicit variable declaration
- InputBox function
- · variable scope
- constants
- · passing variables

# Programming techniques

- IF statement
- · error handling
- escape an endless loop
- Select Case
- looping Do loops and For

# **User-defined functions**

- create a user-defined function
- create an add-in to share code

## **Creating user forms**

- create a custom form
- add controls to a form
- name form controls
- add combo boxes
- add option and command buttons
- run a form
- · setting tab order

## Coding a user form

- where does form code live?
- initialise a form
- open and close the form
- process data entered in the form
- R1C1 notation
- validate form controls

# **Event procedures**

- what is an event procedure?
- write an event procedure
- · worksheet events

#### **Appendix**

work with arrays

Please note that content and terminology may vary slightly between different software versions. We offer training in all of the latest software versions