## **VBA015 - Beyond Macros**

**DURATION:** 2 Days; Instructor-led

#### WHAT YOU WILL LEARN

After using Microsoft Excel for years, many users eventually will reach to a state to seek for automation in hoping can reduce their workload. They start learning how to record and play back macros. However, many will quickly realize that this is not enough to fulfill what they need, or sometime the recorded macros behave strange when the data set changed.

In fact, many Excel users are not aware that macro is actually just a small part of something more excited in Excel. This course is aim to overcome those short comings of recorded macros, and bring the Excel users to other level of automation where beyond what macros can do.

#### **AUDIENCE**

Any Microsoft Excel power users who want to learn how to go beyond what conventional macros can do.

#### **PREREQUISITES**

Before attending this course, students must be able to demonstrate the following skills:

- Familiar with Microsoft-Excel (Any version)
- Preferably tried use macros before

The course materials, lectures, and lab exercises are in English. To benefit fully from the instruction, students need an understanding of the English language and completion of the prerequisites.

### **METHODOLOGY**

This program will be conducted with interactive lectures, PowerPoint presentation, discussions and practical exercise

## **COURSE OUTLINES**

# Module 1 - Macros from power user perspectives

- Why use macros?
- Record Macros
- Playback Macros
- Delete Macros
- What actually the macro is?

### Module 2 - Short comings of recorded macros

- Error in recording
- Inefficient
- Extra code generated
- Not dynamic enough

#### Module 3 - Hand-coded macros

- Straight to the point
- Better readability
- Less Error prone
- Faster execution
- Handle dynamic contents
- Using more advanced features

## Module 4 – Bringing the automation to another level

- Track user interaction with individual worksheet
- Handle Selection Changed
- Handle Worksheet content changed
- Handle user right click
- Handle user double click
- When worksheet become active or inactive

#### Module 5 - Handle workbook level events

- When user attempt to close the work book
- Initial your work when the workbook is opened
- Declare similar behavior for every worksheet in the workbook

## Module 6 - Using Form Controls

- The purpose of form controls
- Advanced UI with form controls
- Linking form controls with macros

# Module 7 – Gaining more control with ActiveX controls

- The different between Form Controls and ActiveX Controls
- Activate macros using ActiveX controls
- Extending the worksheet model using ActiveX controls
- Using ActiveX button
- Using ActiveX Combo box

# Module 8 - Using User Form to interact with users

- The limitations of worksheet as user interface
- · Alternative interface using User Form
- Showing, Hiding and closing User Forms
- Linking user forms with worksheets