VBA003: *VBA for Programmer*

DURATION: 3 Days; Instructor-led

WHAT YOU WILL LEARN
This course provides more in depth understanding the VBA language. Through this course, new VBA programmers can learn how to leverage more advanced features of VBA.

The VBA skill learnt is general and applicable to many Microsoft office applications such as Excel, Access, Word, etc

The knowledge and skill gained from this course can be applied to MS-Office 2003, MS-Office 2007 and newer version of MS-Office.

This course is aim to introduce some of the challenging aspects of VBA programming which is not normally known by new VBA programmer

At the end of the course, participant will be able to write more advance VBA code.

AUDIENCE
Any of the Microsoft office users that already knows fundamentals VBA programming. This is not the first VBA course for non-programmer

PREREQUISITES
Before attending this course, students must be able to demonstrate the following skills:
- Familiarity with the general operations of Microsoft Windows operating system.
- Basic knowledge and skill in using Microsoft office application, such as MS-Word, MS-Excel, etc.
- Basic VBA programming

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 – Building Blocks in VBA
- Modular and Event Driven Concepts
- Modules
- Class Model
- User Form
- Document Model

Module 2 – Subroutines, Functions, Event Handlers and Macro
- When to use which?
- Return value from function
- Termination
- Macro: A special form of Sub
- Event handler: A special form of Sub

Module 3 – Advanced Array Handling
- Multi-Dimensional Array
- LBound and UBound functions
- Redim
- Redim Preserve

Module 4 – Advanced Types
- Variant
- Using Type
- Object
- Predefined Constants

Module 5 – Error Handling
- On Error
- On Error Goto
- On Error Resume Next

Module 6 – Document Model
- Dealing with events
- Event Parameters
- Event Handlers
- Worksheet Events
- Workbook Events
- Re-Entrant Issue

Module 7 – ActiveX Controls
- Button
- CheckBox
- Radio Button
- ComboBox and ListBox
- ScrollBar

Module 8 – User Form
- The purpose
- How to Declare?
- How to call it?

Module 9 – Class Module
- The Purpose
- Properties Declaration
- How to use it?

Module 10 – Advanced Topics
- Using Declare keyword to extend VBA ability using external DLL
- Advanced Techniques
- Security Concerns
- Common Pitfalls
- Good Practices