

Course Title: Microsoft Excel VBA 2016 **Duration: 2 days**

This course introduces the participants to advance topics of MS Excel and the basics of programming using Visual Basic for Applications (VBA). The course starts with refresher on Advance Excel topics and introduce recording of keystrokes as macros, and gradually builds up to cover the basic language constructs of VBA, writing functions and procedures, designing forms, and working with add-ins.

Program Objectives

Upon completion of the program, the participants would be able to do the following:

- Automate processes to speed up routine work
- Create functions and procedures
- Design and use forms for data entry
- Create add-ins to deploy at client machines
- Create simple reports

Audience

This course is meant for power-users of Microsoft Excel, who want to further automate their tasks in Excel. Since this course covers VBA, which is a programming language, the participants should have an aptitude for programming.

Prerequisites

The participants should be well-versed with basics of Microsoft Excel and have an aptitude for programming.

Day-wise Break-up

Day	Module	Topic
Day 1	Module 1	Recording Macros
	Module 2	The Visual Basic Editor
	Module 3	Fundamentals of Programming
Day 2	Module 4	Excel Object Model
	Module 5	User Forms
	Module 6	Working with Other Applications

Course Outline

Module 1: Recording Macros

- Recording and running macros
- Types of references in macros
- Assigning a macro to a Quick Access Toolbar

Module 2: The Visual Basic Editor

- Editing existing macros using VBA Editor
- Writing functions using VBA Editor
- Understanding the Project Explorer window
- Exploring the properties window
- Using the code window
- Debugging code

Module 3: Fundamentals of Programming

- Variables, data types and constants
- Arrays
- Object variables
- Decision structures (IF...THEN, SELECT CASE)
- Logical operators
- Looping constructs (For loops, Do loops, While...Wend statements)
- Built-in functions
- Creating procedures and functions

Module 4: Excel Object Model

- Working with objects—properties, events and methods
- Application objects
- Workbook objects, Worksheet objects and Range objects
- Chart objects
- Pivot table objects

Module 5: User

- Creating forms
- Form events
- Using InputBox and MsgBox
- Creating Add Ins - Custom Menus and Buttons
- Creating Add-ins

Module 6: Working with Other Applications

- Working with Word and other applications