

Course Title: Automation with Microsoft Excel Using Macro/VBA (for Non-Programmers)

Duration: 2 Days

Course Overview:

This two-day course is designed to introduce non-programmers to the power of automation in Microsoft Excel using Macros and VBA (Visual Basic for Applications). The course aims to demystify programming concepts and provide participants with practical skills to automate repetitive tasks, enhance Excel functionality, and improve productivity. By the end of this course, participants will be comfortable with recording macros, writing basic VBA code, and implementing simple automation solutions in Excel.

Course Prerequisite:

Participants should have a solid understanding of Excel functionalities including data entry, basic formulas, and formatting. No prior programming experience is required.

Course Outline:

Day 1: Introduction to Macros and VBA

Module 1: Introduction to Automation in Excel

- 1.1 Understanding automation and its benefits
- 1.2 Overview of Macros and VBA

Module 2: Working with Macros

- 2.1 Recording and running macros
- 2.2 Understanding relative and absolute macro recording
- 2.3 Managing and editing macros

Module 3: Introduction to VBA Environment

- 3.1 Navigating the Visual Basic Editor (VBE)
- 3.2 Understanding VBA code structure and syntax
- 3.3 Running VBA code from the VBE

Module 4: Basic Programming Concepts

- 4.1 Understanding variables and data types
- 4.2 Introduction to control structures (If-Then-Else, For-Next)

Day 2: Advanced Macros and Basic VBA Programming

Module 5: Writing VBA Code

- 5.1 Writing your first VBA subroutines and functions
- 5.2 Working with Excel objects and ranges in VBA

Module 6: Error Handling and Debugging

- 6.1 Basic error handling techniques
- 6.2 Using the VBE debugging tools

Module 7: Automating Excel Tasks with VBA

- 7.1 Automating data entry and formatting tasks
- 7.2 Automating report generation and analysis tasks
- 7.3 Creating interactive forms and controls

Module 8: Conclusion and Review

- 8.1 Course Wrap-up
- 8.2 Q&A
- 8.3 Further Learning Resources

This course is designed to provide a gentle introduction to Excel automation for non-programmers. Practical exercises and real-world examples will be provided throughout the course to help participants apply what they learn. By the end of the course, participants should be comfortable creating their own simple automation solutions in Excel.