



VBA | Macros

Duration: - 18 Hours

Modules

1. Getting Started with VBA
2. VBA Nuts & Bolts
3. Working with Loops, and Ranges Objects
4. Formula Writing in VBA
5. User Form & GUI
6. Working with Excel Features
7. Interaction with Other Applications (Bonus)
8. Q & A



Module 1:- Getting Started with VBA

- Quick Recap of Microsoft Excel
- Introduction to VBA
- What is VBA / Macro in Excel?
- Open Visual Basic Editor (VBE)
- Introduction to Developer Ribbon Tab
- Exploring Form Controls & ActiveX Controls
 - List Box Control
 - Scroll Bar Control
 - Check Box
- Introduction to Visual Basic Editor Window
- Getting Familiar with Visual Basic Editor (VBE)
 - Project Explorer
 - Properties Window
 - Object Explorer
 - Immediate Window
 - Menu Bar
 - Code Window
 - Run Button
 - Breakpoints
 - Insert Button
 - Reset Button
 - Watch Window
 - Locals Window
- Recording Your First Macros in Excel
- Steps to record a Macro
- Executing / Modifying Recorded Macros

Module 2:- VBA Nuts & Bolts

- Working with Cells & Ranges
- Working with Worksheets / Workbooks
- Introduction to Sub and Function Procedures
- Introducing the Excel Object Model
 - Application
 - Workbooks
 - Worksheet
 - Range
 - Object Hierarchy



- Variable Constant and Data Types
 - Introduction to Variables
 - Rules for Naming Variable
 - Declaring & Initializing Variables
 - Object Variables
 - Option Explicit
- Writing your First VBA Code
- Saving Macro Workbook
- Working with Message & Inbox Box
- Introduction to Functions & Subroutines

Module 3:- Working with Loops, and Ranges Objects

- Introduction to VBA Loops
- Types of Loops
- Working with Loops
 - With Statement
 - IF-Then-Else Loop
 - Select-Case Loop
 - Do Until and Do While Loop
 - For Next Loop
 - For Each Loop
- Controlling Program Flow and Making Decisions
- Automatic Procedures and Events
- Working with Range Objects
 - Selecting - Pasting ranges
 - Compiling ranges from multiple sources
- Working with User Defined Functions (UDF)
- Workbook & Worksheets Events
- Types of Errors
- Error Handling & Debugging Techniques



Module 4:- Formula Writing in VBA

- Introduction of Writing Basic & Complex Formula in VBA
- Using Worksheet Functions in VBA
- Difference between Worksheet Functions Vs Active.cell Formula
- Difference between R1C1 and A1 style referencing
- Getting started with Basic Formulas in VBA
- Using Logical and Lookup Formulas
- Fixing arguments of Formulas in VBA

Module 5 :- Advanced Elements

- Working and Creating Customize Functions
- Building New Formulas using VBA Codes
- Add-Ins
 - Introduction to Add-Inn
 - Use of Add-Inn
 - How to Create Add-Inn
- Working with VBA Events
 - Discussing on VBA events
 - Use of VBA events
- Introduction to Arrays
 - Working with Static Arrays
 - Working with Dynamic Arrays
 - One Two & Multi-Dimensional Arrays

Module 6:- User Form & GUI

- User Form Introduction
 - Understanding User Form Events
- User Form Basics
- Using User Form Controls



- Filling Data into Controls
- Validating User Inputs
- Form Control vs ActiveX Control
- User Form Tricks

Module 7:- Working with Excel Features

- Pivot Table& Pivot Charts
 - Creating a Pivot Table Report
 - Working with Pivot Table Fields and Items
 - Updating Pivot Tables
 - Generating multiple Pivot Table reports using VBA
 - Working with Pivot Charts
- Charts
 - Creating an Excel Chart using VBA
 - Changing Chart Type and Series Type
 - Creating Spark-line Chart in Excel using VBA
 - Interactive Excel Charts using VBA
- Named Ranges
 - Working with Named Ranges
- Sorting
- Filtering

Module 8:- Working with Excel Features

- Interacting with Microsoft Word
 - Opening a Word Document
 - Creating a new Word Document
 - Generating Ms Word Report from Excel
- Interacting with MS Outlook
- Working with Files & Folders
- Converting / Saving Excel File into PDF



What you will learn after completing this course: -

- Proficient in Excel Macros
- Recording and Cleaning Macros Easily
- Use Form Controls, Active-x Controls
- Automate many Excel Features using VBA
- Increase your productivity by more than 50%
- Uses right objects & functions
- Make User Form like a Pro
- Make Automate your existing Reports

