MS-Excel VBA

Course Objective

Build a strong foundation in MS Excel VBA (Visual Basic for Applications) to automate repetitive tasks, improve efficiency, create intelligent Excel-based tools, and develop real-world automation solutions used in offices and businesses. This course is designed even learners from a **non-programming** background can join. We use simple, practical, and step-by-step approach.

TARGET AUDIENCE MS-Excel Users, MIS Executives, Accountants, Engineers, Analysts, Working Professionals	**DURATION** **Weekdays**: 35 Days x 1 hour **Weekend**: 11-12 Days x 3 hours
TRAINING MODE • Online • Classroom • Corporate – Inhouse	**PREREQUISITE** Basic to intermediate MS-Excel knowledge. **No prior programming knowledge required;** however, it will be an added advantage.
COURSE DELIVERABLES • Practice files & source code • Real-world automation projects • Certificate of completion • Post-training support	**OUTCOME / SKILLS GAINED** • Automate repetitive MS-Excel tasks • Build smart MS-Excel based tools • Improve productivity & accuracy • Confidence in MS-Excel VBA for office use.

MODULE 1: INTRODUCTION TO MS-EXCEL VBA & AUTOMATION

- What is VBA and why do you use it?
- Difference between Excel VBA, Word VBA, etc.
- Difference between MS-Excel functions vs VBA
- MS-Excel security settings for macros
- Difference between writing macros Vs recording macros
- Understanding Macro-enabled workbooks
- Opening & creating .xlsm files

MODULE 2: GETTING STARTED WITH VBA EDITOR (VBE)

- Developer tab overview
- Opening Visual Basic Editor (VBE)
- Modules, ThisWorkbook & Sheet objects
- Types of modules
- Recording macros and editing it
- Writing first VBA macro
- VBE components:
  - Project Explorer
  - Properties Window
  - Code Window
  - Immediate Window
- Why write code in module

MODULE 3: PROGRAMING & VBA BASICS

- What is program & programing?
- What is compiler & why is it required
- VBA programing basics:
  - Syntax fundamentals
  - Why write code in module(s)
  - How to executive/run program
  - Writing comments in program
- What is procedure
- Concept of public and private SUB
- Calling SUB in another SUB
- Passing arguments via procedures
- What are variables
- Why variables are used
- Types & life of variables
- Declaring variables (Private & Public)
- Usage of variables
- Option Explicit
- Constants

MODULE 4: VBA OPERATORS & CONTROL STRUCTURES

- Arithmetic, comparison & logical operators
- What are conditions & usage?
- Conditional statements:
  - IF....Then
  - IF....Then....Else
  - Select Case
- What are loops & usage?
- Looping structures
  - For....Next
  - For Each...Next
  - Do / Do While / Do Until
- Exit statements

Loops & conditions are the core / heart of any programing language. 50-60% of practical's will be on loops and condition.

MODULE 5: WORKING WITH CELLS, RANGES & WORKSHEETS

- Referencing cells & range
- Working with worksheets & workbooks
  - Create worksheets, workbook via coding
  - Moving, renaming, copy worksheets
- Using Range, Cells & Rows / Columns
  - Where to use Range, Cells, Row / Columns
  - Reading data
  - Writing data
- Selecting Worksheet
- Selecting vs avoiding Select
- Copy, paste & clear data using VBA
- Find & Replace using VBA
- Copy and paste data from one worksheet to another
- Copy and paste data from one workbook to another

MODULE 6: USING EXCEL OBJECT IN VBA

- MS-Excel Object Modal overview
- Application Object
- Workbook & Worksheet Object
- Range Object in depth
- Using With....End With
- Reading & writing large data efficiently

MODULE 7: VBA BUILT-IN FUNCTIONS & MS-EXCEL FUNCTIONS

- Common VBA functions
  - MsgBox, InputBox
  - Date, Now, Timer
- Common VBA functions
- Using MS-Excel worksheet functions in VBA
  - SUM, COUNT, AVERAGE
  - VLOOKUP, SUMIF
- Error handing with functions

MODULE 8: ERROR HANDLING & DEBUGGING

- Common VBA errors
- Types of error
  - Compile-time
  - Run-time
  - Logical errors
- Debugging tools
  - Breakpoints
  - Step Into / Step Over
  - Watch Window
- Error handling using On Error

MODULE 9: AUTOMATING REPORTS & FORMATTING

- Raw data to professional reports in a click
- Automating formatting
- Creating dynamic reports
- Loop-based report generation
- Logic based calculations
- Protecting and unprotecting sheets
- Protecting and unprotecting structure
- Auto-saving and file handling basics

MODULE 10: WORKING WITH DATA

• Handling large data sets	• Dynamic last row & column detection
• Handling multiple datasets for consolidation	• Importing data from other MS-Excel files
• Removing duplicates	• Converting raw data into professional reports

MODULE 11: ADVANCED AUTOMATION CONCEPTS (INTRODUCTION)

• Events in MS-Excel VBA
   o Workbook events
   o Worksheet events
• Creating Charts via VBA
	• Creating custom MS-Excel tools (overview)
	• Speed optimization techniques
	• MS-Excel Forms
	• Overview of MS-Excel Forms programing

MODULE 12: BEST PRACTICES & DEPLOYMENT

• Writing clean & readable VBA code	• Protecting VBA code
• Macro security best practices	• Performance tips
• Distributing VBA files	

MODULE 13: DATABASE CONNECTIVITY

• Overview of database	**Important**
• Read, write, delete & update data to database via VBA	• Database is not part of this course • Basics of database will be covered not in full.

MODULE 14: REAL-LIFE MINI PROJECT

• Automated invoice generation	• Data cleanup automation
• MIS report automation	• Sending bulk emails using Outlook via VBA

MODULE 15: CONSOLIDATION, MENTORSHIP & INTERVIEW PREP.

• Revision of key concepts	• Career guidance for Excel/VBA roles
• Common VBA interview questions	• Mock interview (on demand / chargeable)
• Practical test discussion	• Q&A session

Why Choose Us?	Few Corporate Client References
✓ 200+ MS-Excel VBA automation project ✓ 7+ MS-Excel VBA based software/tools ✓ Trusted by 10,000+ learners – PAN India, USA, Europe, UAE ✓ Practical, job-oriented training ✓ Real-world office & business examples ✓ Experienced trainer with industry exposure ✓ Small batches & personalized attention ✓ Post-training support	• Bharat Forge Limited • KSB Tech Pvt. Ltd. • International School of Management & Research (ISMR) • MSINDIA Health Insurance TPA Pvt. Ltd. • HUSCO Hydraulics Pvt. Ltd. • Francois Compressors India Pvt. Ltd. • NORD Drivesystems Pvt. Ltd. • Equilibrium Solutions Pvt. Ltd. • ITESKUL • Green Packaging Industries Pvt. Ltd. • Flexibility HR Solutions Pvt. Ltd. • Astro MedTech Pvt. Ltd. • Indus Towers Limited • BDG Metals & Power Limited • MTech Innovations Limited • NSDM India
FAQ	
If I miss any session? No worries. We track the progress of every participant. Missed session can be covered later through a backup session or by joining another batch free of cost. **Do I get course material?** Yes, participants receive course material in PDF format along with practice data sheets. **Is course fee refundable?** Yes. The first session is treated as a demo and is eligible for a 100% refund with no questions asked. After the first session, fees are non-refundable under any circumstances.	visit our website for more details

Queries / enrollment / customization, please contact:

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