

Excel in Corporate World with Microsoft Excel

Presented by: **Anil Dhawan**

Topics to be Covered

Course Type: Basic to Advanced Excel

Duration: 3 Weeks / ~12 Hours

- | | | |
|---|---|----------|
| ➤ Overview: Getting Started with Excel | - | 02 hours |
| ➤ Formatting Essentials | - | 02 hours |
| ➤ Functions & Formulas | - | 05 hours |
| ➤ Data Analysis Tools | - | 01 hour |
| ➤ Excel Charts & Pivot Table | - | 01 hour |
| ➤ Bonus Module | - | 0.5 hour |

Getting Started with Excel

Module 1

- ✓ Introduction to Excel 2013/2016/2019/Office 365
- ✓ Application Interface and Key Components of Excel
 - ❑ Ribbon Bar, Quick Excel Toolbar, Formulas Bar, Name Box, Rows, Columns, Status Bar etc.
- ✓ Navigating Through Excel Ribbon Tabs
 - ❑ Exploring Each Ribbon Tab i.e. Home, Insert, Page Layout, View etc.*
- ✓ Exploring Important Excel Options*
 - ❑ Changing Cursor Direction
 - ❑ Enable/Disable Fill Handler and Live Preview
 - ❑ Hiding Horizontal/Vertical scroll bars
 - ❑ Showing gridlines, and Changing Calculation mode etc.
- ✓ Live Session Exercise
 - ❑ Working with Cells/Ranges
 - ❑ Difference between Keyboard Shortcuts and Hot Keys
 - ❑ Use of Short/Hot keys and Mouse
 - ❑ Auto-Fit Content to Column Width / Row Height
 - ❑ Adding/Deleting/Moving/Copy cells/ranges
- ✓ Splitting data of Single Column into multiple
 - ❑ Import data from text file into Excel
- ✓ 10 Examples to use Auto-fill and Flash Fill
- ✓ Magics of Go-To Special
- ✓ Merge/Unmerge Cells & Wrap Text
- ✓ Extracting Unique Values & Important Ribbon, General and Data Entry Keyboard Shortcuts

Module 2

- ✓ Formatting Essentials
 - First thing First - Exploring Universal Formatting Rules
 - Recognizing Text & Number entries.
 - How Excel stores **Date & Time Stamps** etc.
 - Recognizing Text Representation of Numbers
- ✓ Custom Cell Number Formats
 - Converts a number into Currency format, Negative format, Percentile format, Phone Number format
 - Displays 0 at start of a number without converting in text format
 - Shows **Text** with **Number** without converting in text
- ✓ Custom Date/Time Formats
 - How to custom Date / Time in different format as per need
- ✓ Working with Comments / Notes
 - Introducing New Type of Comments (For 365 Users* only)
 - Inserting, Modifying & Deleing Comments with different methods
- ✓ Format Painter – A Quick way to copy 'Formatting Attribute'
- ✓ Paste Special
 - Pasting specific attributes like Value, Formulas, Comments, Column Width, Basic Mathematical Operations etc.
- ✓ Table, Table Styles & Formatting
 - Introducing Excel Table Feature (a way to quickly convert your data-set into dynamic table)
 - Live example
- ✓ Freeze Panes
 - Freeze Rows, Columns etc.
- ✓ Page Setup & Print Formatting

Module 3

- ✓ Introduction to Excel Functions and Formulas
 - ❑ Difference between Functions & Formulas
- ✓ Basics of Functions & Formulas
- ✓ Working with Cell References Types
 - ❑ Relative Cell References
 - ❑ Absolute Cell References
 - ❑ Row Relative & Column Absolute Cell References and vice-versa
- ✓ Most Used Basics & Advanced Functions & Formulas
 - ❑ Text Functions
 - ❑ Date & Time Functions
 - ❑ Mathematical
 - ❑ Statistical Functions
 - ❑ Logical Functions
 - ❑ Lookup & Reference Functions
 - ❑ Newly Introduced Excel Functions
 - ❑ Customized Formulas Tricks
- ✓ Working with Array Formulas
- ✓ Creating Customized Formulas Step-by-Step with Live examples
- ✓ Creating and Working with Dynamic Ranges using Function and Excel Table features
- ✓ Formulas Debugging / Formulas Auditing
- ✓ Types of Formula Errors / Error Handling Tricks

List of Functions (Basics + Advanced/Customized)

Functions & Formulas

✓ **Text Functions**

- ❑ CLEAN, CONCATENATE, LEFT, RIGHT, MID, LEN, LOWER, UPPER, PROPER, REPT, TRIM, VALUE, FIND, SEARCH, SUBSTITUTE, and TEXT etc.

✓ **Date & Time Functions**

- ❑ DATE, DAYS, TIME, NOW, TODAY, EDATE, EOMONTH, NETWORKDAYS, NETWORKDAYS.INTL, WEEKDAY, WEEKNUM, WORKDAY, and WORKDAY.INTL etc.

✓ **Math & Trig Functions**

- ❑ INT, MOD, ROUND, ROUNDDOWN, ROUNDUP, SUM, SUMIF, SUMIFS, SUMPRODUCT etc.

✓ **Statistical Functions**

- ❑ AVERAGE, COUNT, COUNTA, COUNTBLANK, MAX, MIN, COUNTIF, COUNTIFS, SMALL, and LARGE etc.

✓ **Logical Functions**

- ❑ IF, IFS, AND, OR, and IFERROR.

✓ **Lookup & Reference Functions**

- ❑ FORMULATEXT, VLOOKUP, HLOOKUP, INDEX, MATCH, INDIRECT, and OFFSET

✓ **Newly Introduced Functions in Recent Version of Excel***

- ❑ CONCAT, TEXTJOIN, IFS, SWITCH

✓ **Nested Conditions/Customize Formulas***

- ❑ One dimensional dynamic lookup
- ❑ Two dimensional dynamic lookup
- ❑ Formulas for calculating Aging
- ❑ Calculate remaining/pending days and weeks in a year
- ❑ Finding out Weekend/Weekday dates
- ❑ Nested IF condition (using multiple criteria)
- ❑ Alternatives of Nested IF Condition
- ❑ Extracting First, Middle & Last Name dynamically
- ❑ Formulas to get Sum/Average of Nth Top/Bottom values
- ❑ Merge Numbers & Text by keeping Number formatting alive
- ❑ Extract Date or Time from Date-Time stamp
- ❑ Extracting Unique List of Items
- ❑ Reverse lookup
- ❑ Many more....

Module 4

✓ Data Sorting

- Introduction to Data Sorting
- Simple Sorting basis on cell value
- Advanced / Multilevel Sorting
- Sorting based on Cell Colors, Font Color etc.

✓ Data Filtering

- What is Filter and How to apply?
- Sorting with Filter
- Advanced Filter
- Conditional Filtering

✓ Named Ranges

- Introduction to Defined Names
- Assigning Name to Cells and Ranges
- Use of Named Ranges in Functions & Formulas
- Working with Dynamic Ranges

✓ Conditional Formatting

- Introduction to Conditional Formatting
- Exploring all CF Rules in Detail
- Formatting Cells based on values using different Styles

- Formatting Cell Values using Traffic Indicators/Icons

- Highlighting Cells containing Specific Text

- Highlighting Top/Bottom Values (Simple & Dynamic Examples)

- Highlighting Unique/Duplicate Values

- Highlighting Rows/Columns with empty Cells

- Highlighting using Functions/Formulas

- Highlighting Weekday/Weekend Dates using CF

✓ Data Validation

- What is Data Validation in Excel?

- Exploring all Data Validation Rules in detail

- Setting up Input and Error Messages

- Validating Numbers, Decimals, Date, Text Length etc.

- Data Validation using Functions & Formulas

- Validating Data using Named Range

- Dynamic Drop Down List

- Dynamic Dependent Drop Down List

✓ What-If Analysis

- Introduction and working with Scenario Manager

- Use of Goal Seek with Examples

Module 5

- ✓ Introduction to Excel Charts
- ✓ Exploring most commonly used Charts and Templates
- ✓ Basics of Charts
- ✓ Selecting Requirement based Charts
- ✓ Working with Basic Charts:
 - Column / Clustered / Stacked Column
 - Line / Line with Markers
 - Bar
 - Pie / Pie of Pie
 - Map
 - Waterfall
 - Gantt Chart | Pareto Chart
 - Clustered Column with Line etc.
- ✓ Creating Customized / Advanced Charts
- ✓ Creating Dynamic Chart
- ✓ Working with Dynamic Interactive Charts in Excel using Drop Down
- ✓ Working with Chart Elements, Formatting, Chart Styles, Properties etc.

CONTENTS

Copyright © Anil Dhawan
Analytics Training Hub

Module 6

- ✓ Introduction to Pivot Table
- ✓ Creating a Pivot Table
 - ❑ Basics of Pivot Table Creation (Planning and Studying the Data)
 - ❑ Two Dimensional Pivot Table Summary
- ✓ Use of Calculated Fields/Items
- ✓ Pivot Table Formatting
- ✓ Grouping Items & Summarizing data in Pivot Tables
- ✓ Grouping and Bucketing data in Pivot Table
- ✓ Changing/Modifying Data Sources
- ✓ Working with Pivot Table Designs & Layouts
- ✓ Exploring Important Pivot Table Options & Field Settings
 - ❑ Formatting Empty Cells
- ✓ Pivot Table Filters
- ✓ Changing Pivot Table Summary Calculation
- ✓ Use of Slicers in Pivot Table
- ✓ Using Source Data to Convert into Infographic Summary
- ✓ Introduction to Pivot Charts

Study Material Notes & Support

- ✓ Protecting Workbook/Worksheets/Ranges
- ✓ 'Go To Special' Feature and Its' Uses
- ✓ 350+ Window Keyboard Shortcuts Guide (Cheat-Sheet)
 - ❑ 30 Quick Time Saving Excel Keyboard Shortcuts to increase productivity
 - ❑ Learn with Live Examples & Easy way to Best Practice
- ✓ 150+ Mac Excel Keyboard Shortcuts Guide
- ✓ Exploring Some Ready to Use Templates and Industry Dashboards
- ✓ Session Study Material
 - ❑ Session Study Material with solved examples after every session
 - ❑ Access to some Excel Videos*
 - ❑ Excel Formula Tips
- ✓ Real Life Case Studies and Situations for Best Practice and Get Ready for Corporate World
- ✓ Bi-Monthly Quiz
- ✓ Situation based Questions for Practice
- ✓ 6 Months Live Support via Phone/Email/Messages

Excel in Corporate World with VBA

Course Content – Visual Basics for Applications (VBA)

Duration: 5 Weeks / ~18 Hours

➤ Getting Started with VBA	-	<i>02 hours</i>
➤ VBA Nuts & Bolts	-	<i>02 hours</i>
➤ Working with Loops, Conditional Statements & Arrays	-	<i>06 hours</i>
➤ Formula Writing in VBA	-	<i>03 hours</i>
➤ UserForm & GUI	-	<i>02 hours</i>
➤ Working with Excel Features	-	<i>02 hours</i>
➤ Interaction with Other Applications (Bonus)	-	<i>01 hour</i>
➤ Q & A	-	<i>0.5 hour</i>

Getting Started with VBA

Module 1

- ✓ Quick Recap of Microsoft Excel
- ✓ Introduction to Developer Ribbon Tab
- ✓ Introduction to VBA
- ✓ What is VBA / Macro in Excel?
 - Difference between VBA and Macros
- ✓ Introduction to Visual Basic Editor Window
 - Open Visual Basic Editor (VBE)
- ✓ Getting Familiar with Visual Basic Editor (VBE)
 - Project Explorer
 - Immediate Window
 - Run Button
 - Reset Button
 - Properties Window
 - Menu Bar
 - Breakpoints
 - Watch Window
 - Object Explorer
 - Code Window
 - Insert Button
 - Locals Window
- ✓ Customizing the VBE Environment
- ✓ The Macro Recorder
 - Recording Your First Macros in Excel
 - Steps to record a Macro
 - Relative References vs Absolute Reference in Macro Recording
 - Ways to Run Macros
 - Live Project: Dynamic Cell Selection (Using Excel Go to Feature)
- ✓ Executing / Modifying Recorded Macros
- ✓ Saving Macro Workbook

Module 2

- ✓ Introduction to Sub and Function Procedures
 - Declaring Procedures
 - Procedures' Scope (Public/Private Procedures)
- ✓ Introducing the Excel VBA Object Model (A must know thing to become Pro in VBA)
 - Object Hierarchy (Objects and Collections)
- ✓ Properties and Methods
 - Working with Object Properties
 - Working with Object Methods
 - Live Case Study – Working with Comment Object
- ✓ Important and Useful Properties of Application Object
- ✓ Working with Ranges Objects
 - Selecting, Copying, Pasting ranges
- ✓ Working with Comments
 - Tips to make a best use of comments
- ✓ Variable, Data Types and Constant
 - Rules for Naming Variable
 - Declaring & Initializing Variables
 - VBA built-in data types
 - Variable Scope and Working with Constant
- ✓ Finding Last or Next available Row/Column
- ✓ Selecting Rows/Columns/Table (Normally & Dynamically)

Working with Loops, Conditional Statements & Arrays

Module 3

- ✓ Introduction to VBA Loops & Conditional Statements
- ✓ Working with Conditional Statements
 - Types of Conditional Statements
 - Use of Simple and Nested IF conditions
 - IF with AND, OR & NOT
 - Alternative of IF, a Select CASE statement
- ✓ Working with Loops
 - For Next Loop (aka Counter Loop)
 - For Each Loop
 - Normal Do-Loop
 - Do Until
 - Do While Loop
 - While Wend Loop
- ✓ Working with Message & Inbox Box
- ✓ With-End With Constructs
- ✓ Controlling Program Flow
 - Use of GoTo statements
- ✓ Introduction to Arrays
 - Declaring arrays
 - Declaring Multidimensional arrays
 - Static Arrays vs Dynamic Arrays
 - Working with Dynamic Arrays

CONTENTS

Module 4

- ✓ Introduction to Excel VBA Functions and Worksheet Functions
- ✓ Difference between R1C1 and A1 style referencing
- ✓ Difference between Worksheet Functions Vs Active.cell Formula
- ✓ Getting started with VBA Excel Functions
 - ❑ IIf, UCase, LCase, Date, StrReverse, Split, RemoveVowels, InStr, Date, DateSerial, Format, MonthName etc.
- ✓ Getting started with WorksheetFunction
- ✓ Working with Function Procedures
- ✓ Getting started with User Defined Functions (UDF)
 - ❑ UDF with No, One, & Multiple arguments
 - ❑ UDF to Sum Each Digit in a Cell
 - ❑ UDF to extract only numbers from alphanumeric cell
 - ❑ Function with an Array argument
- ✓ Fixing arguments of Formulas in VBA
- ✓ Working and Creating Customize Functions
- ✓ Error Handling & Debugging Techniques
 - ❑ Trapping Errors (Ingoing Error or Jumping to specific section)

Module 5

- ✓ User Form Introduction
 - Basics of UserForm
 - Creating, displaying and unloading UserForms
 - Understanding the settings of UserForm's Properties
- ✓ Exploring Form Controls & ActiveX Controls
 - List Box Control
 - Scroll Bar Control
 - Check Box
- ✓ Exploring UserForm Controls
 - Customizing control toolbox
 - Filling Data into controls
 - Adjusting UserForm controls
- ✓ Cycle/Sequence to follow to create UserForm
- ✓ Validating User Inputs
- ✓ Testing a UserForm
- ✓ User Form Tricks
- ✓ Understanding User Form Events
 - Relevant UserForm Events
 - Control Events

CONTENTS

Working with Excel Features

Module 6

✓ Working with Pivot Tables

- Recording & Modifying macro to create Pivot Table
- Writing codes to create Pivot Table Report
- Working with Pivot Table Fields and Items
- Updating Pivot Tables
- Generating multiple Pivot Table reports using VBA

✓ Charts

- Difference between embedded chart and chart sheets
- Understanding the Chart object model
- Creating an Excel Chart using VBA
- Changing Chart Type and Series Type
- Modifying Charts
- Creating Spark-line Chart in Excel using VBA
- Looping through all charts available in worksheet
- Adjusting Size and Aligning ChartObjects

✓ Sorting & Filtering

- Recording a macro to sort the table
- Understanding and modifying the recorded macro
- Performing Simple sorting
- Dynamic and multilevel sorting
- Filter and display relevant information



Analytics Training Hub
Dr. Anil Dhawan

Add-Ins & Interaction with Other Applications

Bonus Module

- ✓ Add-Ins
 - Introduction to Add-Ins
 - Add-Inn vs COM Add-Ins
 - How to Create Add-Inn
 - Installing an Add-Ins
- ✓ Type of different Excel events
 - Workbook Events (Open, Activate, SheetActivate, BeforeSave, NewSheet, Deactivate etc.)
 - Worksheet Events (Activate, BeforeRightClick, BeforeDoubleClick, Calculate, PivotTableUpdate etc.)
- ✓ Starting an application from Excel
 - VBA Shell function to launch other programs
 - Creating a new Word Document
- ✓ Interacting with Microsoft Office Apps
 - Opening a Word Document
 - Opening Outlook
 - Launching PowerPoint
- ✓ Controlling Excel from another application
- ✓ Sending Personalized emails via Outlook
- ✓ Sending e-mail attachments from Excel
- ✓ Working with Files & Folders
- ✓ Converting / Saving Excel File into PDF

CONTENTS

Analytics Training Hub

Key Take Away

Upon Completion of this course, you will be able to :

- *Proficient in Ms-Excel(Basics & Advanced) & VBA/Macros*
- *Having good command on keyboard shortcuts/Hotkeys*
- *Skilled in formatting the small and large datasets using Excel & VBA both*
- *Capable of coding and handling the large data*
- *Automate many Excel Features using VBA/Macros*
- *Able to choose the appropriate function/formula for any situation*
- *Building own formulas for customize requirements*
- *Navigating through Excel efficiently & effectively*
- *Able to create dynamic ranges*
- *Debugging the functions/formulas*
- *Understanding the functionality of simple and Complex functions & formulas*
- *Design your own User Defined Functions in easy steps using VBA*
- *Plotting various charts & tables using Excel & VBA*
- *Creating various reports using different features & functions*
- *Having strong knowledge of Advanced Formulas*
- *Able to analyze any data with Excel VBA*
- *Ability to create Good Looking and World Class Dashboards*
- *Recording and Cleaning Macros Easily*
- *Use Form Controls, Active-x Controls*
- *Make User Form like a Pro*
- *Make Automate your existing Reports*

