Course Name:

Microsoft Excel- Mastering Formulas and Functions

Synopsis

Excel is a powerful spreadsheet program developed by Microsoft. Unlock the full potential of Microsoft Excel with our Mastering Formulas and Functions course designed specially by a certified Microsoft Excel specialist! Dive deep into the world of Excel's powerful formulas and functions, from basic calculations to advanced data analysis. Learn to unleash the magic of SUM, IF, VLOOKUP, INDEX/MATCH, and beyond, transforming your spreadsheets into dynamic tools for decision-making and insights. Whether you're a beginner or an experienced user, this course will elevate your Excel skills and empower you to tackle complex data challenges with confidence and precision.

What You Will Learn

- **Understanding Absolute and Relative References:** Unlock Excel's Secret Sauce: Absolute and Relative References to keep your data anchored or adapted
- **Excel Error Types:** From the notorious #DIV/0! to the elusive #N/A, explore Excel's error codes like a detective and how to resolve them
- **Formula Auditing in Excel:** Dive deep into your formulas using Excel's Auditing Tools to trace Precedents, spot Errors, and ensure accuracy
- **Excel's Conditional Function:** From nested IF statements with AND/OR conditions to SUMIF/COUNTIF, unlock the magic of conditional logic for accurate analysis and streamlined workflows
- **Excel Mathematical and Statistical Function:** From basic arithmetic to advanced statistical analysis, conquer data challenges with precision and insight.
- **Excel's Wildcard Function:** Learn to wield wildcard characters like * and ? to unlock Excel's hidden powers
- **Excel's Lookup Function:** Navigate through vast datasets effortlessly with Excel's lookup function and discover the power to find and retrieve information like a data wizard

- **Excel's Text Function:** Harness the magic of Excel's TEXT function to extract, format, and manipulate text with ease
- **Date & Time Function in Excel:** From calculating durations to forecasting schedules, Excel's functions help you navigate the time continuum effortlessly
- **Conditional Formating:** Highlight trends, spot outliers, and bring data to life with vibrant colours and dynamic rules
- **Custom Formating:** Harness the technical prowess of Excel's custom formatting to sculpt your data with surgical precision
- **Array Formulas:** Unleash the ability to process multiple data points simultaneously, crunch numbers with unparalleled speed, and achieve complex calculations with finesse
- **Other Important and New Function:** Stay ahead of the curve with Excel's newest and most crucial functions

Who Should Attend

The Excel Advanced Formulas and Functions course is ideal for anyone looking to take their Excel skills to the next level for complex calculations and automation which includes Data Analyst, Financial Analyst, Project Managers, IT Professionals, and generally anyone who deals with data regularly and wants to work more efficiently in Excel.

Prerequisite

N/A

Course Methodology

- Theory
- Hands-On
- Discussions
- Interactive Classroom Session

Course Duration

2 days - 9am - 5pm

Course Structure

Session 1: *Understanding and Deciphering Excel Formulas*
Learn to establish, interpret, and troubleshoot formulas with confidence, empowering you to extract valuable insights and make informed decisions from your data.

o   Excel Formula Syntax
o   Learn fundamental arithmetic operators (+, -, *, /) and logical operators (>, <, =, <>).
o   Absolute and Relative Reference in Formulas
o   Different Excel Error Types
o   Auditing Excel Formulas with Trace Precedents, and Dependents
o   Utilizing Watch Window to keep an eye on specific cells or ranges
o   Everyday Excel Formula

Session 2: *Excel's IF Function Combined with Logical Function (AND/OR/NOT/XOR)*
The combination of Excel's IF function with logical functions such as AND, OR, and NOT allows you to create sophisticated conditional statements that can handle complex decision-making scenarios.

o   Structure of IF Function
o   Nested IF Function
o   Combining IF Function with AND/OR
o   Using IFERROR as Error Handling
o   IS Functions as a Conditional Statement

Session 3: *Excel's Mathematical and Statistical Functions*
Excel provides an extensive array of mathematical and statistical functions that empower users to conduct intricate calculations and analyses directly in their spreadsheets. These include functions like SUMIFS, COUNTIFS, AVERAGEIFS, and many others, which can even be used simultaneously and combined with wildcard characters for enhanced flexibility.

- Working with SMALL/LARGE Function
- Working with RANK Function (Normal Rank and Unique Rank)
- Working with AVERAGE Function
- Working with COUNT & COUNTA Function
- Working with SUMIFS/AVERAGEIFS Function
- Combining with Wildcard Searches
- Working with SUMPRODUCT Function

Session 4: *Excel's Lookup Function*

Participants will have a comprehensive understanding of Excel's lookup functions and their applications in various data analysis and reporting scenarios.

- VLOOKUP/HLOOKUP Function
- INDEX Function
- MATCH Function
- INDEX + MATCH Function (1D and 2D)
- CHOOSE Function
- OFFSET Function
- Dynamic Named Range with OFFSET and COUNTA

Session 5: *Excel Text Function*

Participants will gain a comprehensive understanding of how to extract, manipulate and format text strings effectively.

- Text Cleaning Function
- LEFT, MID, RIGHT Function
- LEN Function
- SEARCH and FIND Function
- Concatenate and Splitting Text Function
- REPLACE and SUBSTITUTE Function Creating Excel Pivot Table

Session 6: *Mastering Excel's Wildcard*

Participants how to leverage wildcard characters in Excel for advanced data manipulation, filtering, and searching.

o   Introduction to Wildcard Characters
o   Basic Wildcard Usage in conjunction with other functions

Session 7: Date & Time Function in Excel
Participants will learn a range of valuable skills related to handling, manipulating, and formatting date and time data effectively.

o   Current Date and Time Function
o   DATEVALUE Function
o   DAY, MONTH, YEAR Function
o   YEARFRAC Function
o   WEEKDAY, WORKDAY and NETWORKDAYS Function
o   DATEDIFF Function

Session 8: Excel's Conditional Formatting
Participants will gain a deep understanding of how to visually enhance their spreadsheets and highlight important data based on specific conditions using built in conditional formatting and formula based conditional formatting.

o   Introduction to Conditional Formatting
o   Basic Conditional Formatting Rules
o   Creating Custom Conditional Formatting Rules
o   Managing Conditional Formatting Rules

Session 9: Excel's Custom Formatting Rules
Participants will be able to leverage custom formatting as a powerful tool for data presentation and analysis within Excel.

o   Understanding Custom Formatting in Excel
o   Rules of Custom Formatting
o   Managing and Editing Custom Formats

Session 10: _Excel's Array Formulas_

Participants will have a deep understanding of Excel's array formulas and how to leverage them for advanced data analysis, calculations, and modelling tasks.

o   Understanding Array Functions and its Rules
o   TRANSPOSE Function

Session 11: _Other Important and New Functions_

Participants will explore advanced features and functionalities that enhance and ease data analysis, manipulation, and visualization.

o   _INDIRECT Function_
o   _XLOOKUP Function_
o   _FILTER Function_