MICROSOFT EXCEL: INTERMEDIATE AND ADVANCED LEVEL (2 DAYS)

COURSE DETAILS

Trainer	*Microsoft Certified: Power BI Data Analyst Associate* *Microsoft Office Specialist – Expert (Microsoft 365 Apps)*
Methodology	Interactive lectures. hands-on exercises, case studies, group discussions
Course Materials	Sample datasets, step-by-step guides for exercises
Pre-requisites	Minimal spreadsheet experience required
Equipment Required	Laptop/desktop with Microsoft Excel installed and internet access

LEARNING OUTCOMES

Upon completion of the course, participants will be able to:

- Validate and clean data using Excel's Data Validation tools, text functions, and error-handling formulas to ensure accurate and reliable datasets.
- Manipulate and format text and date values with appropriate functions to extract insights, clean entries, and enhance readability.
- Apply logical and mathematical functions such as IF, COUNTIFS, and SUMIFS to perform conditional calculations and support data-driven decision-making.
- Create dynamic formulas using named ranges and lookup functions (VLOOKUP, XLOOKUP, INDEX & MATCH) to streamline calculations and improve formula accuracy.
- Design and analyze PivotTables and PivotCharts to summarize large datasets, highlight patterns, and create interactive dashboards using slicers.
- Automate repetitive tasks with Macros and enhance visual communication with Conditional Formatting and Sparklines for impactful reporting.

COURSE OUTLINE

NO	TOPIC	SUBTOPICS
1	**DATA VALIDATION**	• Validating Various Data Types • Identify Invalid Data • Creating Alert Message and Error Messages
2	**TEXT FUNCTIONS**	• Text Manipulation Functions (LEFT, RIGHT, MID, CONCAT, LEN) • Text Formatting Functions (UPPER, LOWER, PROPER) • Text Cleaning Functions (TRIM, CLEAN)
3	**DATE FUNCTIONS**	• Date Extraction Function (YEAR, MONTH, DAY) • Date Calculation Functions (TODAY, NETWORKDAYS, WORKDAY) • Date Formatting Functions (DATE, TEXT)
4	**NAMED CELLS AND NAMED RANGES**	• Introducing Named Cells and Ranges • Creating and Managing Named Cells and Ranges • Using Named Cells and Ranges in Formulas
5	**LOGICAL FUNCTIONS**	• Using and Combining IF, AND, OR Functions • Nested and Multiple Ifs • Handling Errors (IFERROR, IFNA)
6	**MATHEMATICAL FUNCTIONS**	• Counting Cells with Criteria (COUNTIFS) • Adding Cell Values with Criteria (SUMIFS) • Averaging Cell Values with Criteria (AVERAGEIFS)
7	**LOOKUP FUNCTIONS**	• Range Lookup with VLOOKUP • Exact Lookup with XLOOKUP • Dynamic Lookup with INDEX and MATCH
8	**PIVOT TABLES AND PIVOT CHARTS**	• Creating and Modifying a Pivot Table • Sorting, Grouping, and Filtering a Pivot Table • Pivoting Charts and Slicers
9	**CONDITIONAL FORMATTING AND SPARKLINES**	• Advanced Highlight Cells Rules • Conditional Formatting the Entire Row • Visualising Trend with Sparklines
10	**MACROS**	• Recording macros • Applying macros • Assigning macros to buttons