Data Analysis using MS Excel

Duration - 20 Hours
Pricing - 20000

1. Excel Fundamentals

- **Getting Started with Excel**: Introduction to the Excel interface and key features
- **Understanding OneDrive**: Leveraging cloud storage for sharing and collaboration
- **Creating and Opening Workbooks**: Efficient workbook creation, management, and file navigation
- **Saving and Sharing Workbooks**: Best practices for saving and sharing Excel files across platforms

2. Working with Cells and Sheets

- **Cell Basics**: Understanding cell structure, selection, and data entry
- **Modifying Columns, Rows, and Cells**: Techniques for adjusting cell size and content
- **Formatting Cells**: Customizing cell appearance with styles, fonts, and borders
- **Understanding Number Formats**: Working with different number formats (e.g., currency, percentage, date)
- **Working with Multiple Worksheets**: Managing and navigating multiple sheets in a workbook
- **Using Find & Replace**: Streamlining data updates and corrections
- **Page Layout and Printing**: Configuring document layout for optimal printing and presentation

3. Formulas and Functions

- **Introduction to Formulas**: Basics of formula creation for calculations
- **Creating Complex Formulas**: Combining multiple functions and operators to build advanced formulas
- **Cell Referencing**: Understanding relative, absolute, and mixed referencing in formulas
- **Key Excel Functions**: Utilizing common functions for data analysis

4. Working with Data

- **Freezing Panes and View Options**: Improving navigation and viewability within large datasets
- **Sorting & Filtering**: Organizing data and isolating relevant information
- **Remove Duplicates**: Identifying and eliminating redundant data entries

- **Custom Sorting Techniques**: Advanced sorting options for multi-level organization
- **Groups and Subtotals**: Aggregating and grouping data for summarized views
- **Range vs Table Format**: Understanding when to use ranges versus Excel tables
- **Data Validation**: Ensuring data integrity through validation rules
- **Conditional Formatting**: Highlighting cells based on conditions for better insights
- **Sparklines**: Using miniature charts within cells for data trends
- **Quick Analysis**: Leveraging Excel's Quick Analysis tool for efficient data review

5. Data Visualization Tools

- **Basics of Data Visualization**: Principles of visualizing data for better interpretation
- **Understanding Charts**: Overview of charts and selecting the appropriate type for different data
- **Chart Layout and Style**: Customizing chart styles and layouts for clarity
- **Advanced Chart Options**: Creating sophisticated chart types for deeper insights
- **Basic Charts**: Introduction to creating and customizing standard chart types (e.g., bar, line, pie)

6. Advanced Excel Functions

- **Logical Functions**:
  - Basic IF Statements
  - Nested IF Statements
  - IFS Function
  - AND & OR Functions
- **Lookup Functions**:
  - **Basic VLOOKUP**: Performing lookups with range and table formats
  - **VLOOKUP Issues**: Troubleshooting common VLOOKUP errors
  - **Multi-Column Lookup**: Using VLOOKUP with MATCH for more flexibility
  - **Alternatives to VLOOKUP**: Leveraging INDEX & MATCH for more dynamic lookups
  - **Multi-Table Lookup**: Combining VLOOKUP with INDIRECT for cross-table referencing
- **Conditional Calculations**:
  - **SUMIF/SUMIFS**: Conditional summation based on criteria
  - **AVERAGEIF/AVERAGEIFS**: Conditional averaging for subsets of data
  - **COUNTIF/COUNTIFS**: Counting data points based on conditions
- **Database Functions**:
  - **DSUM**: Summing values from a database based on specific conditions
  - **DAVERAGE**: Averaging values from a database
  - **DCOUNT**: Counting entries in a database
- **Text Functions**:
  - **CONCATENATE, TEXTJOIN, CONCAT**: Combining text values
  - **MID, LEFT, RIGHT**: Extracting substrings from text
  - **LEN**: Calculating the length of text strings
  - **EXACT**: Comparing text values for exact matches

- o **Text Formatting**: Using DOLLAR, LOWER, PROPER, UPPER, TRIM for text manipulation
- **Date & Time Functions**:
  - o **DATE, NOW, TODAY**: Working with current date and time
  - o **DAY, MONTH, YEAR**: Extracting specific components of a date
  - o **WEEKNUM, ISOWEEKNUM, WEEKDAY**: Week-related functions for date analysis
  - o **EDATE, EOMONTH**: Calculating dates in the future or past based on intervals
  - o **WORKDAY, WORKDAY.INTL**: Calculating workdays excluding holidays
  - o **NETWORKDAYS, NETWORKDAYS.INTL**: Calculating the number of workdays between two dates
  - o **YEARFRAC**: Calculating fractional years between two dates

7. Reporting Tools

- **Pivot Tables**:
  - o **Basic Pivot Tables**: Introduction to creating and using pivot tables for summarizing data
  - o **Pivot Table Areas**: Understanding the four core areas—Filter, Row, Column, and Values
  - o **Slicers**: Adding interactive slicers for dynamic filtering in pivot tables
  - o **Sorting and Filtering in Pivot Tables**: Techniques for organizing and refining pivot table data
  - o **Analyzing Pivot Tables**: Using the Analyze tab for additional options and customization
  - o **Value Field Settings**: Adjusting settings to customize calculations in pivot tables
  - o **Updating and Deleting Pivot Tables**: Refreshing and modifying pivot table data