



Information Technology

Excel & Powerpoint Advanced for Data Analysis

Course Introduction

Many organizations struggle with the vast amount of data they are accumulating over the years, finding that the structure of the reports to present this data limits their use. It is why data analysis and presentation have become an emerging requirement for many businesses today. Employees are frequently asked to prepare management reports, scorecards, and dashboard charts in order to help the management in their decision-making process.

This course is designed to provide participants with the advanced levels of analysis, reporting and creating custom reports. The course will focus on topics such as tools and techniques used to perform data reporting, analysis and visualization.

Target Audience

1. Data Analyst
2. Business Intelligence Analyst
3. Financial Analyst
4. Business Analyst
5. Marketing Analyst
6. Sales Analyst
7. Operations Manager
8. Reporting Specialist
9. Project Manager
10. HR Analyst

Learning Objectives

- Gain a comprehensive understanding of the principles behind data mining, power query, importing data, and organizing data.

- Use visualization techniques to improve presentation of information
- Design exceptional visualization charts, dashboards, scorecards, and flash reports
- Leverage sampling techniques from data sets using the Data Analysis command
- Learn and use techniques such as building charts, performing What-If scenarios, and using functions.
- Understand how to apply Business Intelligence tools to transform data into useful information.
- Implement multiple data parameters, particularly within Power BI
- Ensure the validity of data while locating errors or duplicates using rules and formula auditing.

Course Outline

- **Day 01**

DATA MINING

- What is Data Mining?
- Understand Your Data
- Sources of Data
- Import External Data into Worksheet Using the Text Import Wizard
- Organizing Data
- Data Extraction using LOOKUP Functions
- Power Query

BUSINESS INTELLIGENCE (BI) TOOLS

- An Overview of BI & BI Tools
- BI Tools used by Organizations
- Using Power BI

- **DATA PARAMETER**

- What is parameter?
- Setting parameter

DATA QUALITY STANDARDS

- Data Validation Tool
- Validate Formulas
- Removing Duplicate Data

- **Day 02**

SAMPLING TECHNIQUES

- What is Sampling?
- Loading Analysis Toolpak in Excel
- Using Analysis Toolpak to Perform Sampling

ADVANCED LISTING TECHNIQUES

- Tricks in creating dependent lists
- Dynamic selection tips
- Dynamic extraction of unique values

FACILITATING CALCULATIONS

- Dynamic and expandable named ranges
- Multi-nested functions / expandable referencing
- Structured table references / table nomenclature
- Aggregate calculation using the 'wildcard' technique

• Day 03

KEY FUNCTIONS & ANALYSIS TECHNIQUES

- Math Functions SUMIFS, COUNTIFS, AVERAGEIFS
- Financial Functions using NPV, IRR, PMT, IPMT & PPMT
- What-If Analysis using Goal Seek
- What-If Analysis using Scenario Manager
- DSUM / SUMPRODUCT / SUMIFS (and building conditions)
- Advanced uses of: OFFSET / CHOOSE / INDEX / MATCH
- ROWS
- INDIRECT

FURTHER ADVANCED TECHNIQUES FOR SUMMARISING AND PRESENTING DATA

- Mini pivot table reports
- Fast calculations with data tables
- Data modelling with scenario manager
- Histogram and Pareto Charts

EXCEL DASHBOARDS (EXTRACTS)

- Creative charting techniques
- Building a visual analysis

• Day 04

EFFECTIVE CHARTS AND VISUALIZATION

- Choosing the right chart for your message
- Customizing chart properties [a look at column charts]
- Visualize trends with line and area charts
- Show % contribution with doughnut charts
- Creating and customizing a bar chart
- Highlight lowest and highest sales month in a column chart, dynamically
- Multi-category axis (Two-Level Axis Labels)

ADDING INTERACTIVITY TO CHARTS

- Using drop-down lists for dynamic charts
- Interactive charts using combo box form controls
- Dynamic charts using option buttons

• Day 05

VISUALLY-RICH TABLES USING CUSTOM NUMBER FORMATS AND SPECIAL FONTS

- The basics of Custom Number Formatting: The logic
- YoY growth rates using custom number formats and symbols
- Scaling numbers with CNFs e.g. 3,724,271 to 3.72M
- In-cell charts using the REPT function
- Up/Down arrows using "Wingdings 3" font

CHARTING AND VISUALISATION TECHNIQUES

- Creating dynamic labels
- Using the camera tool
- Working with formula-driven visualizations

- Using fancy fonts
- Leveraging symbols in formulas
- Working with sparklines
- Creating unconventional style charts
- Fancy thermometer charts
- Colored chart bars

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 19, 2025	May 23, 2025	5 days	4250.00 \$	UAE - Dubai
Aug. 4, 2025	Aug. 8, 2025	5 days	5950.00 \$	Switzerland - Zurich
Dec. 22, 2025	Dec. 26, 2025	5 days	4250.00 \$	UAE - Dubai