

Modern Reporting and Dashboard Development with Excel & Power BI

Batch Size: 30 Participants

Duration: 2 Days (1/2 Day Advanced Excel + 1.5 Days Power BI)

Day 1 (First Half) – Advanced Excel for Data Analysis & Reporting

Module 1: Working with Data Efficiently

- Understanding structured data and Excel Tables
- Importing data from CSV and Excel files
- Data cleaning and preparation techniques
- Removing duplicates and correcting inconsistencies
- Handling missing and incomplete data

Module 2: Data Validation & Formatting

- Creating data validation rules
- Drop-down lists and input restrictions
- Number, date, and text formatting best practices
- Conditional formatting for data insights and exception reporting

Module 3: Data Analysis with Excel

- Sorting and filtering large datasets
 - Advanced filtering techniques
 - Introduction to analytical functions
 - Creating summary reports
 - Excel tips for faster data handling
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Day 1 (Second Half) – Power BI Fundamentals

Module 4: Introduction to Power BI

- Understanding the Power BI ecosystem
- Power BI Desktop interface and workflow
- Connecting to various data sources

- Importing Excel and CSV files

Module 5: Data Preparation with Power Query

- Understanding Power Query Editor
- Data cleaning and transformation
- Managing data types and columns
- Merging and appending datasets
- Building a clean and reliable dataset

Module 6: Data Modeling Essentials

- Understanding tables and relationships
 - Creating relationships between datasets
 - Star schema concepts
 - Best practices for data models
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Day 2 – Power BI Reporting & Dashboard Development

Module 7: Data Analysis with DAX

- Introduction to DAX concepts
- Creating calculated columns
- Creating measures
- Common aggregation and business calculations
- Time-based calculations and trends

Module 8: Data Visualization & Reporting

- Creating Bar, Line, Pie, and Column Charts
- Creating Tables and Matrix visuals
- Using Cards, KPIs, and Gauges
- Designing effective reports
- Formatting and customization techniques

Module 9: Interactive Reporting

- Creating and using Slicers

- Drill-down and drill-through analysis
- Cross-filtering and cross-highlighting
- Applying filters effectively
- Building user-friendly reports

Module 10: Dashboard Development

- Designing executive dashboards
- Combining multiple visuals for insights
- Creating business performance dashboards
- Dashboard navigation techniques
- Report storytelling best practices

Module 11: Publishing & Sharing

- Publishing reports to Power BI Service
- Sharing reports and dashboards
- Exporting reports and data
- Collaboration and workspace overview
- Security and access considerations

Module 12: End-to-End Business Scenario

- Importing and preparing raw data
- Creating a data model
- Building measures and calculations
- Developing an interactive dashboard
- Best practices and Q&A session

Outcome: Participants will be able to clean and analyse data in Excel, build interactive Power BI reports and dashboards, create meaningful visualizations, and share business insights effectively.