

## Excel with BI – Fast-Track Training Curriculum

**Total Duration: 20 Hours**

**Delivery Mode:** Fast-track | High-intensity | Hands-on

**Approach:** Concept → Demo → Guided Practice → Integrated Use Case

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### Program Design Logic (for Client Assurance)

- **No topic removed** – all original content retained
  - Reduced repetition across Excel & Power BI
  - Focus on **business use cases instead of feature-by-feature teaching**
  - Single **end-to-end dataset** used throughout the program
  - Capstone embedded across sessions (not treated as a separate day)
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### Fast-Track Structure (20 Hours Total)

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#### Session 1 (4 Hours)

##### Advanced Excel – Data Analysis & Productivity

##### Coverage:

- Advanced Excel interface, productivity tools & best practices
- Advanced formulas and functions:
  - Logical: IF, IFS, SWITCH
  - Lookup: XLOOKUP, INDEX–MATCH
  - Dynamic arrays: FILTER, SORT, UNIQUE
- Text, date & financial functions
- Error handling & formula auditing
- Efficient techniques for large datasets

##### Methodology:

- Function clustering
- Side-by-side formula comparisons
- Business case–based exercises

##### Outcome:

Participants build optimized, scalable Excel models quickly.

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## **Session 2 (4 Hours)**

### **Advanced Excel – Automation, Modeling & Dashboards**

#### **Coverage:**

- Data validation using formulas & custom rules
- Advanced Pivot Tables & Pivot Charts:
  - Calculated fields & measures
  - Slicers & timelines
- Power Query in Excel:
  - Importing, cleaning, transforming data
  - Merge & append queries
- What-If analysis:
  - Goal Seek
  - Scenario Manager
  - Data Tables
- Dashboard design principles
- Introduction to Excel automation:
  - Macro recording overview

#### **Methodology:**

- One dashboard built live end-to-end
- Guided lab on pivot-driven dashboards

#### **Outcome:**

Participants automate reports and build interactive Excel dashboards.

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## **Session 3 (4 Hours)**

### **Power BI – Data Preparation & Modeling**

#### **Coverage:**

- Power BI ecosystem:
  - Desktop, Service & Mobile
- Connecting to data sources:
  - Excel, CSV, databases
- Power Query Editor:

- Data transformation & cleansing
- Data modeling:
  - Relationships & cardinality
  - Star schema best practices
- Introduction to DAX:
  - Calculated columns vs measures
  - Core DAX functions

**Methodology:**

- Same Excel dataset reused
- Model-first BI approach

**Outcome:**

Participants design clean, scalable Power BI data models.

**Session 4 (4 Hours)**

**Power BI – Advanced Analytics & Visualization**

**Coverage:**

- Advanced DAX:
  - CALCULATE, FILTER, ALL, RELATED
  - Time intelligence functions
- Advanced visuals:
  - Custom visuals
  - Formatting best practices
- Interactivity:
  - Slicers, filters
  - Drill-down & drill-through
  - Tooltips
- Dashboard design principles
- Performance optimization techniques

**Methodology:**

- Measure-driven visuals
- Optimization tips embedded during build

**Outcome:**

Participants create high-performance, interactive BI dashboards.

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**Session 5 (4 Hours)****Power BI – Deployment, Automation & Business Insights****Coverage:**

- Publishing to Power BI Service
- Data refresh & gateway concepts
- Row-level security (RLS)
- Integrating Power BI with Excel & other tools
- Data storytelling best practices

**Capstone Project (Integrated):**

- End-to-end solution:
  - Excel data → Power Query → Data Model → DAX → Power BI Dashboard

**Wrap-Up:**

- Review of best practices
- BI roadmap & next steps

**Outcome:**

Participants deploy secure BI solutions and communicate insights effectively.