

Excel & Power BI Accelerator

With capstone projects

Duration 40 Hours

Prerequisites:

- ✓ Latest windows laptop
 - ✓ Office 365 installed
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Day 1 – Excel Foundations & Productivity Essentials

Introduction to Excel (Just Refresh)

- Understanding Workbook, Worksheet, Rows, Columns
- Excel Interface & Navigation
- Creating, Saving, and Managing Files
- Excel Shortcuts & Productivity Tips

Basic Data Handling

- Data Types in Excel
- Entering & Editing Data Efficiently
- Autofill, Flash Fill, Fill Handle
- Sorting & Filtering Data

Essential Formatting

- Cell Formatting Basics
- Number, Currency, Date & Percentage Formats
- Conditional Formatting
- Themes, Styles & Cell Design
- Format Painter
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Formulas & Functions Refresher

- Basic Formula Structure
- SUM, AVERAGE, COUNT, MAX, MIN
- IF Function Basics
- Ifs and Sumifs
- Text Functions
 - LEFT
 - RIGHT
 - MID
 - CONCAT
 - TEXTJOIN
 - LEN
 - TRIM

Excel Best Practices

- Freeze Panes
 - Page Layout & Print Setup
 - Protecting Sheets & Cells
 - Named Ranges Introduction
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Day 2 – Data Analysis, Validation & Advanced Excel

Data Cleaning Techniques

- Remove Duplicates
- Find & Replace
- Text to Columns

- Handling Blank Cells
- Cleaning Imported Data
- TRIM, CLEAN, SUBSTITUTE Functions

Data Validation

- Creating Drop-down Lists
- Restricting Invalid Entries
- Input Messages & Error Alerts
- Dependent Drop-downs

Lookup & Reference Functions

- VLOOKUP
- HLOOKUP
- XLOOKUP
- Filter

Logical & Advanced Functions

- Nested IF
- IFS
- AND / OR
- IFERROR
- COUNTIF / COUNTIFS
- SUMIF / SUMIFS

Working with Tables

- Creating Excel Tables
- Structured References
- Table Design Features
- Dynamic Table Benefits

Day 3 – Pivot Tables, Dashboards & Power Excel

Pivot Table Fundamentals

- Creating Pivot Tables
- Pivot Table Layouts
- Grouping Data
- Sorting & Filtering Pivot Data
- Value Field Settings

Advanced Pivot Tables

- Calculated Fields
- Pivot Charts
- Slicers & Timelines
- Multiple Consolidation Ranges
- Interactive Reporting

Dashboard Design Concepts

- KPI Reporting
- Interactive Dashboard Planning
- Best Practices for Dashboard Design
- Choosing Correct Charts

Advanced Charts & Visualization

- Column, Bar, Pie, Line Charts
- Combo Charts
- Dynamic Charts
- Sparklines

Introduction to Power Excel Features

- Power Query Overview
 - Power Pivot Introduction
 - Data Model Basics
 - Connecting Multiple Data Sources
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Day 4 – Power Query & Power BI Foundations

Introduction to Power BI

- Understanding Power BI Ecosystem
- Power BI Desktop Interface
- Power BI Workflow
- Importing Data into Power BI

Data Preparation in Power BI

- Data Cleaning in Power Query
- Transforming Data
- Merge & Append Queries
- Changing Data Types
- Handling Errors & Null Values

Data Modeling

- Relationships
- Star Schema Basics
- Fact & Dimension Tables
- Model Optimization Basics

DAX Fundamentals

- Understanding DAX
- Calculated Columns

- Measures
- Basic DAX Functions
 - SUM
 - COUNT
 - CALCULATE
 - DIVIDE

Power BI Visualizations

- Tables & Matrix
 - Cards & KPI Visuals
 - Bar, Column & Line Charts
 - Maps
 - Slicers & Filters
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Day 5 – Advanced Power BI, Dashboards & Publishing

Advanced DAX Concepts

- Time Intelligence Functions
- FILTER Function
- ALL Function
- Variables in DAX
- Ranking Calculations

Interactive Dashboard Development

- Drill Through
- Drill Down
- Bookmarks
- Tooltips

- Navigation Buttons

Advanced Reporting Features

- Conditional Formatting in Power BI
- Custom Visuals
- Row Level Security Basics
- Performance Optimization Basics

Publishing & Sharing

- Power BI Service Overview
- Publishing Reports
- Creating Dashboards in Service
- Sharing & Collaboration
- Workspace Basics
- Exporting Reports

Real-World Business Reporting Project

- Sales Dashboard
- HR Dashboard
- Finance Dashboard Concepts
- End-to-End Dashboard Building

Demo on AI tools for productivity

Final Wrap-Up

- Excel + Power BI Integration
- Industry Best Practices
- Common Interview Questions
- Career Guidance for Data & BI Roles

