

# Power BI Data Analytics & Workflow Automation Boot Camp: Prerequisites and Curriculum



## Prerequisites

**Windows Operating System or Macbook Parallel System**

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## Part 1: Foundations of Power BI & Excel Integration

Build a strong foundation in Power BI Desktop and Web Services while leveraging Excel as a data source and building compelling visuals

Introduction to Power BI & Ecosystem (Desktop, Service, Mobile)

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During this portion of the course, we will provide you with an eXcelerate issued email address to use for the duration of the boot camp in order to utilize Power BI Web Services.

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Data source connections

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Data import via Power Query

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Chart selections

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Filtering and sorting data

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Formatting (Colors, themes, branding, fonts, logos)

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Dynamic dashboards

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Aggregations

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Data types

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## Part 2: Data Modeling & Power Automate Integration

Learn how to model data and update data automatically from Sharepoint and Excel via Power Automate.

### Overview of data modeling & relationships

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During this portion of the course, we will review how to connect/relate data from various data sources.

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### Power Automate integration

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During this portion of the course, we will explore how to automate key reporting and workflow tasks using Power Automate. Students will learn how to trigger actions such as:

- Refreshing Power BI dashboards based on Excel updates
- Sending automated email or Teams notifications when KPIs cross thresholds
- Logging activity for data-driven alerts.

These automation workflows enhance the efficiency, responsiveness, and distribution of insights built in Power BI.

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## Parts 3 – 4 : Advanced Power BI Desktop, AI for DAX & Creating a Portfolio in Power BI Web Services

Automate dashboards, use AI to assist in writing DAX (Power BI logic) to calculate data, and refresh/create dashboards in Power BI Web Service.

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DAX measures vs. columns

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Grouped tables

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Intermediate formulas

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Calculate

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Filter

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Aggregates (SUM, COUNT, AVG, MAXX, etc.)

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TOPN (top/bottom performers)

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## **Part 5: Final Project Delivery**

Deliver a polished business-ready solution combining Excel, Power BI, and Power Automate.

**Each student will showcase their finalized automated Power BI dashboard in a 5 to 10 minute presentation.**

