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Learning Style: Virtual Classroom

Technology:

Difficulty: Beginner

Course Duration: 2 Days

Next Course Date: **May 18, 2026**

## Power BI Essentials: PowerBI for Data Transformation, Reporting and Analytics (TTDPB01)



### About This Course:

Power BI Essentials is a two-day, hands-on course designed for those new to Power BI and walks you through basic workflows, from shaping and preparing data in Power Query Editor to building relationships in a data model and writing basic DAX calculations. You will learn how to apply best practices for formatting reports, use slicers and filters to improve interactivity, and create drill-through pages for deeper insights. You will also explore how to enhance reports with hierarchies, tooltips, and calculated columns, making your visuals clearer and more dynamic. As you progress, you will work with Power BI Service to publish and share reports, set up refresh schedules, and manage workspaces effectively.

## **Course Objectives:**

- Connect, transform, and prepare data using Power Query Editor, ensuring accuracy and consistency before analysis.
- Build relationships between data tables, understanding when to use one-to-one, one-to-many, and many-to-many relationships.
- Write basic DAX calculations to create custom measures, calculated columns, and tables for more meaningful insights.
- Design interactive reports with slicers, filters, hierarchies, and tooltips to improve user experience and engagement.
- Publish reports to the Power BI Service, manage workspaces, and set up refresh schedules for seamless data updates.
- Apply best practices for report performance and formatting, ensuring reports are both efficient and visually compelling.

## **Audience:**

- This course is ideal for professionals who want to start using Power BI to analyze and visualize data efficiently. It is designed for business analysts, data professionals, report developers, and anyone who needs to turn data into actionable insight

## **Prerequisites:**

- A general knowledge of database concepts (fields, records, relationships)
- An awareness of key business priorities such as revenue, profitability, and financial accounting is desirable.
- Familiarity with Excel would also be helpful.

## Course Outline:

### 1. Introduction to the Power BI ecosystem

- What is Power BI?
- Overview of the Power BI Ecosystem
  - Power Query Editor; Power BI Desktop; Power BI Service
- Tour of the Power BI Desktop
- Tour of the Power Query Editor

### 2. The Extract, Transform, Load process

- Introduction to the Power Query Editor
- Clean and transform raw data using the ribbon
- Mastering data types
- Understanding some of the PQE 'rules'
- Leveraging Applied Steps
- Finding nulls/blanks/empties
- Adding custom columns
- Removing unnecessary columns
- Introduction to the 'M' language
- Modifying the M in the Formula Bar
- Merging/append data sources
- Saving/applying transformations

### 3. Creating the data model

- What is a data model? Why is it necessary?
- Reviewing relationships/creating new ones
  - One to many; Many to many; One to one
- Using basic DAX to add data
  - Measures; Calculated columns; Tables
- Introduction to filter context and DAX

### 4. Enhancing the semantic model

- Hierarchies
- Hidden fields
- Adding synonyms
- Adding descriptions

### 5. Creating a date table

- Why is a date table necessary?
- Where is the date table created?
- Creating a basic date table
- Connecting in a date table

## 6. Creating a report

- Formatting pages and using themes
- Choosing and placing visuals
- Formatting visuals
- Visual header controls
- Editing visual interactions
- Slicers and the filter panel
- Syncing slicers
- Formatting tooltips/creating a tooltip page
- Creating a drill through
- Understanding and evaluating page/visual performance

## 7. Publish a report and semantic model

- Publish the report to a designated workspace
- Tour of the Power BI Service
- Apps; Workspaces; My workspace
- Review of the five types of a content a workspace can store
- Reports; Dashboards; Datasets; Dataflows; Apps

## 8. Understanding Workspaces

- Viewing a report or dashboard
- Review of menu options
- Understanding editing privileges in Workspaces
- Review of menu options in edit mode
- Editing a report and saving changes
- Creating a dashboard
- Setting up a refresh schedule
- Creating an app and defining audiences
- Publishing a report or dashboard to an app