



## Power BI – The Basics Course



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## Introduction:

Power BI offers a wide variety of capabilities, ranging from custom data connectors to custom dashboard visuals. In this course shines a spotlight on one of its most powerful and practical features: dataflows. Using dataflows in Power BI, you can easily ingest, transform, integrate, and enrich data from a wide variety of sources. It will explain how to boost efficiency and eliminate duplicate work by using dataflows to scale the extract, transform, and load ETL process across many users of Power BI data and dashboards. It demonstrates how to connect to various data sources within the Power BI cloud platform; leverage Power Query Online to transform data into useable data sets accessible to users; connect a Power BI Desktop file to a Power BI dataflow in the cloud; share dataflows to ensure that several users can connect to the same ETL process; schedule refresh schedules for those dataflows.

In this course, you will learn how to use the fundamental concepts and tools of Power Bi, Office 365, SharePoint Online, Microsoft Excel 2016, and Excel Online to build business solutions that help your organization move forward.

## Targeted Groups:

- Power Users
- Developers
- BI developer
- Business Analysts
- Technical Specialist

## Course Objectives:

At the end of this course the participants will be able to:

- Analyze, transform and present data rapidly
- Understand the Power BI platform
- Set up queries to extract and transform data
- Create efficient data models
- Design and publish interactive reports
- Use DAX calculations confidently

## Targeted Competencies:

- Loading data and data modeling
- DAX fundamentals
- Logical functions
- Power BI service
- Power BI visualizations

## **Course Content:**

### **Unit 1: Introduction to the Power BI Platform:**

- Power BI Platform Architecture
- Datasets and External Data Sources
- Power BI Integration with SaaS Applications
- Understanding Power BI Workspaces
- Creating Reports and Dashboards with Power BI

### **Unit 2: Shape and Extract Data using Power Query:**

- Power Query
- Power Query Editor
- Connecting to External Data Sources
- Transforming and Reshaping Data
- Publishing Queries to the Data Catalog

### **Unit 3: Modeling Data for Analytics using Power Pivot:**

- Data Modeling with Power Pivot and the Tabular Model
- Understanding Tables and Table Relationships
- Introduction to Data Analysis Expression language DAX
- Extending Tables with Calculated Columns and Measures
- Creating Dimensional Hierarchies

### **Unit 4: Support Time Intelligence by Extending Datasets:**

- Understanding Evaluation Contexts
- Creating a Time Dimension Table
- DAX Time Intelligence Support
- DAX Time Intelligence Functions

### **Unit 5: Building Dashboards and Reports with Power BI:**

- Designing Reports using Power BI Visualizations
- Creating Interactive Reports using Filters and Slicers
- Creating Power BI Dashboards

### **Unit 6: Building Dashboards for Mobile Devices:**

- Power BI Architecture for Mobile Devices
- Power BI Apps and Supported Mobile Platforms
- Configuring Mobile Devices for Power BI
- Dashboard Design Principles for Mobile Devices

## **Unit 7: Building and Deploying Power BI Content Packs:**

- Content Packs and the Content Gallery
- Organizational Content Packs
- Customizing and Personalizing Content Packs
- Data Security with Content Packs

## **Unit 8: Utilizing the New BI Featured in Excel 2016:**

- Data Model Support in Excel 2016
- Power Query Enhancements in Excel 2016
- Power Pivot Enhancements in Excel 2016
- Creating PivotTables, Graphs and Charts from a Data Model
- Designing Dashboards with Excel 2016