



Digital Transformation and Innovation

Power BI Data Visualization and Dashboards

Course Introduction

In this training program, Participants will learn why Power BI offers a comprehensive set of Business Intelligence tools for their data analysis and visualization goals and how to use these tools to create effective dashboards and fulfill all of the above tasks - and more.

Target Audience

1. Data Analyst
2. Business Intelligence Analyst
3. Data Scientist
4. Financial Analyst
5. Business Analyst
6. Marketing Analyst
7. IT Manager
8. Reporting Specialist
9. Operations Manager
10. Dashboard Developer

Learning Objectives

- Get to know the different tools of the Power BI universe and learn how to use them.
- Understand Power BI Desktop and its components.

- Learn how to use the Query Editor to connect Power BI to various source. types, how to work on the Data Model and understand the difference between those two steps.
- Understand How to work in the different views of the Data Model.
- Understand How to create calculated columns and measures.
- Master building relationships between different tables.
- Master creating a report with different interactive visualization types.
- Learn how to use Power BI Service (= Power BI Pro) to create dashboards and to share and publish your results.
- Understand how to access your results from multiple devices using Power BI Mobile.
- Understand How to create custom visuals using typescript and the Power BI Developer Tools.

Training program Methodology

At "Boost," we believe in the importance of trainee participation in the training process. Therefore, we follow the "30% - 70%" methodology in this training program. This approach allocates 30% of the program time to a direct explanation of training material, while the remaining 70% is dedicated to a variety of practical activities aimed at achieving comprehensive competence in acquiring knowledge, skills, and required experience.

In this training program, we focus on designing a variety of activities, providing advice, and sharing diverse experiences. This transforms the trainee to an active participant in the training process. This positively impacts their ability to achieve the program's objectives quickly and within the specified timeframe.

To ensure the desired training objectives are achieved, we utilize the following strategies and methods:

- Lectures.
- Discussions.
- Case studies.
- Practical Exercises.
- Role-playing activities.

A detailed report is submitted to each participant and the training department in your organization on the results of the participant's performance and the return on training.

Course Outline

- Day 01

Introduction to Power BI:

- What is PowerBI?
- How can it be used to analyze financial data?
- First Project 1/3: Installing Power BI Desktop & Source File Connection.
- First Project 2/3: Working in the Query Editor.

- First Project 3/3: The Data View & Creating our First Visuals.
- Exploring the Interface of the Data Model.
- Understanding the Power BI Desktop Workflow.
- Understanding the Query Editor Interface.
- Important! Creating the Project File & Recommended Settings.
- Connecting Power BI Desktop to Source Files.
- Keeping & Removing Rows.
- Working with Filters.
- Removing Empty Rows.
- Appending Queries.
- Working with Columns.
- Formatting Data & Handling Formatting Errors.
- Pivoting & Unpivoting Data.
- Splitting Columns.
- Creating Groups & Cleaning Up our Project.
- Creating a Group.

• Day 02

Power BI Architecture:

- Using Excel as a data source.
- Using a folder as a data source.
- The Power BI data model.

Data Analysis:

- Introduction to analytics.
- Explore statistical summary.
- Identify outliers with Power BI visuals.
- Group and bin data for analysis.

- Apply clustering techniques.
- Conduct time series analysis.
- Use the Analyze feature.
- Use advanced analytics custom visuals.

• Day 03

Understanding Relationships:

- Cardinality: Many-to-One & One-to-One.
- Cross Filter Direction & Many-to-Many.
- Understanding Active Properties.
- Understanding the DAX Basics.
- How to properly use the DAX Syntax.
- Supported DAX Data Types.
- Understanding "Data Category".
- Understanding the CALENDAR Function.
- Understanding IF & RELATED.
- Calculated Columns vs Measures.
- Understanding Basic Visual Concepts.
- Getting Started with Visuals & Reports.
- Understanding Tooltips & Interactions.
- Diving Intro Hierarchies & Drill Mode.
- Data Colors & Conditional Formatting.
- Formatting Report Pages.

• Day 04

Working with Report Themes:

- Using the Slicer.
- Understanding Default Summarization & Sorting.
- Working with Treemaps & Tables.
- Understanding Filter Types (Visual, Page & Report).
- Creating Combined Visuals & Waterfalls.

Improving Business Decisions using Power BI Results:

- Reports vs dashboards.
- The Natural Query Language “Q&A”.
- Analytics features.
- Forecasting.
- Data alerts.
- Share and Collaborate.

Final Project:

At the end of the program, the trainer summarizes all the material explained during the previous days and focuses on the most important points which are applicable in our daily life. Later, the trainer splits the class into several groups (teams) and distributes the final project which is a simulation of real life tasks and challenges. Every team starts applying what is requested in the final project. Meanwhile, the trainer passes through team members and tries to help them in case of any difficulty faced. At the end of the day, every team should present his final work in front of the class and an open discussion is held to assess the work.

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 14, 2025	April 18, 2025	5 days	4250.00 \$	UAE - Dubai
Sept. 22, 2025	Sept. 26, 2025	5 days	4950.00 \$	Ireland - Galway
Dec. 22, 2025	Dec. 26, 2025	5 days	4250.00 \$	UAE - Dubai