

# **Data Analysis with Power BI**

#### **Audience Course Data Analysis with Power BI**

The course Data Analysis with **Power BI** is intended for data analysts who want to use Power BI to analyze their data and to make statistical analyzes.

#### **Prerequisites Course Data Analysis with Power BI**

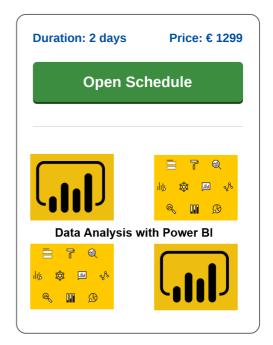
Experience with Excel is required and experience with **programming** is beneficial to good understanding but is not required.

#### **Realization Training Data Analysis with Power BI**

The theory is discussed on the basis of presentations and examples. The concepts are explained with demos. Then there is time to practice with the theory yourself. Power BI desktop is used as a development environment. Course times are from 9:30 am to 16:30 pm

# **Certification Course Data Analysis with Power BI**

After successful completion of the course participants receive an official certificate Data Analysis with Power BI.



# **Content Course Data Analysis with Power BI**

In the course Data Analysis with Power BI participants learn to combine data from various sources and to make data analyzes with interactive dashboards and BI reports. Power BI is a Data Visualization and Business Intelligence Tool (BI) and offers various connectors and services with which users can read data and create BI reports.

#### **Power BI Architecture**

The course Data Analysis with Power BI starts with an explanation of the architecture of Power BI with Power BI Desktop, Power BI Gateway and Power BI Services and how to create reports with Power BI.

#### **Power BI and Data**

Subsequently attention is paid to making connections with data sources such as plain text files, CSV files, SQL Databases, XML data, JSON data and Excel files. It is also discusses how data in the cloud and in online services can be accessed by Power BI.

# **Power BI Components**

The various components that make up Power BI such as Dashboards, Tiles, Power Query, Power Pivot, Power View and Power Map are also treated in the course Data Analysis with Power BI. And the Data Analysis Expressions (DAX) with conditionals, data types and information functions, logical functions and table functions that Power BI has available are reviewed as well.

### **Data Modeling**

Part of the program of the course Data Analysis with Power BI is also Data Modeling in Power BI with relationship detection, calculated columns and tables and DAX formulas and expressions. And attention is paid to the creation and configuration of Dashboards for displaying data.

#### **Filters**

Next the various filters that Power BI has to offer are discussed such as Page Level Filters, Report Level Filters and Drill Through Filters and Queries and Slicers in Power BI are treated.

## **Power BI REST API**

Finally the course Data Analysis with Power BI explains and demonstrates the Power BI REST API which provides service endpoints for embedding, administration and user resources.



# **Modules Course Data Analysis with Power BI**

| Module 1 : Power BI Intro | Module 2 : Data Sources        | Module 3 : Building Blocks |
|---------------------------|--------------------------------|----------------------------|
| What is Power BI?         | Data Connections               | Visualizations             |
| Data Visualization        | Import                         | Datasets                   |
| Business Intelligence     | Direct Query                   | Reports                    |
| Installing Power BI       | Flat Files                     | Dashboards                 |
| Power BI Architecture     | CSV Files                      | Tiles                      |
| Power BI Desktop          | SQL Databases                  | Power BI Components        |
| Power BI Gateway          | XML and JSON Data              | Power Query                |
| Power BI Services         | Excel Connections              | Power Pivot                |
| Creating Reports          | Azure Cloud                    | Power View                 |
| Mobile Apps               | Online Services                | Power Map                  |
| Module 4 : DAX Functions  | Module 5 : Data Modeling       | Module 6 : Dashboards      |
| Data Analysis Expressions | Information Modeling           | Creating Dashboards        |
| Conditional Statements    | Navigation                     | Pinning Visualizations     |
| Integers and Decimals     | Relationships                  | Configuring Dashboards     |
| String and Binary Objects | Relationship Detection         | Sharing Dashboards         |
| Date and Time Functions   | Calculated Columns             | Creating Measures          |
| Information Functions     | DAX Formulas                   | Tiles in Dashboard         |
| Logical Functions         | Calculated Tables              | Data Gateway               |
| Statistical Functions     | DAX Expressions                | Standard Mode              |
| Table Functions           | Managing Time Data             | Personal Mode              |
| DAX Context               | Drill Feature                  | Automatic Updates          |
| Module 7 : Filters        | Module 8 : Queries and Slicers | Module 9 : REST API        |
| Selection Criteria        | Query Editor                   | Admin Operations           |
| Visual Level Filters      | Inquiry Strip                  | Capacities Operations      |
| Page Level Filters        | Inside Sheet                   | Dashboards Operations      |
| Report Level Filters      | Question Settings Sheet        | Embed Token Operations     |
| Drill Through Filters     | Power BI Slicers               | Gateways Operations        |
| Applying Filters          | Date Slicer                    | Groups Operations          |
| Filter Pane Experience    | Range Slicer                   | Imports Operations         |
| Format Filter Pane        | Sync Slicers                   | Reports Operations         |
| Apply Filter in Workspace | Formatting Slicers             | Datasets Operations        |