

Updated 05/17/2024

Sign up

Advanced Power BI training

3 days (21 hours)

Presentation

Have you attended our Power BI training course, or do you regularly use Microsoft's Business Intelligence tool? If you want to master the software's advanced features, this course is for you.

This course will enable you to deepen your technical knowledge of PowerBI. By the end of this advanced Power BI course, you'll have a sound knowledge of the DAX and M languages.

You'll learn about the tool's architecture, best practices for importing data and performing joins, how to improve your dashboards, advanced data modeling and how to use the REST API.

This advanced training course will introduce you to the latest version of the program, [PowerBI 2.128](#).

Objectives

- Good knowledge of M
- Good knowledge of DAX
- Best practices for improving your dashboards
- Advanced data modeling
- Using Power BI's REST API

Target audience

- Data Scientists
- Developers
- Data analysts
- Project managers

- Consultants
- Business Analysts

PREREQUISITES

Have attended our [PowerBI training](#) course or have a good knowledge of the tool.

Software requirements

- Have Power BI desktop installed

Recommendations for pre- and post-course reading

- The [complete guide to](#) understanding the Dax language
- Review the [official Power BI blog](#)
- The new [Copilot and Power BI](#)
- A 1-hour video tutorial on Power Bi Advanced:

Power BI Advanced training program

A reminder of the basics

- Overview of Power BI objects
- Best practices for data preparation and visualization
- Introducing the latest additions to PowerBI

Architectural overview

- Shared architecture
- Self-service architecture
- Architecture for companies

Advanced data import

- Combine multiple data sources
- Modeling with DAX
- Best practices for data import
- Using DirectQuery
- Connection live
- Data import vs. DirectQuery vs. live connection

Advanced DAX features

- Presentation of evaluation contexts
- CALCULATE and CALCULATETABLE
- CALCULATE rules and modifiers
- Variables and their scopes
- Table variables
- Creating a table with DAX
- Create a date table
- Time intelligence functions
- Filter functions
- Using tables as filters
- Creating calculated tables
- Optimizing use of DAX

Joins

- GENERATE and CROSSJOIN
- NATURALINNERJOIN
- NATURALLEFTOUTERJOIN
- UNION
- LOOKUPVALUE

Learn the M language

- Power Query tool reminder
- Variable types
- Complex variables
- Operators
- The conditions with M
- Functions and loops
- Debugging

Advanced visualization

- Source page
- The landing page
- Using favorites
- Add images and organize your visuals
- Create buttons
- Add a text block for comments
- Export your template

Advanced modeling

- Concatenate columns
- Text functions (LEFT, RIGHT, MID...)
- Functions for rounding values
- Create alerts
- Cross-table measurements

- Advanced aggregation functions
- Filter measurements

Using the PowerBI REST API

- Integrating data into a dataset
- Create a dataset
- Get a dataset to add rows
- Adding rows to a table

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.