

Course : Analyze and visualize data with Microsoft Power BI

Practical course - 4d - 28h00 - Ref. AVD

Price : 2750 € E.T.

★★★★☆ 4,6 / 5

BEST ActionCo

Formation éligible au financement Atlas

On completion of the course, participants will be able to use the Microsoft Power BI data analysis solution to create interactive reports and dashboards.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Learn about the capabilities of Microsoft Power BI
- ✓ Obtain, model and render data
- ✓ Design and create reports for data analysis
- ✓ Create interactive dashboards
- ✓ Securely publish and share dashboards in Microsoft OneDrive and SharePoint workspaces
- ✓ Apply and perform advanced report analysis
- ✓ Using Power BI best practices

Intended audience

Data analysts, data and business intelligence professionals, or anyone wishing to exploit data and create interactive dashboards.

Prerequisites

Basic knowledge of Microsoft Windows operating system and data analysis. In-depth knowledge of Excel.

Practical details

Teaching methods

Alternating lectures and practical work.

Course schedule

PARTICIPANTS

Data analysts, data and business intelligence professionals, or anyone wishing to exploit data and create interactive dashboards.

PREREQUISITES

Basic knowledge of Microsoft Windows operating system and data analysis. In-depth knowledge of Excel.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

1 Introduction

- Introducing Microsoft BI.
- The Power BI suite: Power BI Desktop, Power BI Service and Power BI Mobile applications.
- Introducing the Power Query editor.

2 Get data

- Extract, transform and load data into Power BI.
- Use flat files, Excel, relational databases, SaaS sources, web.
- Choose columns, select rows, filter, sort and delete duplicates.

Hands-on work

Create connections to import data from various sources.

3 Transforming data

- Clean up and complete data sets.
- Split columns, format and define data types, assemble and merge tables.
- Create calculated columns. Stack and merge queries.

Hands-on work

Data manipulation to reformat and modify data types.

4 Define the data model

- Use the diagram view to define relationships between tables.
- Design measurements using statistical functions.
- DAX functions for designing elaborate measurements: CALCULATE, ALL, ALLEXCEPT, FILTER, RANKX etc.
- Use DAX Time Intelligence functions.

Hands-on work

Create a data model. Perform statistical measurements.

5 Power BI report design

- Create reports, pages and dashboards.
- Display data: table, matrix, map.
- Use data and formatting parameters.
- Insert visual elements. Use cartographic visualizations.
- Import visual elements (.pbviz) from the gallery: gauges, images, etc.
- Add filtering tools, segments, KPIs. Layout for screen or smartphone.

Hands-on work

Layout a report. Format data. Design a visual and interactive dashboard.

TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

6 Introducing Power BI Online

- Overview of Power BI/Power BI Pro features.
- Publish from Power BI Desktop.
- Report reading functionalities.
- Pin visualizations to a dashboard.
- Presentation of report design with the Power BI service.
- Which datasets in Power BI?

Demonstration

Illustration: create an online report, then consult, use and share published reports.

7 Best practices for designing an advanced model

- Recall the organization of a star model, fact tables and dimension tables.
- Merge queries to reduce flakes.
- Aggregate and stack sources.
- Import data from a list of sources.
- Customize functions and pass parameters in M language.
- Manage errors.

Hands-on work

Design a single table from multiple queries. Batch import a set of workbooks and files. Design a function to clean text.

8 Add interactivity to the report

- Create page backgrounds, themes and report templates.
- Create "master-detail" reports using extraction filters.
- Use the filters tab and the selection tab.
- Use bookmarks for navigation and storytelling.
- Represent with images. Prepare dynamic comments and customize tooltips.

Hands-on work

Define a graphic line and integrate it into a report template. Set up navigation and exploration tools. Present a scenario.

9 Further information

- Work on the time dimension.
- Use variables in DAX to create a calendar, lists and functions to create a calendar in M.
- Accumulate by period. Compare periods.
- Using DAX's advanced measurement functions: the CALCULATE function with multiple conditions and the FILTER function.

Hands-on work

Creation of a calendar table including public holidays. Advanced measurements.

Options

Certification : 80 € HT

TOSA® certification certifies the learner's skills on a 1,000-point scale for a period of 3 years. The TOSA® diploma is issued if the learner's score exceeds 551 points. Once the exam has been taken, the learner can consult his or her results on-line, and receives an e-mail with a certificate, a detailed description of his or her skills, and the diploma within 5 days. The exam lasts 1 H 00 and consists of 35 exercises alternating between manipulations on the software and multiple-choice questions, the difficulty of which varies according to the learner's answers. Unless specifically requested, the course is given by default in French and on the most recent software version. Monitoring is carried out by software and recorded for compliance control purposes.

Times

Courses take place from 09:00 to 12:30 and from 14:00 to 17:30.

Participants may arrive beginning at 08:45. Breaks and lunches are complimentary.

For four- and five-day hands-on courses, sessions end at 16:00 on the last day of the course, regardless of the teaching mode..

Dates and locations

REMOTE CLASS

2026 : 14 Apr., 14 Apr., 19 May, 16 June, 29 Sep., 20 Oct., 17 Nov., 15 Dec.

PARIS LA DÉFENSE

2026 : 14 Apr., 19 May, 16 June, 29 Sep., 20 Oct., 17 Nov., 15 Dec.

LYON

2026 : 16 June, 29 Sep., 15 Dec.

AIX-EN-PROVENCE

2026 : 16 June, 29 Sep.

BORDEAUX

2026 : 16 June, 29 Sep.

DIJON

2026 : 19 May, 29 Sep.

LILLE

2026 : 16 June, 29 Sep.

MONTPELLIER

2026 : 19 May, 29 Sep.

NANTES

2026 : 16 June, 29 Sep., 15 Dec.

RENNES

2026 : 19 May, 29 Sep.

SOPHIA-ANTIPOLIS

2026 : 19 May, 29 Sep.

STRASBOURG

2026 : 16 June, 29 Sep.

TOULOUSE

2026 : 16 June, 29 Sep.

BRUXELLES

2026 : 16 June, 17 Nov.

LUXEMBOURG

2026 : 16 June, 17 Nov.