Course : Power BI: Advanced

Practical course - 2d - 14h00 - Ref. BIG
Price : 1410 CHF E.T.

★★★★½ 4,3 / 5

BEST

Teaching objectives

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

- Use the language M to create optimized data models
- Design sophisticated measures with the language DAX
- Create complex reports with Power BI Desktop
- Create a presentation and scenario tailored to your message.

Practical details

Teaching methods
Combination of lectures and hands-on work.

Course schedule

1 **Overview, refreshers, and best practices**

- Refresher on the design cycle of a Power BI report.
- Connecting and preparing data.
- Understanding the structure of a star schema, fact tables, and dimension tables.
- Expression of need and identifying sources of data.
- Organizing tables and relationships, defining measures, visualization.

2 **Using queries to design an appropriate model**

- Merging requests to reduce snowflakes.
- Aggregating and stacking sources.
- Importing data from a list of sources.
- Customizing functions and passing parameters in M.
- Managing errors.

Hands-on work
Designing a single table from multiple queries. Importing a set of workbooks and files in batches. Designing a function for cleaning up text.

3 Working with the Time dimension

- Using variables in DAX to produce a calendar, lists, and functions to produce a calendar in M.
- Cumulative sum by period. Comparing periods. Cumulative sum over sliding periods.
- Using Time Intelligence functions to create period comparisons, cumulative sums, and sliding periods.
- Using the functions: DATEADD, DATESYTD, DATESBETWEEN, DATESINPERIOD, CLOSINGBALANCE.
- Working with multiple date columns and double relationships with USERELATIONSHIP.
- Filtering data over the current period.

Hands-on work
Creating a calendar table incorporating paid holidays. Measuring progress. Doing a cumulative sum over 12 sliding months.

4 Using advanced DAX functions

- Calculating a cumulative sum with the EARLIER function.
- The CALCULATE function with multiple conditions and the FILTER function.
- The function of managing blank values: ISBLANK.
- DAX table creation functions: FILTER, CALCULATETABLE, ADDCOLUMNS, SUMMURIZE, UNION, etc.

Hands-on work
Taking advanced measurements. Creating cumulative sum and sorting columns. Filtering sorted columns. Working with tables in memory.

5 Display, navigation, and visualizations

- Creating a background, a theme, a report template.
- Using bookmarks for navigation and storytelling.
- Representing with images. Preparing dynamic comments and customizing tooltips.
- Defining a personalized visual with the Synoptic Panel.
- Creating Master Detail reports using drillthrough filters.
- Using the filter pane and selection pane.

Hands-on work
Defining a graphical identity and incorporating it into a report template. Setting up navigation and exploration tools. Presenting a scenario.

Dates and locations

REMOTE CLASS
2026 : 12 Mar., 9 Apr., 4 May, 4 May, 21 May, 11 June, 25 June, 9 July, 13 Aug., 13 Aug., 10 Sep., 1 Oct., 15 Oct., 2 Nov., 2 Nov., 23 Nov., 3 Dec.

LAUSANNE
2026 : 21 May, 13 Aug., 23 Nov.

GENÈVE
2026 : 21 May, 13 Aug., 23 Nov.