

# Power BI – DAX Formulas – Data Analysis Expression

## Description

This course allows participants to deepen their knowledge of PowerPivot and Power BI training by addressing the 120 most important functions (formulas) of the formula expression language and DAX queries (Data Analysis eXpressions) to create pivot tables, more complex with elaborate statistical measures or time-intelligence measures, or create DAX queries.

## Course Content

- Number and category of DAX functions
- Overview of current problematic limitations
- DAX in Models (Column) VS DAX in PVT (Measures)
- Difference between DAX context, DAX context line, DAX context filter and DAX queries
- Converting PowerPivot into cube formulas
- TRIM text function to remove unwanted spaces
- SUBSTITUTE text function to replace characters
- LEFT and FIND text functions to extract a text from the left
- UPPER or LOWER text functions to change the case
- RIGHT, FIND and LEN text functions to extract a text to the right
- CONCATENATE text function to merge texts
- FORMAT text function for rendering texts or numbers
- IF, AND, OR Logical functions for logical tests
- SWITCH and TRUE logical functions to condense IF writing
- IFERROR logic function to handle errors
- YEAR date function to extract the year
- MONTH date function to extract month
- DAY date function to extract the day
- HOUR time function to extract time
- ISTEXT information function to identify whether the returned value is a string
- PATH link function to retrieve parent elements
- PATHITEM link function to target one of the parent elements
- HASONEVALUE and VALUES link functions
- RELATED link function for repatriating data
- COUNTROWS statistic function to count rows
- RELATEDTABLE link function to handle links implicitly
- USERELATIONSHIP link function to select the inactive link
- LOOKUPVALUE filter function for textualizing an item
- DISTINCT filter function
- DISTINCTCOUNT filter function
- ALL filter function
- ALLEXCEPT filter function
- CALCULATE filter function
- Logical filter operators
- LN math function to calculate natural logarithm
- CEILING math function for upper rounding
- FLOOR math function for lower rounding
- MROUND math function for rounding to the nearest given multiple

- SUM and SUMX statistical functions
- AVERAGE and AVERAGEX statistical functions
- COUNT and COUNTX statistical functions
- MIN, MINX and MAX, MAXX statistical functions
- RANK.EQ and RANKX statistical functions
- STDEV.S / STDEV.P and STDEVX.S / STDEVX.P statistical functions
- VAR.S / VAR.P and VARX.S / VARX.P statistical functions
- EVALUATE with CALCULATETABLE reverse DAX functions
- EVALUATE with SUMMARIZE reverse DAX functions
- ADDCOLUMNS reverse DAX function for aliasing
- Using multiple tables
- EVALUATE with ORDER and FILTER reverse DAX functions
- EVALUATE with SUMMARIZE and ROLLUP reverse DAX function
- Référence de pattern DAX
- Time Intelligence Functions
- DAX Patterns
- Power Query vs DAX queries (speed factor)
- Plus a lot of other functions

## **Documentation**

- Digital courseware included

## **Participant profiles**

- Analysts who need to make the PowerPivot's native capabilities more complex by using DAX

## **Prerequisites**

- Participants should have completed the training: Excel - PowerPivot for End-Users

## **Objectives**

- Be prepared for Power BI Desktop trainings

## **Niveau**

Avancé

## **Classroom Registration Price (CHF)**

3900

## **Virtual Classroom Registration Price (CHF)**

3650

## **Duration (in Days)**

5

## **Reference**

MPB-32