EXCEL 2016
Advanced Level

OBJECTIVES

At the end of the course, the participant will be able to apply formulae and functions of a more advanced nature by using supervised individual exercises. They will master the PowerPivot tool to be able to carry out analyses of major quantities of data.

TARGET CLIENTELE

Public

PREREQUISITES

Having taken the intermediate level course

COURSE SYLLABUS

1. **Quick review of intermediate concepts about functions**
   - Syntax for functions
   - Interlinked functions
   - Analyzing a complex formula

2. **Using complex formulae in functions, in categories**
   - Logical
   - Text
   - Date and time
   - Search
   - Matrices
   - Statistics
   - Mathematic
   - Information

3. Establish a decision-making approach
- Define objectives of analysis
- Clarify main concepts of decision-making
  - Measure, dimension, cube, hierarchy
- Make a model of the information and create a relational schematic
  - field, table, relation, main key, foreign key
- Ensure quality of data

4. Use PowerPivot to set the relationship between data and analyze it
- Review list management in Excel
  - Put in a table, filter, sort, insert a Pivot table
- Exploit various data sources
  - Excel, Access, Web, text files (csv, txt)
- Use the assistant in SQL Request to filter data sources
- Prepare data to facilitate analysis
- Define relationships
- Create Pivot tables and charts based on PowerPivot
- Use segments (slicers) in Pivot tables

5. Exploit advanced functions of PowerPivot
- Add calculated columns and measures
- Exploit DAX formula language
- Use the main DAX functions
  - Classic functions (logical, text, dates)
  - Filter functions
  - Time intelligence functions

6. Create and interpret a dashboard
- Create graphic indicators
  - Gauge, tachymeter, noticeable
- Create a dashboard in an Excel Spreadsheet, protect the layout, anticipate data updating

7. Discover the use of Pivot tables
- Break the myth of complexity
- Discover data analysis tools
- Liven presentation of data
- Centralize filter, sorting and grouping data tools

8. Create a table step-by-step
- Choose data
- Organize data
- Transform table
- Format data
- Filter data

9. Create a chart with data
- Link data to an image