



Mastering DAX Workshop

This **three-day** workshop is a complete course about the DAX language. DAX is the native language of Power Pivot for Excel, Power BI Desktop and SSAS Tabular models in Microsoft SQL Server Analysis Services 2012/2014/2016. The training is aimed at users of Power BI Desktop, Power Pivot for Excel and at Analysis Services developers that want to learn and master the DAX language. The goal of the course is to teach all the features of the DAX language, providing the knowledge to write formulas for common and advanced business scenarios. All the attendees get a copy of the book *The Definitive Guide to DAX*.

Prerequisite: Attendees need to have a basic knowledge of the data modeling in Power Pivot for Excel, or Power BI Desktop, or Analysis Services Tabular modeling. A prerequisite of the course can be the participation to a SSAS Tabular or PowerPivot Workshop, or having an equivalent realworld experience.

The training is aimed at developers and users who want to exploit the full potential of DAX language.

Training Material Delivered to Each Attendee:

- A copy of the book *The Definitive Guide to DAX*.
- Course slides in PDF format
- Demo files used in the course

Goals of the Training:

- Creating DAX expressions for measures and calculated columns
- Querying Tabular models, Power BI and Power Pivot workbooks by using DAX
- Creating advanced data models in Power Pivot and SSAS Tabular by leveraging on DAX features
- Practicing in hands-on lab sessions assisted by our teachers



Course Outline:

- DAX Basics
- Table Functions
- Evaluation Contexts
 - Filter and Row Context
 - CALCULATE
- Evaluation Contexts and Relationships
- Time Intelligence Calculations
- DAX as a Query Language
- Statistical Functions
- Advanced Table Functions

- Advanced Evaluation Context DAX
 - Understanding Cross filters
 - Internal Materialization
- Calculations over Hierarchies
- Parent/Child Hierarchies
- Advanced Time Intelligence in DAX
- Advanced Relationship Handling
 - Physical Relationships
 - Virtual Relationships
 - Examples of Complex Relationships

Hands-On Lab Sessions

Bring your own notebook to run hands-on lab sessions assisted by our teachers. We provide a detailed setup guide and exercise files so that you can prepare your computer in advance. You will need to have a recent version (no older than 3 months) of Power BI Desktop installed in your notebook. You will receive the setup notes two weeks before the course.

Public Open Workshops

We offer a public schedule of open classes, where we welcome individual registrations of participants from different companies and backgrounds. In this case, we will follow the default course program with all the examples, based on the standard Contoso database along with other samples provided by us.

You can find all the available dates and locations at www.sqlbi.com/training/mastering-dax.

Private Classes

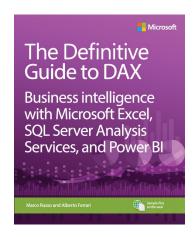
We offer private versions of the workshop, delivered to participants from a single company. In this case, we can either follow the standard course or, if required and upon previous agreement, we can prepare a range of examples taken from the company data warehouse or OLTP system. At the end of the course, the participants might have one or more projects already working on their data.

If this is the preferred option, the customer must supply us all the data needed to create the examples and the relevant documentation describing the database structure and the required analysis at least ten days prior to the beginning of the course. As an alternative, we can extend the course by one day and provide this service at the customer's site, working side by side with the participants to build a set of startup workbooks.

Contact us at info@sqlbi.com to arrange private classes.



Learn DAX language directly from the authors of the book The Definitive Guide to DAX and DAX Patterns website!





Marco Russo

Marco is a Business Intelligence consultant and mentor. His main activities are related to data warehouse relational and multidimensional design, but he is

also involved in the complete development lifecycle of a BI solution. He has particular competence and experience in sectors like financial services (including complex olap designs in banking area), manufacturing and commercial distribution. He achieved the unique SSAS Maestro certification and is also a Microsoft Certified Trainer with several Microsoft Certified Professional certifications.

More info at www.sqlbi.com/marco-russo

Alberto Ferrari

Alberto is a Business Intelligence consultant. He shares his interests in two main areas: methodological approach to the BI development lifecycle and performance tuning of ETL and SQL code.



His main activities are with SSIS and SSAS for the bank, manufacturing and statistical areas. He is also a speaker in international conferences like European PASS Conference and PASS Summit.

He achieved the unique SSAS Maestro certification.

More info at www.sqlbi.com/alberto-ferrari

SSAS MAESTRO by Microsoft



Microsoft Partner

Gold Business Intelligence
Gold Data Platform

Register today on

www.sqlbi.com/training/mastering-dax

