

Microsoft Power BI Dax Level 1 Course Outline

Duration: 2 Days

Unlock the power of your data with the Microsoft Power BI DAX training course. Designed for beginners, this course provides a solid foundation in Data Analysis Expressions (DAX), helping you create dynamic calculations and gain deeper insights from your data. Whether you're new to DAX or looking to enhance your Power BI skills, this hands-on course will teach you how to write and apply basic DAX formulas effectively.

What You'll Learn

- Understand the fundamentals of DAX, including data types, operators, and calculations.
- Explore evaluation contexts, including row and filter contexts, and how they impact calculations.
- Master table functions like FILTER, ALL, and VALUES to create dynamic data models.
- Learn to use CALCULATE and CALCULATETABLE for advanced filtering and data manipulation.
- Apply DAX to real-world scenarios, such as time intelligence, cumulative totals, and moving averages.

Course Prerequisites

This course is designed for individuals with foundational Power BI knowledge who are ready to explore DAX. To make the most of your training, we recommend:

- **Basic Power BI skills:** Familiarity with creating reports, importing data, and using visuals.
- **Intermediate Excel experience:** Understanding of functions like SUM, IF, and VLOOKUP, and working with tables.
- **Analytical mindset:** An interest in exploring data relationships and building calculations.

Full Course Outline

What Is DAX?

DAX in the world of Excel
Cells vs tables
Iterators - what are they?

Introducing DAX

- Understanding DAX calculations
- DAX data types
- DAX operators
- Calculated columns vs measures
- Variables
- Error handling in DAX
- Formatting DAX code
- Common DAX functions

Basic Table Functions

- What are table functions?
- EVALUATE syntax
- Table expressions
- Understanding FILTER
- Understanding ALL, ALLEXCEPT, and ALLNOBLANKROW
- Understanding VALUES and DISTINCT

Understanding Evaluation Contexts

- Introduction to evaluation contexts
- Understanding the row context
- Using SUM in a calculated column
- Using columns in a measure
- Row context with iterators - EARLIER function
- Working with many tables
- Row contexts and relationships
- Filter context with relationships
- Introducing VALUES
- Introducing ISFILTERED and ISCROSSFILTERED

CALCULATE and CALCULATETABLE

- Understanding CALCULATE
- Understanding the filter context
- CALCULATE examples
- Filtering a single column
- Filtering with complex conditions
- Using CALCULATETABLE
- What are circular dependencies?
- CALCULATE rules
- Introducing ALLSELECTED
- Understanding USERELATIONSHIP

DAX Examples

- Finding ratios and percentages
- Cumulative totals
- Using ABC (Pareto) classification
- Finding sales per day and working day
- Differences in working days
- Static moving averages

Time Intelligence Calculations

- What is time intelligence?
- Building a date table
- Handling multiple relationships to the date table
- Aggregating overtime (year-to-date and quarter-to-date)
- Opening and closing balances

Training Benefits

Comprehensive training materials: Access detailed notes and exercise files for future reference.

Post-training support: Enjoy three months of assistance via email, phone, or screen sharing for follow-up questions.

Certificate of completion: Celebrate your achievement with a certificate that recognises your effort and skills.

Practical learning environment: Experience hands-on training designed to build confidence and inspire trust.