QuickStart

Over 35 Years Of Technology Training

Document Generated: 12/16/2025

Learning Style: Virtual Classroom

Technology:

Difficulty: Intermediate

Course Duration: 1 Day

Next Course Date: April 29, 2026

Power BI: Mastering DAX for Data Analysis (TTDPB05)

About This Course:

If you are already using Power BI but want to get more out of your reports, Mastering DAX and Data Analysis is for you. DAX (Data Analysis Expressions) is

the formula language that powers Power BI, giving you the ability to create dynamic calculations, shape data effectively, and improve report performance. Whether you are struggling with complex measures, trying to fix unexpected results, or looking to speed up slow reports, learning DAX will help you take full control of your data.

In this fast-paced, hands-on, expert-led course, you will work with real-world scenarios to build DAX skills that make a measurable difference in how you create and manage Power BI reports. You will learn how to write accurate and efficient expressions, control how filters and row context impact your calculations, and apply advanced functions to solve common data challenges. You will also explore best practices for optimizing performance, setting up security roles, and using external tools to analyze and refine your formulas. By the end of the course, you will be able to create faster, smarter, and more insightful Power BI models that drive better decisions.

This course is designed for Power BI users who already have a solid understanding of basic report building and want to sharpen their skills with DAX driven data modeling and calculations. If you are a data analyst, business intelligence professional, or report developer, or if you work with Power BI in any role where accuracy and efficiency matter, this course will give you the tools and confidence to create more powerful and reliable reports. No prior DAX expertise is required. You just need a working knowledge of Power BI and a desire to improve your reporting skills.

Course Objectives:

- Write clear and effective DAX expressions that return the right results and are easy to maintain.

- Control how filters and row context affect your calculations so your reports always reflect the right data.

- Speed up slow reports by using best practices for DAX and optimizing your data model.

- Use CALCULATE and other key functions to create dynamic, flexible measures that respond to different filters and conditions.

- Set up Row-Level Security (RLS) to control access to data and ensure users only see what they should.

- Work with external tools like DAX Studio to analyze and fine-tune your expressions for better performance.

Audience:

- This course is designed for Power BI users who want to take their DAX skills to the next level and build more efficient, insightful reports. Ideal roles include data analysts, business intelligence professionals, report

https://www.quickstart.com/power-bi-mastering-dax-for-data-analysis-ttdpb05.html

developers, and anyone responsible for data modeling in Power BI.

Prerequisites:

- Familiarity with the Power BI data model, relationships, and report-building features.

- Basic experience writing measures and calculated columns in Power BI.

- An understanding of aggregations, filters, and fundamental data concepts.

Course Outline:

1. What is DAX and what is it used for?

- DAX syntax

- Similarities to Excel

- Formatting DAX

2. Use DAX to add data and calculations

- Measures

- Calculated columns

- Tables

- Security Roles

3.Relationships and DAX

- Cardinality

- Dimension tables and fact tables

- Filter direction

4. Evaluation Contexts

- Filter Context

- Row Context

- Altering the filter context: CALCULATE

5. Other important functions

- FILTER

- ALL

- DIVIDE

- IF, AND, OR, NOT

- SUM, SUMX

- VALUES, DISTINCT

- ADDCOLUMNS, SUMMARIZE

- RELATED, RELATEDTABL

6. Using DAX in creative ways

- Activating a relationship

- Creating a Dynamic title

- Formatting a value

7. DAX Variables

- Declaring a variable

- Returning a value

- Using variables to troubleshoot errors

- External Tools

- DAX Studio

- DAX Formatter

- DAX.DO

- Tabular Editor

8.Row-level Security

- Security overview in Power BI

- Row-level security

- Static Method

- Dynamic Method