



Course Title: Introduction to DAX for Power BI	Course Duration: 2.0 Days
Exam: Not Included	Exam Type: No Exam
Qualification: Certificate of Completion: DAX Fundamentals for Power BI	

Course Syllabus

Module 1: Getting started with DAX

- Introduction to DAX
- Creating objects with DAX
- Context and rules of evaluation
- Variables, comments, and testing

Module 2: Performing basic calculations

- Getting started
- Implicit measures
- Adding quick measures
- Working with DAX data types .
- Doing basic math
- Using logic in your calculations
- Using the if() function
- Nested if()
- Using the switch() function
- Advanced switch()
- Logical operators & functions: ||, OR(), &&, AND(), NOT()
- Aggregating and summarizing data



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- The sum() function

Module 3: Working with context in the data model

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- Context defined
-
- Data modeling basics
-
- Introduction to dimensional modeling
-
- Relationships and their effect on the evaluation context
-
- Getting data from other tables using related() and related table
-
- Looking up data without using relationships
-
- Modifying the context using calculate()

Module 4: Performing more advanced calculations

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- The DAX iterator functions
-
- Using table manipulation functions

Module 5: Working with time

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- Performing date calculations
-
- Working with date tables
-
- Generating a date table with the calendar() function
-
- Defining custom operating periods
-
- YTD, QTD, and MTD calculations
-
- Custom to-date calculations
-
- Finding year-over-year change
-
- Finding moving averages

Module 6: Enhancing the user experience



- Controlling visibility of your measures
- Using what-if parameters
- Adding banding
- Using DAX to provide row-level security

Course Overview

At course completion, you should be able to

- Describe DAX syntax, data types, and errors
- Use DAX to create calculated columns, measures, and tables
- Explain how DAX calculations are evaluated, along with the differences between row context and filter context
- Configure and use Time Intelligence to perform common time-based calculations, for example to-date calculations, year-over-year analysis, moving averages, etc.
- Create calculated columns and measures that use data from multiple tables in the data model
- Write measures that handle error conditions gracefully
- Use DAX to enhance the Power BI user experience
- Use DAX Studio to connect to a Power BI data model and execute simple queries

Course Learning Outcomes

By the end of this course, learners will be able to understand DAX syntax and evaluation context, create calculated columns and measures, use common DAX functions such as SUM, CALCULATE, FILTER, and RELATED, apply basic time intelligence functions, and build reusable calculations that improve data analysis and reporting in Power BI. These skills enable learners to create more dynamic and insightful Power BI reports.

Audience

Power BI users, data analysts, business analysts, report developers, and professionals working with data models and dashboards

Entry-Level Requirements

Basic knowledge of Power BI Desktop, data modeling fundamentals, and Excel formulas

Recommended Reading

Microsoft Learn: DAX in Power BI

What's Included

Instructor-led training, course materials



Exam Information

This course includes a practical assessment to evaluate learners' understanding of DAX fundamentals. The assessment focuses on creating measures, applying evaluation context correctly, and solving common analytical problems using DAX. Learners may be required to complete hands-on exercises or a short project within Power BI to demonstrate applied DAX skills.

What's Next

After completing this course, learners can progress to Advanced DAX, Power BI data modeling, performance optimization, or Microsoft Power BI certification preparation.

Additional Information

Welcome to Introduction to DAX for Power BI. This two-day instructor-led course is intended for business users who have been using Power BI and want to use DAX to create custom calculations in their data models. In this class, you will be introduced to using Data Analysis Expressions (DAX), which is the expression language that is used to create custom calculations in the Power BI Data model. The course covers some of the theoretical underpinnings of the data model and the DAX language, but the emphasis is on using DAX to solve common business problems. You will learn how to write your own calculated columns, measures, and tables, how to visualize the way Power BI computes DAX calculations, and how to troubleshoot custom code.