



Microsoft® Power BI® DAX Functions

Creating Measures and KPIs

Course Description

Course Overview: DAX Functions are an essential part of getting the most out of Power BI. They can make asking complicated questions about your data easy. This course covers more than 40 DAX functions that just about every type of Power BI user will use at one time or another.

Target Student: This course is for students who are part of the data modeling team for their organization. This course is for active learners who need to write the calculations to answer their organization's questions.

Prerequisites: To ensure your success, we recommend you first take the following CompuTrain courses or have equivalent knowledge: [Microsoft® Power BI®: Introduction](#), or [Microsoft® Power BI®: Shaping and Visualizing Data](#).

Course Objectives

Upon successful completion of this course, students will understand:

- Calculated Columns vs Measures
- Implicit vs Explicit Measures
- How to write DAX Functions
- How to Create Measures and KPIs

Course Content

Lesson 1: Introduction to DAX

- What is a Data Model?
- Creating Table Relations
- What is DAX?
- Calculated Columns vs Measures
- Using Text Functions
- Understanding the Syntax of DAX
- Understanding Implicit vs Explicit Measures

Lesson 2: Understanding Date Tables

- Creating a Date Table
- Creating a Date Hierarchy
- Using Single Date Functions

Lesson 3: Creating Measures with DAX

- Using Statistical Functions
- Creating Logical Functions
- Tips for Creating Calculations in Power Pivot
- Creating KPIs

Lesson 4: Understanding Filter Propagation

- Understanding Filter Context
- Altering the Query Context
- Creating Advanced Filters

Lesson 5: Basic Iterator Functions

- Understanding Row Context
- When to use X-Functions vs Aggregators
- Using Iterator Functions

Lesson 6: Relationship Building Calculations

- Getting Data from Related Tables
- Using Inactive Relationships in Measures

Lesson 7: Incorporating Time Intelligence

- Using DAX Date and Time Functions
- Shifting the Date Context