



## Microsoft® Power BI® - DAX

### 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 50 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® - Smart Start**, or **Microsoft® Power BI® - Data Modeling**.

## Course Objectives

Upon successful completion of this course, students will be able to:

- Use DAX Functions
- Create Measures
- Create KPIs
- Understand Iterator Functions
- Use Time Intelligence Functions
- Use Inactive Relationships in Measures
- Use Data from Related Tables

## Course Content

### Lesson 1: Introduction to DAX

- What is DAX?
- Calculated Columns vs Measures
- 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

- Working with Text Functions
- 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: Incorporating Time Intelligence

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

### Lesson 7: Relationship Building Calculations

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