

## 20768: Developing SQL Data Models

- **Formato do curso:** Presencial e Live Training
- **Localidade:** Live Training
- **Data:** 22 Nov. 2021 a 24 Nov. 2021
- **Preço:** 1240€
- **Horário:** Laboral - das 9h00 às 17h00
- **Duração:** 21 horas

This three-day instructor-led course is aimed at database professionals who fulfil a Business Intelligence (BI) developer role. This course looks at implementing multidimensional databases by using SQL Server Analysis Services (SSAS), and at creating tabular semantic data models for analysis with SSAS.

**The 70-768 certification exam retires on January 31, 2021**

### Destinatários

The primary audience for this course are database professionals who need to fulfil BI Developer role to create enterprise BI solutions.

Primary responsibilities will include:

- Implementing multidimensional databases by using SQL Server Analysis Services
- Creating tabular semantic data models for analysis by using SQL Server Analysis Services

### Pré-requisitos

- Basic knowledge of the Microsoft Windows operating system and its core functionality.
- Working knowledge of Transact-SQL.
- Working knowledge of relational databases.

### Objectivos

- Describe the components, architecture, and nature of a BI solution
- Create a multidimensional database with analysis services
- Implement dimensions in a cube
- Implement measures and measure groups in a cube

- Use MDX syntax
  - Customize a cube
  - Implement a tabular database
  - Use DAX to query a tabular model
  - Use data mining for predictive analysis
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## Programa

### **Introduction to Business Intelligence and Data Modelling**

This module introduces key BI concepts and the Microsoft BI product suite.

Lessons

- Introduction to Business Intelligence
- The Microsoft business intelligence platform

Lab : Exploring a Data Warehouse

### **Creating Multidimensional Databases**

This module describes the steps required to create a multidimensional database with analysis services.

Lessons

- Introduction to multidimensional analysis
- Creating data sources and data source views
- Creating a cube
- Overview of cube security

Lab : Creating a multidimensional database

### **Working with Cubes and Dimensions**

This module describes how to implement dimensions in a cube.

Lessons

- Configuring dimensions
- Define attribute hierarchies
- Sorting and grouping attributes

Lab : Working with Cubes and Dimensions

### **Working with Measures and Measure Groups**

This module describes how to implement measures and measure groups in a cube.

- Working with measures

- Working with measure groups

Lab : Configuring Measures and Measure Groups

### **Introduction to MDX**

This module describes the MDX syntax and how to use MDX.

Lessons

- MDX fundamentals
- Adding calculations to a cube
- Using MDX to query a cube

Lab : Using MDX

### **Customizing Cube Functionality**

This module describes how to customize a cube.

Lessons

- Implementing key performance indicators
- Implementing actions
- Implementing perspectives
- Implementing translations

Lab : Customizing a Cube

### **Implementing a Tabular Data Model by Using Analysis Services**

This module describes how to implement a tabular data model in PowerPivot.

Lessons

- Introduction to tabular data models
- Creating a tabular data model
- Using an analysis services tabular model in an enterprise BI solution

Lab : Working with an Analysis services tabular data model

### **Introduction to Data Analysis Expression (DAX)**

This module describes how to use DAX to create measures and calculated columns in a tabular data model.

Lessons

- DAX fundamentals
- Using DAX to create calculated columns and measures in a tabular data model

Lab : Creating Calculated Columns and Measures by using DAX

## **Performing Predictive Analysis with Data Mining**

This module describes how to use data mining for predictive analysis.

### Lessons

- Overview of data mining
- Using the data mining add-in for Excel
- Creating a custom data mining solution
- Validating a data mining model
- Connecting to and consuming a data mining model

Lab : Perform Predictive Analysis with Data Mining

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