

20768: Developing SQL Data Models

- **Nível:** Intermédio
 - **Duração:** 21h
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Sobre o curso

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

Objetivos:

- 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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Pré-requisitos

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

- Introduction to Business Intelligence and Data Modelling
- Creating Multidimensional Databases

- Working with Cubes and Dimensions
- Working with Measures and Measure Groups
- Introduction to MDX
- Customizing Cube Functionality
- Implementing a Tabular Data Model by Using Analysis Services
- Introduction to Data Analysis Expression (DAX)
- Performing Predictive Analysis with Data Mining

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