

# Microsoft SQL Server Analysis Services Multidimensional

Course code: GOC6411

This course is intended for anyone who wants to perform professional data analysis using SQL Server Analysis Services (SSAS) in multidimensional mode. Participants will learn how to use appropriate data sources, create cubes, measures, dimensions, KPIs, and other techniques that lead to building a comprehensive data analysis solution. You will learn how to write queries in MDX and manage SSAS solutions. Please note that this training does not cover the tabular mode of SSAS, which is included in a separate course (GOC6412). Therefore, the knowledge gained in this course cannot be applied to designing data models for Power BI and Microsoft Fabric, as these are based on the tabular mode of SSAS.

## What You Will Learn

- You will get familiar with SQL Server Analysis Services
- You will learn how to create your own multidimensional databases and work with OLAP cubes
- You will master the creation of dimensions and measures
- You will learn the basics of the MDX language
- You will understand the fundamentals of administering a multidimensional instance of SQL Server Analysis Services

## Prerequisites

- Basic knowledge of relational databases and T-SQL at the level of course GOC277
- Basic understanding of data warehouse concepts at the level of course GOC645

## Course Outline

- Introduction to Analysis Services
- Overview of SQL Server Analysis Services
- Key concepts and use cases
- Creating Multidimensional Databases
- Creating a Data Source and connecting to data sources
- Implementing a Data Source View
- Building cubes and dimensions
- Working with Cubes and Creating Dimensions
- In-depth focus on cube creation
- Advanced work with dimensions
- Working with Measures and Measure Groups
- Creating and managing measures
- Working with measure groups
- Introduction to MDX Language
- Explanation of MDX fundamentals
- Introduction to basic MDX constructs
- Creating calculated members
- Administration of a Multidimensional Analysis Services Instance
- Deploying solutions from development to production
- Security management
- Data updates (Processing)
- Task automation

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