

# Implementation of a data warehouse and ETL processes using Microsoft SQL Server Integration Services.

Course code: GOC645

The course is designed for creators of data warehouses and ETL processes over Microsoft SQL Server, who want to learn to create data warehouses and ETL processes, which will load data from various data sources, transform them and insert into the data warehouse. At the beginning of the course, you will familiarize yourself with the key principles of data warehouse operation and their roles in Business Intelligence (BI) solutions. You will learn to design and implement data warehouses in Microsoft SQL Server. Furthermore, you will get acquainted with SQL Server Integration Services (SSIS), which you will learn to use for loading data from various data sources for the purpose of updating the data warehouse. On practical examples, you will try to create a comprehensive ETL process, including incremental data loading. The acquired knowledge is applicable to all supported versions of SQL Server (2012 - 2019). This course replace the cancelled course Implementation of a data warehouse in SQL Server 2016 [MOC 20767].

## Who is the course for

The course is intended for creators of data warehouses and ETL processes over Microsoft SQL Server, who want to learn to create data warehouses and ETL processes, which will load data from various data sources, transform them and insert into the data warehouse.

## Course outline

- Introduction to data warehousing
- Designing infrastructure for a data warehouse
- Design and implementation of a data warehouse
- Columnstore indexing
- Creation of ETL solutions
- Implementation of SSIS control flow
- Debugging and troubleshooting in SSIS
- Data extraction
- Master Data Services
- Deployment and configuration of SSIS packages

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