



## COURSE: Data Analysis with Power BI and SQL Server

Business intelligence (BI) and even advanced analytics (AA) are the key influencers from the IT area on all main business types. We turn data into information which helps us towards better results. This course introduces two key BI components from the infrastructure and services

point of view - SQL Server and Power BI. However, unlike the majority of courses, presentations and texts, this course does not focus on the glorious parts of a BI project only. It teaches the attendees also about the dirty work that is commonly hidden, but enormously important.

The course introduces the theoretical background for data warehousing (DW) and the logical data models used. However, the course dwells deeply also in the dirty work. The delegates learn about the extract – transform – load (ETL) process and explains how to optimize in SQL Server and on Power Query side. Then the course explains how to create an efficient Power BI data model. The attendees also learn how to create reports and publish them in Power BI Service. A long module is dedicated to AA in Power BI. The course wraps up with a holistic view on end-to-end performance from source queries through DW and ETL to Power BI data models and reports.

### Summary

<i>Duration:</i>	<i>4 days</i>
<i>Level:</i>	<i>200*</i>
<i>Delivery method:</i>	<i>Virtual Instructor-led class</i>
<i>Language:</i>	<i>English</i>

\* The difficulty level is consistent with the widely accepted scale of technical difficulty of training on Microsoft Corp

### AUDIENCE:

This course is intended for database developers, analysts, and experienced Office users who want to step into the business intelligence world.

### PREREQUISITES:

- Attendees should be familiar with Excel and have at least basic T-SQL knowledge.

### TOPICS:

**Module 0:** Introduction

**Module 1:** Introduction to business intelligence (BI)

**Module 2:** Data modeling for analytical applications

**Module 3:** Data warehousing with MS SQL Server

**Module 4:** Columnar storage advantages analysis

**Module 5:** Introducing Power BI

**Module 6:** Extract – transform – load (ETL) process with T-SQL and Power Query

**Module 7:** Using Excel for BI

**Module 8:** Data model in Power BI

**Module 9:** Creating reports with Power BI Desktop

**Module 10:** Publishing reports with Power BI Service

**Module 11:** Administering a Power BI solution

**Module 12:** Data science in Power BI

**Module 13:** Power BI model and reports optimization