

## COURSE: BI Fundamentals

SQL Master Academy works in close partnership with SolidQ in the field of Business Intelligence trainings, due to which fact we also have in our portfolio a unique programme of professional trainings in the field of Data Quality, Multidimensional Design, SSAS, ETL and SSIS. The courses train BI developers and designers of BI solutions, including back end EIM, as well as front end and reporting.

### Summary

<i>Duration:</i>	<i>4 days/ 32 hours</i>
<i>Level:</i>	<i>200*</i>
<i>Delivery method:</i>	<i>In class</i>
<i>Language:</i>	<i>English</i>
<i>Price:</i>	<i>1050 EUR excl VAT</i>

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

### AUDIENCE:

Attendees should have basic understanding of data analysis and relational data models. They should have experience with at least some of the following tasks:

- Reporting from a line of business system
- On-line analytical processing
- Data warehousing
- Data quality

### DESCRIPTION:

Learn in four intensive days how to get information and predictions from your data. Get understanding of the components of a business intelligence solution from an enterprise to a personal level, from simple to the most advanced types of analyses, and get familiar with the Microsoft tools.

### AFTER THE TRAINING ATTENDEES WILL BE ABLE TO:

- Understand the components of a BI solution
- Create a dimensional model for a data warehouse
- Use data warehousing components of the SQL Server Database Engine
- Develop an extract-transform-load procedure with SQL Server Integration Services
- Evaluate the data quality issues and define possible resolutions with Data Quality Services
- Keep the quality of their most important data with Master Data Services
- Author managed reports with SQL Server Reporting Services
- Use on-line analytical processing solutions with SQL Server Analysis Services Multidimensional

**For more information visit: [www.sqlmasteracademy.com](http://www.sqlmasteracademy.com)**

### TOPICS:

- Module 1. Introduction to BI
- Module 2. Dimensional data warehouse (DW) modeling
- Module 3. SQL Server data warehousing
- Module 4. Extract-transform-load (ETL) with SQL Server Integration Services (SSIS)
- Module 5. Enhancing data quality with Data Quality Services (DQS)
- Module 6. Managing master data with Master Data Services (MDS)
- Module 7. Reporting with SQL Server Reporting Services (SSRS)
- Module 8. On-line analytical processing (OLAP) with SQL Server Analysis Services (SSAS) Multidimensional
- Module 9. Personal OLAP with Power Pivot
- Module 10. Small and medium business (SMB) OLAP and SSAS Tabular
- Module 11. Using Power Query to enhance the Power Pivot data model
- Module 12. Ad-hoc reporting with Power View and Power Map
- Module 13. Power BI new experience with Power BI Desktop and Power BI Services
- Module 14. Data mining with SSAS Multidimensional and Excel
- Module 15. Introduction to R
- Module 16. Machine learning with Azure ML

**FUNDAMENTALS**

SQL Server Fundamentals courses give you an excellent base for successful career as administrator or data base developer. Their practical purpose, use of scenarios of working practice will help both the beginners, as well as the more experienced students. The courses will assist the students to develop skills to protect in a better way the data of their organizations, to react quicker and adequate to all issues, which are data base related, and to avoid following some harmful myths and wrong concepts in administration and data base development.

- ❖ **MS Windows & AD Administration for DBA's**
- ❖ **Querying SQL Server Fundamentals**
- ❖ **SQL Server Administration Fundamentals**
- ❖ **SQL Server Development Fundamentals**

**MASTERING**

The trainings of SQL Server Mastering series consist of intensive modules which are comparatively complicated regarding the technical level and which are designed and intended for professionals in the field of SQL Server. Trainings include solid theoretical material, part of which comes directly from the program team, who develops SQL Server in Microsoft also numerous demonstrations from the "workshop" of SQL Server, unpublished tuning techniques for increase of SQL Server performance.

- ❖ **Mastering SQL Server for Database Admins**
- ❖ **Mastering SQL Server for Database Developers**
- ❖ **SQL Server Performance Tuning and Optimization**

**DEEP DIVE**

Deep Dive Series consists two and three day trainings with technical level 300+ (level 100 – beginners, level 400 – masters). Those courses are focused on specific components of SQL Server. They consist of a significant number of practical advices, a lot of demonstrations, huge theoretical part and also examples of real infrastructural solutions, discussions of real situations which students have in their infrastructures and want to discuss.

- ❖ **SQL Server Enterprise Infrastructure Optimization and Deployment**
- ❖ **SQL Server Upgrade**
- ❖ **SQL Server Replication Deep Dive**
- ❖ **SQL Server High Availability and Disaster Recovery Solutions**

**BI**

SQL Master Academy works in close partnership with SolidQ in the field of Business Intelligence trainings, due to which fact we have in our portfolio a unique programme of professional trainings in the field of Data Quality, Multidimensional Design, SSAS, ETL and SSIS. The courses train BI developers and designers of BI solutions, including back end EIM, as well as front end and reporting.

- ❖ **Personal Business Intelligence with MS Power BI**
- ❖ **Introduction to MS Business Intelligence**
- ❖ **BI Fundamentals**
- ❖ **Accelerated SQL Server 2012-2016 Integration Services**
- ❖ **Multidimensional Database Design with SSAS 2012-2016**
- ❖ **Data Quality and Master Data Management with SQL Server 2012-2016**
- ❖ **Data Mining Algorithms in SSAS, Excel, R, and Azure ML**

**DATABASE DESIGN**

The design of relational data base is one important and inseparable part of the solution development. Those are knowledge and skills which every DB Dev or DB Designer should have. A huge part of the problems in production sphere are due to a not good base model or to such, which does not scale well. The courses for design of relational data base we offer in SQL Master Academy, are oriented not only to mastering of the relational model and the good design of the subject filed, but also to the mastering of good practices in modelling of scalable data base.

- ❖ **Relational Database Design Fundamentals**
- ❖ **Relational Database Design for Performance and Scalability**

**SQL SERVER 2016**

Explore the new version of the fastest performing database system in the market today – SQL Server 2016! Be prepared for InMemory OLTP, the new columnstore extensions and the brand new operational analytics possibilities, which can give your workload 30x-100x performance improvement. See how the Query Store, temporals, the new built-in security features and AlwaysOn groups works. Get all that you need to put your skills and your databases on track.

- ❖ **SQL Server 2016 Get Ready for DBA and DB Devs**
- ❖ **SQL Server 2016 for Business Intelligence Experts**
- ❖ **SQL Server Cloud based Solutions**