

## Course syllabus

### CATEGORY

SQL, Oracle, Access courses

### TRAINING FORMAT

In Bratislava or online with a lecturer

### PRICE EXCL. VAT

999,92 €

### PRICE INCL. VAT

1 229,90 €

including 23 % VAT

# Database Analyst I. - Comprehensive Skills

Clear overview of course topics, training scope and key information.

The Database Analyst I competency course is intended for all applicants who want to find employment in the labor market and learn to work with database functions. The package consists of the courses: MS Excel Database Functions: in the scope of 2 days SQL SERVER Working with a Database I.: in the scope of 2 days Power BI - 1: in the scope of 3 days

### COURSE CONTENT

01

#### Principles When Creating a Database Table

limitations of Excel and their possible solutions data validation in a database table

02

#### Logical Functions

IF, nested IF AND, OR

03

#### Lookup Functions

INDIRECT LOOKUP, VLOOKUP HLOOKUP, CHOOSE MATCH, INDEX

04

#### Database Functions

DSUM, DAVERAGE DMIN, DMAX DCOUNT, DSTDEV etc.

05

#### Formula Debugging

watch window mode and formula checking panel arrows, Evaluate Formula tools error checking

06

## Working with Automatic and Advanced Filter

limitations of automatic filter entering complicated filtering conditions use of wildcards in text criteria use of a macro over a table creating simple and nested subtotals tool for consolidating multiple ranges

07

## Working with PivotTables

working with row, column, page and data area fields setting properties of a table field and also properties of the whole table multiple consolidation ranges calculated field, grouping

08

## Printing Large Tables

selecting print area page setup discussion conclusion

09

## SQL SERVER Working with a Database 1.

10

## Overview and Familiarization with the Microsoft SQL Server Environment

11

## Installation and Basic Database Setup

- creating and editing databases,

12

## Explanation and Classification by Table Types

- creating and editing tables, setting data types, keys and relational relationships between tables

13

## creating database diagrams

working with data, creating and editing views, advantages of their use, working with data in tables ensuring data integrity working with data, filtering, working with multiple tables, joins, views, stored procedures,

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## Triggers, Transactions, Types of Locks and Their Use

SQL language syntax T-SQL commands SELECT, INSERT, UPDATE, DELETE, CREATE TABLE, ALTER TABLE Nested functions and SELECTS. Working with text (LTRIM, RTRIM, UPPER, LOWER, LEN). Data cleaning (LEFT, RIGHT, SUBSTRING, REPLACE, CONCAT, CHARINDEX, REPLICATE, STUFF). Conversion between individual data formats (CONVERT, CAST, TRY\_CAST, TRY\_CONVERT). Joining tables (UNION, UNION ALL, INTERSECT, EXCEPT, SELF JOIN). Temporary tables (Common Table Expression, TEMP Table). Searching data using Window Functions (Aggregate Function, Ranking Function, Value Function). Query Tuning.

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## Power BI 1.

Application description

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## Getting Data from Different Sources

from Excel from text files from the web from a database

17

## Editing Data in the Power Query Editor

18

## Creating a Data Model

multiple tables in the data model Relationships between tables Date table Hierarchy Selected DAX functions - row, table Measures

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## Data Visualization

different visuals - table, matrix charts visual formatting show / hide details

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## Filters

at visual level at page level at report level

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## Creating Custom Tooltips

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## Creating a Details Page

23

## Report Drillthrough Options

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This document serves as an informational overview of the course syllabus. Current dates, venue and availability are listed at Macrosoft.sk.

<https://www.macrosoft.sk/en/courses/database-analyst-i-comprehensive-skills>