

# Querying with Transact-SQL

Course Syllabus

## **Course Prerequisites**

This course assumes no prior experience with Transact-SQL or databases, though some fundamental knowledge of computer systems and database concepts will be useful.

## **Course Outline**

The course consists of 11 modules arranged into 4 sections. Each section is designed to be completed in a week.

#### Section 1

01 | Introduction to Transact-SQL 02

| Querying Tables with SELECT

#### Section 2

- 03 | Querying Multiple Tables with Joins
- 04 | Using Set Operators
- 05 | Using Functions and Aggregating Data

#### Section 3

- 06 | Using Subqueries and APPLY
- 07 | Using Table Expressions
- 08 | Grouping Sets and Pivoting Data

#### Section 4

- 09 | Modifying Data
- 10 | Programming with Transact-SQL
- 11 | Error Handling and Transactions

#### **Expected Effort**

Each week, you should expect to spend 4-5 hours on the course, including:

- Viewing the lecture videos and demonstrations.
- Further reading.
- Trying the labs.
- Completing module assessments (see below).

### Coursework and Grading

This course includes coursework, some of which is graded. Each module in the course includes an ungraded lab (which is designed to give you hands-on practice with the Transact-SQL syntax taught in the module), and a graded assessment, in which you must answer all questions. Additionally, at the end of the course you must complete a final exam.

The module assessments account for 60% of the total grading for the course, and the final exam accounts for the remaining 40%. You must achieve an overall score of 70% or more to pass this course.

In the module assessments, you have two attempts at each question. In the final exam, you are restricted to one attempt per question.

#### Discussion

We encourage all students to submit questions, observations, and comments in the Discussion section. If you have any issues while working on the course, check here first – your fellow students may have already found a resolution!

Please remember that the discussion forum is open to all students and staff, and while we love to see passionate engagement, abusive or inflammatory behavior will not be tolerated.

Due to the volume of students attending this course, it will not be possible for the course staff to answer every question individually. You should still post questions however, because in many cases, your fellow students may be able to help.