

# CM2027 Databases and Data Models 7.5 credits

#### Databaser och datamodeller

This is a translation of the Swedish, legally binding, course syllabus.

#### **Establishment**

The course plan with diary no. C-2024-1626 applies from HT 2026 according to faculty board decision: C-2024-0635. Decision date: 2024-10-02

#### **Grading scale**

A, B, C, D, E, FX, F

#### **Education cycle**

Second cycle

# Main field of study

Technology and Health

## Specific prerequisites

English 6

Knowledge of programming, 6 hp

### Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

#### Intended learning outcomes

The goal of the course is to give basic knowledge on how data is stored and how to you analyze it.

After passing the course the students need to be able to

- Describe and explain theories and statements in database architecture and models.
- Be able to write programs that process data fetched from a database.
- Describe how different database warehouses and data lakes work.

For higher degrees the student need to be able to

- Analyze, discuss and compare different data architectures and it's models and algorithms,

#### Course contents

- Databases
- Datawarehouse
- Data lakes
- Data models in health data

#### **Examination**

- LABA Laboratory work, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- RED1 Written exam and Assignment, 4.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

# Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.

• In an oral assessment, every student the entire assignment and solution.	t shall be able to present and answer questions about