



# IV1351 Data Storage Paradigms

## 7.5 credits

Datalagring

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

### Establishment

The official course syllabus is valid from the autumn semester 2021 in accordance with Head of School decision: J-2021-0470. Decision date: 15/04/2021

### Grading scale

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

### Education cycle

First cycle

### Main field of study

Information Technology, Technology

### Specific prerequisites

Knowledge and skills in programming, 7.5 higher education credits, equivalent to completed course ID1018.

Active participation in a course offering where the final examination is not yet reported in LADOK is considered equivalent to completion of the course.

Registering for a course is counted as active participation.

The term 'final examination' encompasses both the regular examination and the first re-examination.

## Language of instruction

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

## Intended learning outcomes

After passing the course, the student shall be able to

- describe and explain basic concepts, principles and theories in the area of data/databases/data storage and in information administration and database design
- model needs for information based on an organisational description and convert the model to a functioning database
- use relational databases and query languages
- describe how a programme can access a database and write such a programme.

## Course contents

- Introduction to databases, data storage and information administration
- The relational model and normalisation
- Conceptual modelling and logical database modeling
- Query language
- Memory management and handling of persistent storage

## Examination

- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Works and Project, 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 shall be able to present and answer questions about the entire assignment and solution.