



DD2477 Search Engines and Information Retrieval Systems

7.5 credits

Sökmotorer och informationssökningssystem

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

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

Establishment

The Dean of the School for Electrical Engineering and Computer Science has 13/10/2020 established this course syllabus as official from spring term 2022, decision registration number: J-2020-1816.

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Completed courses in

- basic computer science, equivalent to one of the courses DD1338/DD1320/DD1321/DD1325/DD1327/ID1020/ID1021
- linear algebra, equivalent to one of the courses SF1624/SF1684/SF1672.

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

- explain and use concepts in information retrieval such as indexing, ranking, boolean search model, vector space model
- implement methods for indexing, search, and ranking of a very large number of documents with hyperlinks
- use tools and software libraries for information retrieval
- be able to evaluate algorithms and systems for information retrieval

in order to be able to

- work for companies that specialise in information retrieval
- carry out a master's degree project in computer science with a specialisation in information retrieval
- be an important link between systems designers, programmers, and interaction designers in industry as well as in research projects.

Course contents

Basic and advanced technologies for information retrieval, indexing and ranking; indexing of non-textual data; boolean models and vector space models for search; evaluation and user interface issues; the structure of Internet search engines.

Examination

- LAB1 - Computer assignments, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 - Project assignment, 3.0 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.

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.