



DD2476 Search Engines and Information Retrieval Systems

9.0 credits

Sökmotorer och informationssökningssystem

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

Establishment

The official course syllabus is valid from the spring semester 2022, in accordance with decision by the Dean of school: J-2022-0856 Decision date: 07/06/2022

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

SF1604 Linear Algebra, SF1901 Basic Statistics and Probability Theory, DD1338 Algorithms and Data Structures or equivalent courses.

Language of instruction

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

Intended learning outcomes

On completion of the course, you should be able to:

- * explain the concepts indexing, vocabulary, normalisation and dictionary in information retrieval,
- * give an account of different distance measures for text and choose a distance measure that is appropriate for a given problem,
- * define a boolean model and a vector space model and explain the difference between them,
- * implement a method for ranked search of a very large number of documents with hyper links,
- * evaluate information retrieval algorithms and give an account of difficulties with evaluation,
- * give an account of the structure of an Internet search engine.

Course contents

Basic and advanced technologies for information retrieval: information extraction; efficient text indexing; 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

- LABB - Laboratory lessons, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LABA - Laboratory lessons, 6.0 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.

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.