



DD2417 Language Engineering

7.5 credits

Språkteknologi

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

Establishment

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Knowledge and skills in programming, 6 credits, equivalent to completed course DD1337/DD1310-DD1319/DD1321/DD1331/DD1333/DD100N/ID1018/ID1022.

Knowledge in algorithms and data structures, 6 credits, equivalent to completed course DD1338/DD1320-DD1328/DD2325/ID1020/ID1021.

Knowledge in probability theory and statistics, equivalent to course SF1910-SF1925/SF1935 or completed TEN1 within SF1910/SF1925/SF1935.

Intended learning outcomes

After passing the course, the student shall be able to

- explain and use concepts at the basic levels of linguistics: morphology, syntax, semantics, discourse and pragmatics,
- explain, implement and use standard methods of language engineering that are based on rules, statistics and machine learning,
- use basic language engineering tools, corpora and software libraries
- design and carry out simple evaluations of some language engineering system, and interpret the results,

in order to be able to

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

Course contents

- Levels for the analysis of written human language: Morphology, syntax, semantics and pragmatics
- Grammatical, statistical and neural methods for linguistic analysis and generation.

Examination

- PRO1 - Project assignment, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- LABA - Computer Laboratory Work, 3.0 credits, grading scale: P, F
- TENA - Written Exam, 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.

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.