



# DD2417 Language Engineering

## 7.5 credits

Språkteknologi

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

### 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-2020-1814.

### 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 DD1338/DD1320/DD1321/DD1325/DD1327/ID1020/ID1021; and probability theory, equivalent to course SF1912/SF1914-SF1924.

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 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

- LAB1 - Computer assignments, 6.0 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 - Project assignment, 1.5 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.