



# DD2418 Language Engineering

## 6.0 credits

Språkteknologi

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

### Establishment

On 2020-10-13, the Head of the EECS School has decided to establish this official course syllabus to apply from spring semester 2021, registration number J-2020-1812.

### Grading scale

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

### Education cycle

Second cycle

### Main field of study

Computer Science and Engineering, Information Technology, Information and Communication Technology

### Specific prerequisites

Completed courses in

- basic computer science equivalent to course DD1338/DD1320/DD1321/DD1325/DD1327/ID1020/ID1021
- 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 the course, students should be able to:

- explain and use basic linguistic concepts: morphology, syntax, semantics, discourse and pragmatics,
- explain, implement and use standard methods of language engineering, 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, as well as interpret the results,

in order to be able to

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

## Course contents

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

## Examination

- LAB3 - Laboratory work, 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.

## Transitional regulations

Students who have passed the lab module LAB2 but have not passed the project assignment INL1 of the earlier course DD2418 can pass INL1 by making the entire fourth laboratory assignment in new LAB3 module.

Students who have passed on the project INL1 but not passed on the lab task LAB2 of the earlier course DD2418 can pass LAB2 by making three elective laboratory assignments in new LAB3.

## 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.