

Language Technology

Språkteknologi

6 credits

Single subject and programme course

729G86

Valid from: 2026 Spring semester

Determined by	Main field of study	
Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Cognitive Science	
Date determined	Course level	Progressive specialisation
2020-02-03	First cycle	G1N
Revised by	Disciplinary domain	
Chairman of the Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Technology	
Revision date	Subject group	
2021-12-14; 2025-02-12	Other Interdisciplinary Studies	
Offered first time	Offered for the last time	
Spring semester 2020		
Department	Replaced by	
Institutionen för datavetenskap		

Entry requirements

General entry requirements for undergraduate studies and Social Studies, English and Mathematics corresponding to the level in Swedish upper secondary education (Samhällskunskap 1b or 1a1 and 1a2, Engelska 6, Matematik 3b/3c or Matematik C)

Intended learning outcomes

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

- explain basic methods for the processing of natural language
- practically apply language technology methods and systems to realistic problems
- evaluate language technology components and systems with appropriate methods
- assess the difficulty of language technology problems and which resources are needed to solve them
- reason about the capabilities and limitations of large language models for solving language technology problems

Course content

Language technology develops methods for making human language accessible to computers. The goal of this course is to provide an introduction to language technology as an application area, and to some of its basic methods. The course focuses on methods based on machine learning.

The course is examined by:

- basic methods and techniques for the analysis and interpretation of natural language
- relevant machine learning methods
- validation methods
- applications of language technology
- tools, software libraries, and data

Teaching and working methods

The teaching consists of lectures, computer labs, and supervision in connection with a project done in small groups.

Examination

The course is examined by:

- Individual digital written exam, betygsskala: EC
- Oral presentation of laboratory work in group, betygsskala: EC
- Individual project assignment report, betygsskala: EC

Passing with distinction requires distinctions in at least two of the examining modules.

Detailed information can be found in the study guidelines.

If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.

If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaining the objectives of the course.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

Grades

ECTS, EC

Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

If special circumstances prevail, the vice-chancellor may in a special decision specify the preconditions for temporary deviations from this course syllabus, and delegate the right to take such decisions.

About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is “Swedish”, the course as a whole could be given in Swedish, or partly, or as a whole, in English. Examination language is Swedish, but parts of the examination can be in English.
- If teaching language is “English”, the course as a whole is taught in English. Examination language is English.
- If teaching language is “Swedish/English”, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English depending on teaching language.