



FDT3315 Speech Communication Theory, basic course 15.0 credits

Talkommunikationer, grundkurs

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

Establishment

Course syllabus for FDT3315 valid from Spring 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Admitted as doctoral student

Language of instruction

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

Intended learning outcomes

1. Describe the theoretical basis for the speech communication process in terms of linguistics, phonetics and information theory.
2. Account for the implications of speech communication theories in speech synthesis, automatic speech recognition and multimodal spoken dialogue systems.
3. Describe current scientific methods used in investigating speech communication processes.

Course contents

1. Linguistic, phonetic and information theories in relationship to speech communication
2. Relationship between theoretical approaches to speech communication and the development and application of speech technological systems
3. Computational models of speech communication
4. Review of scientific methods used in investigating speech communication

Disposition

The course is organized in the form of a reading course in which current, relevant research articles are to be chosen and discussed together with the doctoral student's supervisors. Credits may also be obtained by submitting reports from participation in relevant external doctoral study activities such as seminars, workshops and conferences.

Course literature

Relevant research articles are to be chosen in cooperation with the doctoral student's supervisors.

Examination

- EXA1 - Exam, 15.0 credits, grading scale: P, 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.

Other requirements for final grade

Written and oral reports approved by the doctoral student's supervisors.

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.