



# DT214X Degree Project in Electro Acoustics, Second Cycle 30.0 credits

Examensarbete inom elektroakustik, avancerad nivå

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

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for DT214X valid from Autumn 2007

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

Electrical Engineering, Information and Communication Technology

## Specific prerequisites

The degree project should be part of the specialization in the program and should normally be conducted during the final semester.

Students on a Master of science of engineering program must have at least 240 credits (210 credits for the students of 270 credits program) from completed courses in the program and students on the Computer science and engineering program may have a maximum of three unfinished compulsory courses from study years 1-3.

Students on a Master of science program should have at least 60 credits in the program, including 30 credits with specialization in the second cycle within the main field of study.

It is the duty of the examiner to check that the eligibility requirements are met before work begins. Exemption can be granted by the director of undergraduate studies.

## Language of instruction

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

## Intended learning outcomes

### Purpose

The purpose of the degree project is that the student should develop and demonstrate the knowledge and skills required to work independently as a Master of science in engineering/Master of science.

### Knowledge and understanding

After the course the student should be able to

- demonstrate knowledge in the chosen subject area.

### Skills and abilities

After the course the student should demonstrate an ability to

- critically, independently and creatively identify, formulate and manage complex issues using a holistic approach,
- participate in research and development and thereby contribute to the development of knowledge,
- plan and carry out advanced tasks within specified constraints using scientific methods and methods of engineering practice,
- select, adapt and combine different methods, and be able to justify and reflect on these choices,
- orally as well as in a written report clearly present and discuss conclusions from the work and the knowledge and arguments that form the basis for these,
- independently identify needs for further knowledge and relevant sources of information, perform searches for information, evaluate the relevance of information and use proper referencing.

Ability to make judgments and adopt a standpoint

After the course the student should demonstrate an ability to

- evaluate his/her own work as well as the work of others with regard to relevant scientific, social and ethical aspects.

## Course contents

The master project must treat a problem within electro acoustics.

There has to be interesting questions from the field of electro acoustics to investigate. The main focus of work should be on investigation and analysis. If programming is involved, its purpose should be to verify methods and theories that have been developed in the project. Projects often result in a prototype but very seldom in a finished product. The extent corresponds to five months of qualified work.

The work includes to

- make a detailed specification and time plan for the work and perform the work according to this or with deviations approved by the examiner,
- search and study literature that is directly relevant to the work and present it in the report,
- participate in supervision sessions and workshops at KTH (sometimes calling for written submissions),
- make a written account for the work in a public report that meets established standards,
- make an oral presentation of the work at KTH,
- make an oral and written opposition on the degree project of another student within the subject.

The degree project is done individually. During the course the student has the right to supervision on a regular basis. The degree project must be carried out within agreed time limits. It is the task of the student to find a suitable problem for the degree project.

## Course literature

It is decided individually.

## Examination

- PRO1 - Project, 7.5 credits, grading scale: P, F
- PRO2 - Project, 15.0 credits, grading scale: P, F
- PRO3 - Project, 7.5 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.

## Other requirements for final grade

The degree project should be part of the specialization in the program and should normally be conducted during the final semester.

Students on a Master of science of engineering program must have at least 240 credits (210 credits for the students of 270 credits program) from completed courses in the program and students on the Computer science and engineering program may have a maximum of three unfinished compulsory courses from study years 1-3.

Students on a Master of science program should have at least 60 credits in the program, including 30 credits with specialization in the second cycle within the main field of study.

It is the duty of the examiner to check that the eligibility requirements are met before work begins. Exemption can be granted by the director of undergraduate studies.

The title of the thesis is written in English and Swedish in the certificate.

## 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.