



EK211X Degree Project in Electrical Measurements, Second Cycle 30.0 credits

Examensarbete inom elektrisk mätteknik, 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 EK211X valid from Spring 2009

Grading scale

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

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

Program requirements. Further, the student should have a solid course background for the project task in question.

Language of instruction

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

Intended learning outcomes

The aim of the course is to develop the ability to independently carry out and report a work effort within the area of Electrical measurement technology or Microsystem technology.

Upon completion of this course, the student shall be able to:

- apply relevant knowledge and skills, within the area, to a given problem
- within given constraints, even with limited information, independently analyze and discuss complex inquiries/problems and handle larger problems on the advanced level within the area
- reflect on, evaluate, and critically assess one's own and others' scientific results
- document and present one's work with strict requirements on structure, format, and language usage
- identify the need for further knowledge and continuously develop one's own knowledge.

Course contents

The degree project shall consider a relevant problem within the area of Measurement technology or Microsystem technology. The extent of the work should be that it requires at least five qualified work months. The work effort includes the development of a project plan, studies of literature that is relevant for the thesis work and the proposed investigation and analysis. The results are presented in a written report and orally at a seminar. If the work is done at a company, it can also be required to present the work orally there as well. During the degree project period, an opposition should be conducted on another student's thesis work.

Disposition

Project work corresponding to one semester (approx. 5 months)

The language of the course is normally English but Swedish is also accepted. Good knowledge of English is always needed for the study of relevant literature.

Course literature

Decided individually together with the examiner

Examination

- XUPP - Examination Question, 30.0 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.

Project (XUPP), including

- Time plan
- Project report
- Oral presentation with opponent
- Opposition on another students work
- Participation at another two Master thesis seminars

Other requirements for final grade

The work is conducted individually.

The examiner determines the grade level after consulting with the supervisor. The following things are considered:

1. The process, including understanding of the task and its relevance, ability to work independently and with the supervisor.
2. Scientific content, including background knowledge for the task.
3. Presentation: written and oral presentation of the work, including analysis of the results and opposition to another thesis project.

To be passed, the student must get a pass in all these criteria.

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.