IL222X Degree Project in Electronic- and Computer Systems, Second Cycle 30.0 credits

Examensarbete inom elektronik- och datorsystem, 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 IL222X valid from Autumn 2008

Grading scale

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

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

The degree project is normally done in the area in which the student has chosen for specialization. This is, however, not an absolute requirement. The decisive fact if a student is allowed to make a degree project within a subject area is if an examiner assesses that the students have the necessary prerequisites for the subject degree project in question.

The degree project should normally be done in the last year of study.

Language of instruction

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

Intended learning outcomes

The student should:

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

Course contents

The degree project should deal with an interesting problem within the subject area. In order for a task to be accepted as degree project, there has to be interesting problems within the subject area to investigate. The work should rest on scientific methodology and should encompass elements of investigations and analysis. The work may include elements of implementation but this should be of subordinate importance and the aim of it should mainly be to verify developed models and theories and be an application of chosen methodology. There are no requirements that the degree project should result in a finished product. The extent of the project should be such that it is clear that the student has performed at least five effective working months.

It is included in the project work to make a careful specification and time plan for the task and to seek and digest relevant literature for the degree project to be accounted for in a prestudy. The work is presented in a written report and in a public oral presentation.

The degree project if normally carried out individually. It may also be done in pair with another student. If the degree project is done in pair with another student it is important that, if possible, each student's contribution clearly can be separated in order to be able to make a fair grading.

Language of instruction
Swedish or English

Examination

- XUP1 - Pre-study, 6.0 credits, grading scale: P, F
- XUP2 - Accomplishment, 15.0 credits, grading scale: P, F
- XUP3 - Written Report, 7.0 credits, grading scale: P, F
- XUP4 - Presentation and Opposition, 2.0 credits, grading scale: P, F
- XUP5 - Thesis Project, 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.

The course can be reported as one element of 30 HEC or as a sequence of elements according to the following:

- Prestudy, 6 HEC
- Accomplishment, 15 HEC
- Written report, 7 hp
- Presentation and Opposition, 2 HEC

The grade is set after an overall impression according the KTH-wide assessment criteria. The final grade is set according to the following:

The model is based on that the three assessment criteria Process, Engineering-related and scientific content, and Presentation each is given the appraisal Excellent, Good, Sufficient or Failed each represented with points 3p, 2p, 1p and 0p, respectively.

Assessment criteria:

- **Process**
  (Excellent 3p, Good 2p, Sufficient 1p, Failed 0p)
- **Engineering-related and scientific content**
  (Excellent 3p, Good 2p, Sufficient 1p, Failed 0p)
- **Presentation**
  (Excellent 3p, Good 2p, Sufficient 1p, Failed 0p)

Other requirements for final grade

The sum of points of the assessment criteria make up the basis for the grades A_F according to the table below. For a passing grade (E or higher), at least appraisal Sufficient is required in all assessment criteria

- Grade A, 8-9p
- Grade B, 7p
- Grade C, 6p
- Grade D, 5p

- Grade E, 3-4p
- Grade F, 0-2p

The examiner may, after an overall impression, lower or raise the grade from this table one step.

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.