DD221X Degree Project in Computer Science, Second Cycle 30.0 credits

Examensarbete inom datalogi, avancerad nivå

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

Establishment

Course syllabus for DD221X valid from Autumn 2009

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering, Information Technology, Information and Communication Technology

Specific prerequisites

The degree project should constitute a part of an advanced study within the program and should normally be carried out under the last semester of the education.

Students on engineering programmes should have at least 240 credits (210 credits for students on 270 credit programmes) from completed courses within the engineering programme.

Students on Master's programmes should have at least 60 credits within the program of which 30 credits with advanced second cycle study within the main field of study,

The examiner should verify that the entry requirements are satisfied, before the work is started. Exemption can after assessment be granted by the director of first and second cycle education.

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

Aim

The aim of the degree project is that the student should develop and show such knowledge and ability that is required to work independently as Master of Science (in Engineering).

Knowledge and understanding

The student should

- show advanced knowledge within the chosen subject area.

Skills and abilities

The student should show ability to

- with overall view critically, independently and creatively identify, formulate and handle complex issues,
- participate in research or development work and thereby contribute to the knowledge development,
- plan and with scientific and engineering methods carry out qualified assignments within given frames,
- choose, adapt and combine different methods and be able to explain and reflect around these choices,
- orally and in writing clearly give an account of and discuss his or her conclusions and the knowledge and the arguments underlying these, and
- independent identify need of additional knowledge and relevant sources of information, carry out information retrievals, evaluate the relevance of the information and use correct reference management.

Judgement and approach

The student should show ability to

- assess own work and the work of others, considering relevant scientific, social and ethical aspects.

Course contents

The degree project should treat an interesting problem in the area of computer science. In order for the assignment to be accepted as a degree project, there have to be interesting issues from the subject area to investigate. The emphasis of the work should lie in investigation and analysis. Possible programming work should be subordinate and with the intention to verify methods and theories. Degree projects often result in a prototype but very seldom in a complete product. The extent corresponds to five months of qualified work.

In the work it is included to

1. establish a precise specification with time plan and carry out the work according to it or with by examiner approved dissents,
2. search and read literature that is directly relevant to the degree project and present this in the report,
3. participate in supervision sessions and seminars at KTH (sometimes with requirements of written submissions),
4. present the work in a public written report that satisfies set norms,
5. present the work orally at KTH,
6. make an oral and written review of another degree project within the subject.

The degree project should be carried out individually. During the work the student has right to get regular supervision. The degree project should be carried out within agreed time limits. It is the student's assignment to find an appropriate assignment for the degree project.

Course literature

It is decided individually.

Examination

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

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

In this course offering, the code of honour of the school is applied, see: http://www.kth.se/csc/student/hederskodex.

Other requirements for final grade

A degree project implemented according to the description under “ Course main content", including all points 1– 6.

The degree project is assessed according to the bases of assessment and criteria of KTH and CSC. This implies that the degree project's a) process (wherein public discussion is included), b) engineering and scientific contents, c) presentation (written and oral) are assessed.

KTH bases of assessment: http://intra.kth.se/regelverk/utbildning-forskning/grundutbildning/examensarbete/bilaga-a-bedomningsgrunder-och-kriterier-for-examensarbete-1.31698

The bases of assessment of CSC are found in the CSC booklet with instructions for degree projects: http://www.kth.se/csc/student/exjobb-csc/exjobbare/anvisningar.

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.