DD225X Degree Project in Biomedical Engineering, Second Cycle 30.0 credits

Examensarbete inom biomedicinsk teknik, 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 DD225X valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

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

Specific prerequisites

The student should do the master project within his/her area of specialization since a solid background of the field is necessary in order to achieve a high quality work. Those who have selected an area of specialization outside of biomedical engineering may be allowed to do

a master project in biomedical engineering if the person has the necessary knowledge and skills for the project in consideration.
The master project is normally performed during the final semester of studies.

Language of instruction

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

Intended learning outcomes

After passing the master's Thesis project course, you will know and be able to

- apply standard methods of practice in industry, administration and academic environments regarding planning, conducting, reporting and evaluating larger independent design and investigation projects,
- independently plan, conduct, report (orally and in writing), criticize and defend a design or investigation in the biomedical engineering area that is important for a problem-owner in industry, administration or academy,
- collect and systematize requirements and expectations on the project deliverables, and asses the reasonableness of these in light of available time and resources(30 credits),
- find, obtain, evaluate and compile information relevant for the project realization,
- select a course of action and prepare, follow and adapt a plan for the project,
- analyze, criticize and defend project results,
- write professional reports in Swedish or English complying to established standards of design, language, style and content,
- orally report project results with professional requirements on preparation, content, style and time used.
- improve knowledge and skills in an area of biomedical engineering.

Course contents

The master project must treat a problem within biomedical engineering. The problem must focus on questions from the field of biomedical engineering that are of interest to investigate and analyze. The main part of the work should be investigation and analysis. If laboratory work or 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. It must be obvious that the student has completed at least five months of qualified work.

A detailed specification and a time schedule for the project must be made. A search for relevant literature in the field must be made and relevant literature must be studied as a foundation for the work. The work is presented in a written report and in an oral presentation. There are some mandatory seminars.

The work is done 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

Project part 1 (PRO1; 7,5 university credits)
Project part 2 (PRO2; 15 university credits)
Project part 3 (PRO3; 7,5 university credits)

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.