SK202X Degree Project in Applied Physics, Second Cycle 30.0 credits

Examensarbete inom tillämpad fysik, 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

The head of school at the SCI school has 2021-10-13 decided to establish this syllabus to apply from Autumn 2022, registration number: S-2021-0217.

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Engineering Physics

Specific prerequisites

In order for special eligibility for a degree project course of 30 credits at the advanced level to be fulfilled all courses in grades 1-3, or courses required for issuance of bachelor's degree and at least 60 credits of advanced level courses must be completed. The courses on

advanced level must include courses in the program that are relevant to the degree project (can specified) as well as a course in theory of science and research methodology.

Language of instruction

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

Intended learning outcomes

1. show knowledge of the disciplinary foundation of the chosen subject area and best practice, advanced understanding in current research and development and advanced method knowledge.
2. demonstrate the ability to search, collect and integrate knowledge critically and systematically with an overall view of the subject. Identify the need for additional knowledge.
3. demonstrate the ability to identify, analyse, assess and handle complex phenomena, issues and situations also with limited information
4. demonstrate the ability to plan and with adequate methods carry out qualified assignments within given time frames and to evaluate this work
5. demonstrate the ability to develop and evaluate products, processes, systems, methods or technical solutions with regards to human needs and the aims of the society for economically, socially and ecologically sustainable development
6. demonstrate the ability to orally and in writing in dialogue with different groups clearly explain and discuss the conclusions and the underlying arguments.
7. demonstrate the ability to make assessments considering relevant scientific, social and ethical aspects
8. show the skill required to participate in research and development projects, or to work independently in similar qualified activities

Course contents

The degree project consists of an individual assignment with a topic that is decided by examiner. It should normally constitute a specialisation within the chosen field of technology and be at the level of second-cycle studies. The degree project should correspond to 20 weeks of full-time studies. The work will be presented in a written report and an oral presentation at an open seminar.

Examination

- XUP1 - Examination Question, 30.0 credits, grading scale: P, 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 is carried out individually or together with another student. In the latter case, the examiner must ensure that each student's work effort corresponds to the requirements for individual degree project. The degree project is presented in writing and orally in English or Swedish. Depending on the student's educational program, opposition and participation in opposition to other degree projects may be required for a completed course.

The degree project will be assessed after the fulfillment of the course objectives, see above. The grade is set by the examiner as an overall assessment after the degree project report has been plagiarized. For approved degree project, the performance must not be failed according to any of the assessment criteria.

Students who do not finish their work within a year, risk failing the course. Decisions are made, where applicable, in consultation between the examiner and the program manager.

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.