



SK2004 Project course in Quantum Technology 7.5 credits

Projektkurs i kvantteknologi

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 headmaster at the SCI school has 2021-04-15 decided to establish this syllabus to apply from Autumn 2021, registration number: S-2021-0166

Grading scale

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

Education cycle

Second cycle

Main field of study

Engineering Physics

Additional regulations

Registration for the course is done via a special registration form.

Specific prerequisites

Completed course: SI2380 Quantum Mechanics, advanced course

Completed course: SK2903 Quantum technology

The examiner must ensure that the student has the additional subject knowledge in quantum technology required for the project. Normally, this means that the student, in addition to the courses mentioned above, should also have passed another 1-2 conditionally elective courses at advanced level in quantum technology.

Language of instruction

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

Intended learning outcomes

After completing the course, the student should be able to:

- apply relevant knowledge and skills previously acquired in the subject area to an in-depth problem in quantum technology
- within given frameworks, even with limited information, independently analyze and discuss an issue in quantum technology
- reflect on, evaluate and critically review their own and others' scientific results
- document and present their work to a specialized target group with high demands on structure, formalities and language management
- identify their need for additional knowledge and continuously develop their skills

Course contents

The project work consists of an independent work in quantum technology. The subject of the project is decided by the examiner and shall constitute an in-depth study of one of the sub-areas of quantum technology. The project work must be at an advanced level and correspond to 5 weeks of full-time studies. The work must be reported via an oral and a written presentation.

Examination

- PRO1 - Project assignment, 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

The project work must be presented orally and in writing in English or Swedish.

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.