FIH3612 Solid State Devices 7.5 credits

Fasta tillståndets komponenter

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 FIH3612 valid from Spring 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Other 3rd cycle courses in semiconductor devices or semiconductor physics.

Language of instruction

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

Intended learning outcomes

After passing this course you will be able to solve a design, implementation or investigative task with limited supervision, and to report the result of such a task.

More precisely, you will be able to

- plan, carry through and report such a task in solid state devices,
- obtain and evaluate information applicable for carrying out the task,
- choose a course of approach and define, follow and follow up a plan for carrying out the task in a given resource budget,
- report your results in writing, professionally,
- report your results orally, with proper structure and time-keeping,
- show in depth knowledge in an area of solid state devices.

Course contents

Through this course students with a special interest area within the field of solid state devices can perform studies that have been individually defined. Possible topics include one or more of: analysis, simulation, design, materials growth and characterization, processing, process control, reliability testing, electrical characterization, high frequency characterization, noise, photonic characterization.

Examination

- EXA1 - Examination, 7.5 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.

Individually written report

No instruction is given in this course

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.