FIH3611 Solid State Devices 3.0 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 FIH3611 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,

• 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.

The course can also be used to report shorter courses outside of KTH like summer schools etc.

Examination

• EXA1 - Examination, 3.0 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 stu-
dents.

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.