

FIL3604 Integrated Circuits 3.0 credits

Integrerade kretsar

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 FIL3604 valid from Spring 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Other 2nd or 3rd cycle courses within integrated circuits.

Language of instruction

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

Intended learning outcomes

The aim of this course is to provide an understanding of, and experience with, the concepts, analysis, design and testing of integrated circuits. After passing this course the students will be able to analyse, design. implement, test, and report the results of such a task.

More precisely, the students should be able to:

- plan, carry through and report such a task within the integrated circuits area,
- identify and evaluate the information required to carry out the task,
- choose the appropriate approach, define it and follow it for carrying out the task in a given resource budget,
- report the results orally and in writing,
- show improved knowledge in the area of integrated circuits.

Course contents

Trough this course students with interest in integrated circuits can perform studies that have been individually defined. Possible topics include one or more of the following: system analysis and design; circuit design, simulation and analysis; physical design; measurement and 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 students.

Grading scale: P/F

Other requirements for final grade

Individually written report (and oral presentation).

No other 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.

