

SI2532 Computational Physics, Additional Course 2 7.5 credits

Beräkningsfysik, tilläggskurs 2

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 SI2532 valid from Autumn 2014

Grading scale

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

Education cycle

Second cycle

Main field of study

Engineering Physics

Specific prerequisites

Computational physics equivalent SI2530.

Language of instruction

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

Intended learning outcomes

The course intends to provide advanced knowledge in computational physics and experience and ability to alone solve problems in computational physics. On completion of the course, the student should be able to:

- Independently develop, write and test simulation program.
- Critically assess results with regard to limitations of models and the statistical nature of the methods.

Course contents

During the course the student solves a larger project assignment that can be chosen freely among a number of suggested assignments. The work includes literature studies, programming and simulations and compilation and written presentation of results. The teaching consists of individual supervision.

Disposition

Course consist of an individual project that can be completed after agreement with examiner. This course may be chosen only after agreement with the examiner.

Course literature

Enligt överenskommelse med examinator.

Examination

• PRO1 - Project, 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

Written report and oral presentation.

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.