DN2295 Project Course in Scientific Computing 7.5 credits

Projektkurs i beräkningsteknik

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for DN2295 valid from Autumn 2009

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

Language of instruction

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

Intended learning outcomes

This course gives an insight into some current research area, e.g. the finite element method with applications in a.o. wave propagation, solid mechanics, fluid mechanics and turbulence. The course is designed as a group project based on the prerequisites of the students and those teachers who can supervise the project.

After the course the students should have

* read the theory relevant for the project from e.g. text books and scientific reports,
* performed numerical experiments for some numerical method obtained e.g. by coupling existing components from an advanced scientific computing program,
* summarized the results in an oral and written examination.

Course contents

In the course students with special interest in scientific computing work with a task within a group of say 2-4 persons. The contents is designed for the whole group and the work is partitioned between the group members so that everybody gets insight into and is able to present the whole project. The course is given if sufficient teacher resources are available for the supervision of the project

Some introductory lectures are given in the beginning of the course.

Course literature

Depends on the syllabus.

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.

If the course is discontinued, students may request to be examined during the following two academic years.

In this course all the regulations of the code of honor at the School of Computer science and Communication apply, see: http://www.kth.se/csc/student/hederskodex/1.17237?l=en_UK.

Other requirements for final grade

Passed oral presentation in seminar form and a written report.

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.