



# DD2375 Project Course in High-Performance Computing

## 7.5 credits

Projektkurs i högprestandaberäkningar

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

### Establishment

The official course syllabus is valid from the autumn semester 2022 in accordance with head of school decision: J-2021-1953. Decision date: 14/10/2021

### Grading scale

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

### Education cycle

Second cycle

### Main field of study

Computer Science and Engineering

### Specific prerequisites

Completed course DD2356 Methods in high performance computings or DD2360 Applied GPU Programming or DD2358 Introduction to High Performance Computing.

Active participation in a course offering where the final examination is not yet reported in LADOK is considered equivalent to completion of the course. This applies only to students

who are first-time registered for the prerequisite course offering or have both that and the applied-for course offering in their individual study plan.

## Language of instruction

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

## Intended learning outcomes

After passing the course, the student shall be able to

- carry out and present a whole, or parts of, a method from a current research report in high performance computing
- give an account of current research challenges in high performance computing
- effectively search for research literature that is relevant to high performance computing
- read research articles efficiently and evaluate them with regard to structure and aspects such as novelty, technical soundness, evaluation and usability

in order to be able to benefit from academic research in their future career and thereby contribute to knowledge transfer to the industry

## Course contents

- Give an overview of relevant research publications, the structure of a research paper and how to, in an efficient manner, search for relevant literature
- Read, present and discuss the latest research reports in high performance computing
- Implement a method, or parts thereof, published in a research paper

## Examination

- PRO1 - Project work, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- PRO2 - Project work, 5.5 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.

## 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.