



DD1396 Parallel and Concurrent Programming in Introduction to Computer Science 3.0 credits

Parallellprogrammering i introduktion till datalogi

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

Establishment

The official course syllabus is valid from the spring semester 2027 according to the decision by director of first and second cycle education. Decision date: 2027-10-15

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Knowledge and skills in programming corresponding to completed course DD1337/DD1310-DD1319/DD1321/DD1331/DD1333/DD100N/ID1018/ID1022.

Knowledge of algorithms, data structures and basic software development techniques, 6 credits, corresponding to completed course DD1338/DD1320-DD1328/DD2325/ID1020/ID1021 or completed exam elements KONT and LABD in DD1326.

Active participation in DD1338 during study period 2-3 of the same academic year is considered equivalent to completion of the course. Registered students are expected and considered to be actively participating.

Intended learning outcomes

After passing the course, the student should be able to

- design and implement simple concurrent programs
- use programming to solve problems
- analyze, choose, select and implement basic algorithms and data structures
- describe the fundamental principles of HTTP and client-server architecture, and implement simple client-server programs with consideration for accessibility

in order to

- efficiently use computers in their continuing education and working life
- find and use the correct techniques for a given problem
- be prepared for advanced courses in computer science.

Course contents

Theory and practical exercises regarding basic parallel programming and software development, including HTTP, client-server architecture, and accessibility. Go will be the language of instruction.

Examination

- HEM3 - Assignment, 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.

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.