ID1212 Network Programming 7.5 credits

Nätverksprogrammering

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

The official course syllabus is valid from the autumn semester 2023 in accordance with the decision by the Head of School: J-2023-0626.Date of decision: March 13 2023

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

- Knowledge in networks and communication, 7.5 higher education credits, equivalent to IK1203.
- Knowledge in parallel programming, at least 3 higher education credits, equivalent to ID1019/ID1217.

Language of instruction

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

Intended learning outcomes

After a pass mark on course, the student should be able to develop distributed applications that communicate using different communication paradigms and then use appropriate design and architecture.

Course contents

- Programs that communicate over sockets with TCP and UDP.
- Enciphered sockets with SMTP/IMAP/HTTPS.
- Introduction to application servers (Tomcat) and frameworks (Run).
- Thread handling for the above.
- HTTP/2 and websockets.

Java is used as language in the course.

Examination

- LAB1 - Laboratory work, 3.5 credits, grading scale: P, F
- PROJ - Project work, 4.0 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.

The final mark of the course is decided by tasks for higher grades in the test part of the course.

Transitional regulations

Students who have taken the course with earlier examination codes can still get examinated on these, apart from TEN1 that is replaced by PROJ.

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.