ID2010 Programming of Interactive Systems 7.5 credits

Programmering av interaktiva system

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

On 2019-10-15, the Head of School of EECS has decided to establish this official course syllabus to apply from the spring semester 2020 (registration number J-2019-2063).

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 in Java programming the equivalent ID1018 of or DD1337.

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

- recognise and identify characteristic properties of a distributed computer program
- describe and use the basic computer networking technology with an emphasis on TCP/IP
- give examples of loosely coupled ad-hoc systems, containing reactive and proactive components
- evolve and develop a distributed computer program with multiple components and asynchronous interactions.

Course contents

- Distributed systems characteristic differences from local systems: delay, memory access, partial error and concurrency.
- Computer communication and technician for spontaneous discovery and message passing.
- The agent metaphor as a method to build distributed systems.
- Java programming in network: programme with several threads, distributed programmes, RMI, mobile objects.

Examination

- LAB1 - Laboratory Work, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 4.5 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.

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.