DD2485 Programmable Society 7.5 credits

Programmerbart samhälle

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 2024 in accordance with the decision from the faculty board: J-2024-2368.Decision date: 2024-11-12

Decision to discontinue this course

The course will be discontinued at the end of HT 2024 according to faculty board decision: J-2024-2368.Decision date: 2024-11-12The course was given for the last time in HT 2023. The last opportunity for examination in the course was given in HT 2023.The course has only been given in HT2023 and all those accepted have passed the grade on the course. Plussing is not possible.

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Knowledge in software engineering, 7.5 higher education credits, equivalent to completed course DD2480.

Active participation in a course offering where the final examination is not yet reported in LADOK is considered equivalent to completion of the course. Being registered for a course counts as active participation. The term 'final examination' encompasses both the regular examination and the first re-examination.

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

- design, develop and run blockchain protocols and nodes
- use modern programming languages for smart contracts
- use and improve software engineering for smart contracts (testing, deployment, continuous integration/delivery)
- explain technology for distributed ledgers (DLT) and smart contracts in different implementation domains (decentralised finance, reporting, law, control with distributed autonomous organisations, digital art)

in order to

- obtain the necessary skills of a blockchain engineer, smart contract engineer, web3 engineer or digital artist
- be able to exercise lifelong learning in fast changeable technology.

Course contents

- distributed ledger technology (DLT), especially block chains
- programming with smart contracts
- software development for the programmable society
- current research about **distributed ledger technology** and smart contracts

Examination

- ÖVN1 - Oral and written exercises, 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.

Project-based examination with several graded projects.

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.