

DD2496 Privacy Enhancing Technologies 7.5 credits

Integritetsskyddande tekniker

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

This official course syllabus is valid from the autumn semester 2024 in accordance with decision by the director of first and second cycle education: J-2024-0230. Date of decision: 05/02/2024

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 computer security equivalent to DD2395.

Knowledge in English corresponding to the upper secondary course English B/English 6.

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

- identify threats against the privacy in a digital system
- explain and use basic terminology in the area correctly
- find and use documentation of privacy related problems and technologies
- give an overview of privacy enhancing technologies (PET)
- analyse descriptions of PET systems with regard to their protection of privacy and functionality
- analyse and discuss descriptions of PET-systems with regard to their ethical consequences and influence on the society
- present and explain their arguments to others

in order to

- as citizen and expert be able to discuss privacy in general and PET in particular
- in the working life and research project be able to use existing privacy enhancing techniques and develop software and computer systems with integrity in mind.

Course contents

Judicial context for integrity in Europe.

Basic concepts and terminology in the area of privacy enhancing technologies.

A selection of privacy enhancing technologies.

Examination

- INL1 Written assignment, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- SEM1 Seminar assignment, 3.5 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.

Other requirements for final grade

Seminar assignment (carry out an own seminar and develop questions for the seminar).

Written assignment (answer questions about the seminars and make a written submission).

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.