DD2496 Privacy Enhancing Technologies 7.5 credits

Integritetsskyddande tekniker

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

Establishment

Course syllabus for DD2496 valid from Autumn 2017

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Computer Security equivalent to the course DD2395.

Language of instruction

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

Intended learning outcomes

After completion of the course, the student should be able to:

- identify threats against privacy in an IT system,
- explain and use basic terminology in the area correctly,
- find and use documentation of privacy-related problems and technologies,
- demonstrate an overview of privacy enhancing technologies (PET),
- analyse descriptions of PET systems with regard to their protection of privacy and function,
- identify vulnerabilities from PET system descriptions, predict their equivalent threat, and choose countermeasures against identified threats and show their efficiency,
- compare countermeasures and evaluate their side effects,
- present and explain their reasoning to others,

in order to

- as citizen and expert be able to discuss privacy in general and PET in particular,
- in professional life and/or research projects be able to use existing privacy enhancing technologies and develop their own.

Course contents

Legal context for privacy in the EU.

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

A selection of privacy enhancing technologies.

Course literature

Will be announced on the course web no later than 10 weeks before the start of the course. The reading list will be expanded during the course considering the students' choice of technologies.

Examination

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

If the course is discontinued, students may request to be examined during the following two academic years.

In this course, the code of honor of the school is applied, see: http://www.kth.se/en/csc/ut-bildning/hederskodex. Under special circumstances, other examination formats may be used.

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.