



IV2024 Principles of Computer Security 7.5 credits

Principer för datasäkerhet

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

Establishment

Course syllabus for IV2024 valid from Autumn 2010

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

Eligibility for "single-course" students not enrolled in a KTH programme:

- BSc degree within Business Administration, Economics, 180 ECTS credits (hp) in Technology or Natural Sciences or equivalent and
- documented proficiency in English B or equivalent.

Language of instruction

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

Intended learning outcomes

Having completed this course the student will be able to

- a) communicate knowledge of the concepts, models and terms commonly used in the area of ICT security.
- b) identify and productively experiment with currently relevant ICT security issues.
- c) evaluate factors that influence the security of systems.

Course contents

The course includes:

- * Introduction to information security
- * Security Models and Policies
- * Cryptography overview
- * Security Architectures, incl. Identification, authentication, access control.
- * Malicious Software, incl. Viruses, worms, trojan horses, etc.
- * Program Security
- * Security Tools
- * Assurance
- * Law and ethics
- * Privacy and Privacy Enhancement Tools

Disposition

Lectures and Practical Assignments.

Course literature

Preliminary:

Matt Bishop: Introduction to Computer Security, Addison Wesley, 2005, 0-321-24744-2

Examination

- INL1 - Assignment, 1.5 credits, grading scale: P, F
- TEN1 - Examination, 6.0 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.

Written Examination and Assignments. Possible grades for the written examination are A/B/C/D/E/Fx/F while each of the assignments are either pass or fail (P/F).

To pass the course it is necessary that both the written examination and the assignments are passed. The total grade of the course is based on the grade of the written exam.

If the student is close to pass the exam (assessed by the examiner), the student gets the opportunity to pass the exam by doing a complement assignment. This assignment can only give the grade E, and not higher. The assignment must be sent in according to given deadline and can only be used to raise the grade to E on the current exam.

Detailed examination criteria for the course can be obtained at:
<http://people.dsv.su.se/~alan/2024/goalsAndExamCriteria.pdf>

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.