

Innholdskrav	Utfyllende opplysninger og kommentarer
Navn:	Computer Security
Emnekode og emnenivå:	Inf-2310-2
Emnetype	The course can be taken as a singular course
Omfang	10 ECTS
Overlapp	Inf-2301 (5 ECTS) Inf-2310-1 (7 ECTS)
Forkunnskapskrav, anbefalte forkunnskaper	INF-1101 Data structures and algorithms INF-2300 Computer Communication
Faglig innhold	The course will provide an introduction to general principles of computer security from an applied viewpoint. This includes common cyberattacks, techniques for identifying and defending against vulnerabilities in computers and networks, the fundamental building blocks of secure systems, security principles for commonly used items, and human, social, and economic aspects of computer security.
Relevans i studieprogram	
Læringsutbytte	<p>Knowledge</p> <ul style="list-style-type: none"> • Should know the general principles of computer security • Should know common cyberattacks • Should know the fundamental building blocks of secure systems, including encryption, digital signatures, crypto-protocols, and access control models • Should have an in-depth knowledge of challenges and solutions related to providing secure communication between computers • Should be aware of the human, social, and economic aspects of computer security <p>Skills:</p> <ul style="list-style-type: none"> • Should be able to use the fundamental security building blocks to design and implement secure systems • Should be able to design and implement solutions that use encryption as a secure element in communication <p>Competence:</p>

	<ul style="list-style-type: none"> Should identify and be able to defend against security vulnerabilities
Undervisning og arbeidsform	Lectures: 30 hours, Colloquium: 30 hours, Lab: 30 hours. The course is given every spring semester.
Arbeidskrav	The coursework includes up to 4 written assignments graded "Approved" / "Not Approved". Oral presentation of the assignments and demonstration of a working system can be claimed.
Eksamen og vurdering	A 4 hour final written exam counting 100%. Approved assignments give access to the final written exam.
Kontinuasjoneksamen ²	<p>Re-sit examination: Given early in teaching free semester, if the course is compulsory in the study plan. It will be arranged a 4 hour written exam counting 100%. To get access to the re-sit examination in the teaching free semester the student must have passed the course requirements.</p> <p>Postponed examination: Given early in teaching free semester. It will be arranged a 4 hour written exam counting 100%. To get access to the postponed examination in the teaching free semester the student must have passed the course requirements.</p>
Vurdering med flere deksamener	-
Sikkerhetsopplæring	-
Praksis	-
Undervisnings- og eksamensspråk ³	The language of instruction is English and all of the syllabus material is in English. Examination questions will be given in English, but may be answered either in English or a Scandinavian language.
Pensum	Syllabus and reading list are available in Fronter or by contacting the teacher or the student adviser.
Privatister	-
Andre bestemmelser	-

Kilde: https://intranett.uit.no/intranett/vis-artikkel?p_document_id=432321&p_dimension_id=88203&men=65815 (intranett)