

COURSE SYLLABUS

State-of-the-art in Cybersecurity, 7.5 credits

State-of-the-art inom cybersäkerhet, 7,5 högskolepoäng

Course Code:	T2SICI	Education Cycle:	Second-cycle level
Confirmed:	Sep 29, 2026	Disciplinary domain:	Technology
Valid From:	Aug 30, 2027	Subject group:	Computer Technology
		Specialised in:	A1F Second cycle, has second-cycle course/s as entry requirements
		Main field of study:	Computer Science

Intended Learning Outcomes (ILO)

On completion of the course the student shall:

Knowledge and Understanding

- display knowledge of state-of-the-art and emerging areas in cybersecurity

Skills and Abilities

- demonstrate the ability to understand state-of-the-art and emerging areas in cybersecurity
- demonstrate the ability to make assessments of directions in state-of-the-art and emerging areas in cybersecurity

Judgement and Approach

- demonstrate the ability to draw conclusions about state-of-the-art and emerging areas in cybersecurity
- demonstrate the ability to draw conclusions about directions in state-of-the-art and emerging areas in cybersecurity

Content

The course provides knowledge and skills grounded in state-of-the-art and emerging areas of cybersecurity. This includes current best practices, evolving knowledge domains, and established work procedures. While state-of-the-art is a continuously evolving concept, the course highlights key trends such as the integration of AI and machine learning, and the growing importance of security-by-design principles. Students will also gain the ability to critically assess and draw informed conclusions about strategic directions and methodological approaches in modern cybersecurity practice.

The course includes the following elements:

- State-of-the-art and emerging areas in cybersecurity
- Approaches for assessment of state-of-the-art and emerging areas in cybersecurity
- Approaches to draw conclusions and make decisions about directions state-of-the-art and emerging areas in cybersecurity

Type of Instruction

The teaching in the course consists mainly of lectures, assignments, tutoring, seminars, and a project.

Language of instruction is English.

Entry Requirements

Passed courses at least 90 credits within the major subject in Computer Science, Informatics, Information Systems, Computer Engineering, or the equivalent, and taken the course Cybersecurity Overview, 7,5 credits or equivalent. Proof of English proficiency is required.

Examination and Grades

The course is graded 5, 4, 3 or U.

Registration of examination:

Name of the Test	Value	Grading
Assignment ¹	4.5 credits	5/4/3/U
Project	3 credits	G/U

¹Determines the final grade of the course, which is issued only when all course units have been passed.

Course Literature

Please note that the course literature may be revised up to eight weeks before the start of the course.

Title: ISC2 CISSP Certified Information Systems Security Professional Official StudyGuide, 10th Edition

Author: Mike Chapple, James Michael Stewart, Darril Gibson

Publisher: Wiley

ISBN: 978-1-394-25469-9