

Education plan

for

Masterprogram i informationssäkerhet
Master´s Programme in Information Security

120.0 Higher Education Credits
120.0 ECTS credits

Programme code:	SMINO
Valid from:	Autumn 2024
Date of approval:	2024-05-17
Changed:	2024-05-17
Department:	Department of Computer and Systems Sciences

Decision

Finalized by: Samhällsvetenskapliga fakultetsnämnden , 2024-05-17

Prerequisites and special admittance requirements

A Bachelor degree equal to 180 ECTS in any main field of study.

Language requirements: English B or the equivalent

Programme structure

This international master's programme in information security supplies an identified demand of skills and competence from the industry and research/education with a broad, interdisciplinary perspective.

The programme covers information security through several different practical and theoretical starting points thus giving a more holistic view of this complex area. The topic is covered from the perspectives of the individual, the organisation and the society. The content of the programme is based on state of the art research and theories in the field and at the same time characterized by "hands-on" applied questions such as: how an effective information security work can be conducted in the organization.

The language of instruction is English.

Goals

In addition to the general learning goals stated in chapter 1, paragraph 9 of the Swedish Higher Education Act, the following goals, according to Higher Education Ordinance, are applied.

Knowledge and Understanding

For a Degree of Master the student shall:

- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate specialised methodological knowledge in the main field of study.

Skills and Abilities

For a Degree of Master the student shall:

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information,
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work,
- demonstrate the ability to clearly report and discuss both orally and in writing own conclusions and the knowledge and argumentation which they are based on, in dialogue with different audiences in national and international contexts, and
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Assessment Ability and Approach

For a Degree of Master the student shall:

- demonstrate the ability to make assessments in the main field of study taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development,
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal needs for further knowledge and to take responsibility for own continuous learning.

Courses

All courses are within the main field of Computer and Systems Sciences.

The course Supplementary course in Computer and Systems Sciences 15 credits is at basic level, all other courses are at advanced level.

First Semester

Alternative 1: for students who do not have 90 credits in Computer and Systems Sciences, Informatics or

the equivalent:

- Supplementary course in Computer and Systems Sciences, 15 credits

Alternative 2: for students who have 90 credits in Computer and Systems Sciences, Informatics or the equivalent:

- Two elective courses (7,5 credits each) chosen from a list provided by the department

The other two courses are mandatory for all students:

- Fundamentals of Information Security, 7,5 credits
- Information Security in Organisations, 7,5 credits

Second Semester

- Scientific Communication and Research Methodology, 7,5 credits
- Network Security, 7,5 credits
- Cyber Forensics, 7,5 credits
- Cyber Security, 7,5 credits

Third Semester

- Research Methodology for Computer and Systems Sciences, 7,5 credits
- Intelligence and Security Informatics, 7,5 credits
- Information and IT security management, 7,5 credits
- Legal aspects of information security, 7,5 credits

Fourth Semester

- Master Thesis in Computer and Systems Sciences, 30 credits

Degree

The programme leads to a Degree of Master of Science.

The main field of study is Computer and Systems Sciences.

The Specialization is Information Security.

Misc

When the program is discontinued and its education plan suspended, the student has the right to complete the education according to this education plan, within the time of the program's nominal duration plus two years. The limitations specified in the syllabuses for the courses included in the program primary apply.