Department of Computer and Systems Sciences

Stockholm University

Education plan

for

Master´s Programme in Information Security
Masterprogram i informationssäkerhet

120.0 Higher Education Credits
120.0 ECTS credits

Programme code:	SMINO
Valid from:	Autumn 2018
Date of approval:	2014-04-23
Changed:	2018-03-06
Department:	Department of Computer and Systems Sciences

Decision

This programme syllabus was approved by the Social Sciences Faculty Board 2014-04-23.

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, the programme is partly distance based and builds on further development of already available courses. Due to the relatively open admission requirements there is a supplementary course in Computer and Systems Sciences for students who do not have 90 credits in Computer and Systems Sciences or Informatics.

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 Undestanding
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.

Judgement ability and approach
For a Degree of Master the student shall:

- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work

- 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
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:
- Introduction to Information Security, 7,5 credits
- Scientific Communication and Research Methodology, 7,5 credits

Second Semester
- Software Security, 7,5 credits
- Information Security in Organisations, 7,5 credits
- Network Security, 7,5 credits
- Research Methodology for Computer and Systems Sciences, 7,5 credits

Third Semester
- Information Security Project Management, 7,5 credits
- Cyber Security, 7,5 credits
- Legal aspects of information security, 7,5 credits
- Cyber Forensics, 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 in the main field of study: Computer and Systems Sciences.

The Specialization is Information Security.

Misc

When the programme syllabus has expired, the student has the right to complete the education according to the present curriculum during a settlement period comprising the programme's nominal duration plus two years. During this period the limitations stated in the syllabi apply primarily regarding the courses included in the programme, and secondarily equivalent courses are offered.

A Degree of Master is awarded after the student has completed the courses required to gain 120 credits, of which at least 90 credits of second cycle courses (including master thesis 30 credits).

To enter the second year of the programme students should have completed a minimum of 45 credits from the first year.

To write the master thesis in Computer and Systems Sciences students should have completed a minimum of 60 credits from the first year and a minimum of 10 credits from the second year.