

**SYLLABUS**

**STUDY YEAR 2024/2025**

# **Master Programme in Information Security**

## **Enrollment semester Autumn 2024**

DATE

**2022-10-14**

REFERENCE NO.

**LTU-4061-2022**

DECISION MAKER

**Dean of the Faculty of Humanities and Social Sciences**

## Programme content and structure

The program consists of a total of 120 credits out of which 90 credits are compulsory courses at advanced level in the area of Information Security. The final thesis constitutes 30 credits out of the total of 90 credits at advanced level. The program is available by distance and on campus.

During the first year of the programme, you will take courses that focus on the core concepts of information security and also allow you to apply your knowledge in a project course, which concludes the first academic year. In the project course you can, for example, choose to work together with companies and organizations both nationally and internationally. Courses in the second year broaden your knowledge in the field and prepare for the final thesis. The programme will give you useful skills demanded by employers that operate on the global market.

There are two electable courses within the program where the student can choose between a range of in-depth courses within information security and computer science. There is also the option to graduate after one year, with a one year master degree, after consultation with the course director.

Swedish for beginners is only offered to overseas campus students. The course is not included in the degree, and is read in addition to the compulsory courses.

### Credits

120 credits

### Degree

- Degree of Master of Science (120 credits) - Major; Information Security

## Entry requirements

Academic degree of at least 180 ECTS, in the areas of Systems Science, Computer Science, Computer Engineering, Information Systems or equivalent.

Good knowledge in English, equivalent to English 6

### Selection

The selection procedure is based on academic qualifications, quality and quantity aspects

#### Selection group

Academic: 100%

## Compulsory courses

### Compulsory courses 75 credits

Course code	Course	Cr	Level	Comment
A0004N	Information Security	7.5	Bachelor's level	
A7001E	Strategic security and IT-management	7.5	Master's level	
A7002E	Trends in IS and Information Security	7.5	Master's level	
A7006N	Scientific Methods	7.5	Master's level	
A7007E	Critical Infrastructure Protection	7.5	Master's level	
A7009E	IS-project	15	Master's level	
A7010E	Applied Computer Security	7.5	Master's level	
A7011E	IT-Infrastructure Security	7.5	Master's level	
A7011N	Internet Security	7.5	Master's level	

### Master thesis 30 credits

Course code	Course	Cr	Level	Comment
A7009N	Master Thesis	30	Master's level	

### Electable courses 15 credits

Selective space is 15 credits. It is mandatory to select elective courses up to the given number of credits. The given number of credits of elective courses listed must be met for degree.

Course code	Course	Cr	Level	Comment
A0001E	Security Architecture	7.5	Bachelor's level	Selectable
A7012E	Information Security Risk Management	7.5	Master's level	Selectable
	Digital Forensics for Incident response (IT771A) given by University of Skövde (Second cycle)	7.5		Selectable
	Practical Cryptology, (IT754A), given by University of Skövde (Second cycle)	7.5		Selectable

### Course offered outside the obligatory courses - not compulsory - For non Scandinavian students 3 credits

Selective space is 3 credits. It is mandatory to select elective courses up to the given number of credits. The given number of credits of elective courses listed must be met for degree.

Course code	Course	Cr	Level	Comment
S0046P	Swedish for International Students 1	3	Bachelor's level	Selectable

## Study schedule

### Year of study 1 Enrollment semester Autumn 2024, Is offered in 2024/2025

Study-period	Course code	Course	Cr	Comment
1	A0004N	Information Security	7.5	
1	A7010E	Applied Computer Security	7.5	
1	S0046P	Swedish for International Students 1	3	Selectable
2	A7011E	IT-Infrastructure Security	7.5	
2	A7011N	Internet Security	7.5	
3	A7001E	Strategic security and IT-management	7.5	
3	A7007E	Critical Infrastructure Protection	7.5	
4	A7009E	IS-project	15	

### Year of study 2 Enrollment semester Autumn 2024, Is offered in 2025/2026, planned study schedule

Study-period	Course code	Course	Cr	Comment
1	A7006N	Scientific Methods	7.5	
1	A7012E	Information Security Risk Management	7.5	Selectable
1		Practical Cryptology, (IT754A), given by University of Skövde (Second cycle)	7.5	Selectable
2	A0001E	Security Architecture	7.5	Selectable
2	A7002E	Trends in IS and Information Security	7.5	
2		Digital Forensics for Incident response (IT771A) given by University of Skövde (Second cycle)	7.5	Selectable
3-4	A7009N	Master Thesis	30	Entry requirements