

SYLLABUS

Magister Thesis in Information Security 15 credits A7007N

Examensarbete informationssäkerhet, magister

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2023-01-31**

Magister Thesis in Information Security 15 credits A7007N

Examensarbete informationssäkerhet, magister

Second cycle, A7007N

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	U G VG *	Informationsteknik	Computer Technology

Main field of study

Information Security

Entry requirements

Minimum 30 credits from the MSc in Information Security, e.g. A0004N - Information Security 7.5 credits, A7010E - Applied Computer Security 7.5 credits, A7011E - IT-Infrastructure Security 7.5 credits and A7011N - Internet Security 7.5 credits.

Selection

The selection is based on 30-285 credits

Course Aim

The aim of the course is for the student to practice, develop and show their ability to, in an adequate way, apply theory and method in order to solve unstructured problems relevant to professional activities in Systems Science with a specialization in Information Security.

Upon completion of the course the student shall be able to:

- Develop and formulate a relevant research problem from a selected subject in the area of Systems Science.
- Utilize scientific studies and judge their relevance for the selected problem
- Manage different, and differences between, theoretical areas.
- Carry out a well motivated and relevant selection of theoretical foundation for the study.
- Select and motivate specific research methods for the study with a demonstrated understanding of the impact on the final results of the study.
- Collect relevant information for the study with a connection to selected theory and method
- In a relevant way present the collected information in written format.
- Based on selected theory and method and in scientifically correct way analyze and draw conclusions concerning the selected research problem.
- Evaluate the scientific and practical relevance of the results.
- Perform written communication in a linguistically and scientifically correct manner.
- Orally communicate the results of the study both to scholars in the area as well as to individuals without specific knowledge in the area.
- Defend the results.
- Critically evaluate other studies in a constructive and scientific manner.

Contents

The student will have to - specify the subject for the project, methods of working, problem identification etc. in a written memorandum - In a number of seminars present the progression of the research - write a thesis which is presented and defended at a seminar - act as an opponent on another degree project

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The students normally work in pairs and are appointed a tutor. The thesis is presented and discussed at project seminars. The learning Management System Fronter is used for delivering course material, information and submissions. Knowledge is shared and created within the course through virtual meetings with teachers and other students for discussions, supervision, teamwork and seminars. For student on campus there will be meetings on campus.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Participation in seminars 1 hp (U G)

Opposition 1 hp (U G).

Oral presentation 1 hp (U,G).

Written report 12 hp (U G VG).

In the written report the student shall demonstrate the ability to:

- Develop and formulate a relevant research problem from a selected subject in the area of digital preservation.
- Utilize scientific studies and judge their relevance for selected problem
- Manage different, and differences between, theoretical areas at an advanced level
- Demonstrate a well motivated and relevant selection of theoretical foundation for the study.
- Select and motivate specific research methods for the study with a demonstrated understanding of impact on final result of the study.
- Collect relevant information for the study with a clear connection to selected theory and method.
- In a relevant way present the collected information in written format.
- Based on a selected theory and method and in a scientifically correct way analyze and draw conclusions concerning the selected research problem.
- Evaluate the scientific and practical relevance of the results.
- Perform written communication in a linguistically and scientifically correct manner

In the oral presentation and opposition the student shall demonstrate the ability to:

- Orally communicate the results of the study both to scholars in the area as well as to individuals without specific knowledge in the area.
- Defend the results

In the opposition the student shall demonstrate the ability to:

- Critically evaluate other studies in a constructive and scientific manner.

To pass the course the student shall participate in compulsory meetings and a total of four compulsory seminars, one for presentation and defence, one as opponent and two other seminars as decided by the supervisor. To pass the course further requires e-publishing of the thesis in accordance with the rules of LTU and that the thesis is completed no later than 12 calendar months after the course has formally ended. The student can however only utilize further supervision 6 calendar months after the course has formally ended.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term “unauthorized aids” refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Remarks

Technical Requirements: Access to a PC with Windows XP, microphone, Web camera and permission to install software. Internet connection (minimum 0,5 Mbps).

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0002	Written report	U G VG *	12	Mandatory	A10	Yes
0003	Opposition	U G#	1	Mandatory	A10	
0004	Oral presentation	U G#	1	Mandatory	A10	
0005	Seminars	U G#	1	Mandatory	A10	

Last revised

by Robert Brännström, HUL at the Department of Computer Science, Electrical and Space Engineering 2023-01-31

Syllabus established

by Institutionen för industriell ekonomi och samhällsvetenskap 2007-02-28