

# Introduction to the course

## Information Security

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## 1 Scope and aims

- Scope
- Aims

## 2 Course structure and content overview

- Teaching and tutoring
- Schedule

## 3 Course content

- P7 A short study in information security

## 4 Assessment

- LADOK modules
- Handed-in assignments
- 'What if I'm not done in time?'



- The course treats a wide interpretation of Information Security.
- It treats both engineering and management.
  - The first part is about management.
  - The second part is about engineering.
  - But the principles from the engineering parts can be applied in an organization's process design too.

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## You should be able to

- *apply* basic concepts and models in information security.
- *evaluate* the usability of security solutions and *suggest* improvements that improve usability and security.
- *analyse* threats, possible protection mechanisms and *design* an approach to protection which considers usability.
- *apply* the Swedish Civil Contingency Agency's Framework for Information Security Management Systems to *analyse, assess and improve* the information security in an organization.
- *review and apply* the results of published research in the security field.



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- Teaching consists of several types of learning sessions.
- Most topics are covered only by lectures.
- Some are complemented with seminars, hand-ins and labs.
- These are for combined learning and assessment.
- These are focused to the first six weeks.
- The last four weeks are dedicated to the project.
- These weeks have weekly tutoring sessions.

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**Week Work**

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1      Lecture: Course start/Foundations of security  
Lecture: Security usability

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2      Lecture: MSB's Framework, part I  
Start working on M1 (isms)  
Lecture: MSB's Framework, part II  
Start working on M2, prepare S3 (risk)  
Lecture: Records management

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3      Lecture: Information theory  
Lecture: Cryptography, part I  
Lecture: Cryptography, part II  
First grading of M1 (isms), M2 (risk)

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- 4 Lecture: Identification and authentication, part I  
Lecture: Identification and authentication, part II  
Lecture: Protocols and formal verification  
First seminar session S3 (risk)
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- 5 Lecture: Access control  
Lecture: Accountability  
Lab: L4 (pwdguess), L6 (pricomlab)  
Seminar: S5 (pwdpolicies)
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- 6 Lecture: Trusted computing  
Lecture: Software security  
Lecture: Course conclusion  
Lab: L4 (pwdguess), L6 (pricomlab)
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- 7 Tutoring: P7 (research)  
Lab: L4 (pwdguess), L6 (pricomlab)
- 
- 8 Tutoring: P7 (research)  
Lab: L4 (pwdguess), L6 (pricomlab)
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- 9 Tutoring: P7 (research)
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- 10 Presentation: P7 (research)  
Second grading of M1 (isms), M2 (risk)  
Seminar: second call for seminars (S3, S5)  
Lab: final call for labs
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+3 months    Presentation: second call for presentations (P7)  
                  Final grading of M1 (isms), M2 (risk)  
                  Seminar: final call for seminars (S3, S5)

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+6 months    Presentation: final call for presentations (P7)

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- Small independent study in information security.
- Aim is to practice your knowledge from the course.
- As well as deepen your knowledge in some parts.
- And to assess that you reach the intended learning outcomes (ILOs) above.

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- Aim is to practice your knowledge from the course.
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- And to assess that you reach the ILOs above.

- You are quite free in choosing.
- But the project must be connected to research.
- You must select and read relevant research papers.

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LADOK	Credits (ECTS)	Grade	Course Assignments
I104	1.5	P, F	M1, M2, S3, S5
L104	1.5	P, F	L4, L6
R104	4.5	A–F	P7
Total	7.5	A–F	P7

**Table:** Table summarizing course modules and their mapping to LADOK. P means pass, F means fail. A–E are also passing grades, where A is the best.

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- You have three chances for grading per year.
- These are marked in the schedule.
- Thus there will be three deadlines per assignment until the next time the course is given.

- No tutoring is planned after the course.
- If you want to ensure tutoring, it's during the course.

## If you predict you will not finish on time

- Within three weeks of course start, deregister from the course.
- This allows you to reregister next time the course is given.
- You must reregister to get access to the course the following year.
- If you haven't cancelled, you'll be last in the queue.

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