

# Syllabus

for course at advanced level

**Cyber Security**  
**Cybersäkerhet**

**7.5 Higher Education**  
**Credits**  
**7.5 ECTS credits**

<b>Course code:</b>	ML474C
<b>Valid from:</b>	Autumn 2016
<b>Date of approval:</b>	2016-03-31
<b>Department</b>	Department of Computer and Systems Sciences
<b>Main field:</b>	Computer and Systems Sciences
<b>Specialisation:</b>	A1F - Second cycle, has second-cycle course/s as entry requirements

## Decision

This syllabus was approved by the Head of the Department 2016-03-31.

## Prerequisites and special admittance requirements

22.5 ECTS in information security courses at master level.

## Course structure

Examination code	Name	Higher Education Credits
474I	Cybersecurity, assignment	2.5
474T	Cybersecurity, written exam	5

## Course content

The course deals with problems and issues related to cyber security and provides the essential knowledge, skills and values required to be able to operate in the field of cyber security. The course includes the following areas: - Terminology - Cyber security at different levels - National policies for cyber security - Cyber security between countries - Methods for analysis of cyber security - Relevant goals, requirements, actors, activities and problems - Identification of protected social functions - Relevant standards and best practices - Overview of current research in the field.

## Learning outcomes

Upon successful completion of the course the student should be able to:

- Describe the key objectives, requirements, actors, activities and problems related to cybersecurity.
- Explain the commonly used best practices, processes, standards and methods of analysis of cyber security in organizations, nation states and between countries.
- Apply, in an independent and efficient manner, key methods for analysis of cyber security.
- Know the meaning of key terms and concepts in the field of cybersecurity.

## Education

The teaching and learning activities in the course are: lectures and laboratory works. The language of instruction is English.

## Forms of examination

- a. The course is examined through assignments and a written examination.

- b. The final grading of the course is based on the following grading scale related to the learning outcomes of the course: A = Excellent, B = Very Good, C = Good, D = Satisfactory, E = Sufficient, Fx = Fail, F = Fail.
- c. The grading criteria are communicated to the students at the start of the course.
- d. In order to complete the whole course segment the student must obtain at least grade E (or P with Pass/Fail grades) in all course components/examinations.
- e. In addition the following regulations also apply:
- Students who obtain grade Fx in a written examination task are allowed to complete a supplementary assignment in order to elevate the grade to E. The examiner informs the concerned students when the results of the written examination are published. The supplementary assignment has to be submitted within a given deadline and can only be utilized to elevate the grade of the actual examination task.
  - Students who obtained grade E in an examination task are not allowed to re-write the examination or resubmit the assignment in order to obtain a higher grade.
  - Students who have failed the same examination task twice are allowed to have another examiner appointed, unless there are special reasons to the contrary.

### **Interim**

When a course is discontinued, or its contents are substantially altered, the following applies:

- Failed examination tasks are replaced with other similar examination tasks according to a specific plan.
- If no similar examination tasks can be provided, at least three examination opportunities per examination task should be offered during a period of at least three terms from the date of the decision. After this period, no examinations should be carried out on the course.

### **Limitations**

This course may not be included in a degree together with a course, taken in Sweden or elsewhere, of identical or partially similar content.

### **Required reading**

Information about course literature is available on the department's website - [www.dsv.su.se](http://www.dsv.su.se) - at least two months before the start of the course.