



IK2002 Security in Mobile and Wireless Networks 7.5 credits

Säkerhet i mobila och trådlösa nätverk

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for IK2002 valid from Spring 2009

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Specific prerequisites

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

This course has two major goals: to provide a comprehensive overview of all relevant aspects of security in mobile and wireless networks and also to introduce to students new, advanced research topics. The course will also provide possibilities for hands--on experience with developing security features.

Course contents

- Introduction to wireless networks security
- Analysis of threats and application requirements
- Wireless networks security componets
- Security services in wireless and mobile networks: authentication, authorization, data confidentiality, data integrity and access control
- Security infrastructure for wireless mobile networks: keys and certificate management
- Secure group applications
- Security of mobile code

Course literature

Jon Edney, William A. Arbaugh

“Real 802.11 Security : Wi-Fi Protected Access and 802..11i”

Addison–Wesley, ISBN 0–321–13620–9

Additional reading materials

Examination

- PRO1 - Project, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 4.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH’s coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

The students need to pass both the written exam and the project assignment. The final course grade is based on the grade of the written exam.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.