HI2008 Internet Services and Traffic Measurements 7.5 credits

Internettjänster och trafikmätningar

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

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

Establishment

Course syllabus for HI2008 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Information Technology,Information and Communication Technology

Specific prerequisites

Communication networks I and II or equivalent courses.

Language of instruction

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

Intended learning outcomes

Multimedia services such as IP-TV, IP telephony, and video communication are becoming more and more widespread in IP networks. This development has also increased the need for measurements of performance parameters, network management, and new Internet service architectures.

After completing the course the participants should be able to:

- Analyze requirements for multimedia network services
- Explain and analyze different service architectures
- Understand and use the Simple Network Management Protocol (SNMP)
- Understand and use methods and tools for network monitoring and traffic measurements

Course contents

- Internet services: IP telephony, Session Initiation Protocol (SIP), IP-TV, video communications, peer-to-peer communication, and web services.
- New service architectures, e.g. Differentiated services and Integrated services.
- Methods and tools for network monitoring and measurements
- Measurements and verification of performance and quality of service on the network and application levels in IP networks.
- Simple Network Management Protocol (SNMP).
- Network management information structure and traffic measurements.
- Review of research and development in the field.

Course literature

The course literature will be announced on the web latest four weeks before the start of the course.

Examination

- LAB1 - Laboratory Work, 3.0 credits, grading scale: P, F
- RED1 - Report, 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.

Other requirements for final grade

Passed written exam (RED1; 4.5 cr.), grades A-F.
Passed lab assignments (LAB1; 3 cr.), grades P/F.
Total grades A-F.

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.