



# IV201V Tele Communication, II

## 7.5 credits

### Telekommunikation, II

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 IV201V valid from Autumn 2007

### 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

After this course a student should be able to; lead advanced discussions based on concepts and terms specific to the subject of telecommunications define legacy vis-à-vis next-generation network solutions in terms of in part overall technical design (infrastructure, architecture, components and protocols) in part usage areas (services) identify pros and cons from a business standpoint with different telecommunications solutions generate high-level telecommunications- and data networking oriented solutions that meet real business needs

## Course contents

The technological infrastructure in the organisation has become a decisive factor for its strength in competition. The network architecture changes the conditions for industries and activities; efficient communication both internal and external has become important conditions in the organisation of the 21-century. Electronic services have come to be more usual; ways of doing business changes as do ways of working, use of broadband networks and multi-media applications. The element shows how the technical conditions and the businesslike demands versus each other.

Data- and telecommunication is handled both from a business perspective and a technical perspective.

Topics covered include;

- Technical conditions and 21-century trends
- Internet
- Next-generation networking
- IP services, such as VPN and IPT (VoIP)
- Operations management in the telecom sector
- Broadband networks
- Wireless communication

## Disposition

Lectures, assignments, seminars

## Course literature

Lillian Goleniewski: Telecommunications Essentials: The Complete Global Source for Communications Fundamentals, Data Networking and the Internet, Next-Generation Networks and Wireless Communications Upplaga : 2 ISBN 0-321-42761-0

## Equipment

PC i recommended but not obligatory

## Examination

- PRO1 - Assignment, 3.0 credits, grading scale: A, B, C, D, E, FX, 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.

Written examination 4,5 hp. Written report (group) 3 hp.

## Other requirements for final grade

Attained result in the written examination determines course grade.

## 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.