FDA127 Communication (CUGS)

Lectures:

24 h.

Recommended for

Graduate students in electrical engineering, computer engineering, or computer science.

The course was last given:

New course.

Goals

To give knowledge of advanced network architectures, mobile and wireless networks, and multimedia information and networking.

Prerequisites

Basic course in computer networks.

Organization

Seminars, reading assignments, and laborations.

Contents

• Mobile and Wireless networks

spontaneous networking techniques

MAC protocols: CSMA, MACAW

cellular: GSM/GPRS, UMTS/WCDMA, WAP, mobile IP

home: infrared, Bluetooth

- Location management and context awareness.
- Network management: SNMP, MIB, etc.
- Routing protocols: BGP, IGP, RIP etc.
- Services & protocols.
- Security: Firewall, Ipsec, access methods, evaluation methods.
- Network architectures: internet exchange points, DMZ nets (de-militarized zone networks.)
- TCP/IP: QoSx, ICMP, Mobile IP, IPv6x etc.
- Peer-to-peer networking.

Literature

Tanenbaum, A: Computer Networks. Fourth Ed. Prentice Hall.

Teachers

Juha Takkinen.

Examiner

Nahid Shahmehri.

Schedule

Fall 2002.

Examination

Active participation and seminar presentations.

Credit

3 credits.