

Offered by  
ICT Engineering

IT-CON1

1.0

## Computer Networking

ECTS

5

### Prerequisites

General admittance requirements.

- SDJ1

### Main purpose

The main purpose of the course is to gain a basic understanding of computer networks and the protocols used in the Internet.

### Knowledge

- Knowledge about the nuts and bolts of the Internet
- Understand layered abstractions in TCP/IP
- Understand World Wide Web
- Understand the Internet's naming system
- Understand how electronic mail systems work
- Understand addressing in a TCP/IP network

### Skills

- Configure a small office/home office (SOHO) network based on Ethernet technology
- Analyze network traffic using packet sniffer software
- Clients/server programming with sockets

### Competences

Having completed this course, students should be able to:

- Configure computers to communicate on a network
- Understand and discuss protocols on a professional level

### Topics

- TCP/IP
- Application level protocols
- IP addressing
- Network configuration
- Socket programming

### Teaching methods and study activities

The required workload for students is estimated at 137 hours where approximately 2/3 is self study including exercises and examination preparation. Activities change between theory, self study and exercises.

### Resources

James F. Kurose, Keith W. Ross. Computer Networking, A Top-Down Approach; Fifth Edition (International Edition). Pearson.

### Evaluation

Internal examination.

25% of the grade will come from a test held during the course, 75% will come from the final examination.

### Examination

Oral examination.

The duration of the oral examination is 20 minutes, including voting and marking.

### Grading criteria

Students will be graded according to the Danish 7-point grading scale.

10/9/2018

Mark 12:

Awarded to students who have shown excellent comprehension of the above-mentioned competences. A few minor errors and shortfalls are acceptable.

Mark 02:

Awarded to students for a just acceptable level of comprehension of the required competences.

**Additional information**

**Responsible**

Erland Ketil Larsen

**Valid from**

1.8.2016

**Course type**

Global Business Engineering; Compulsory Course for GBE-ICT; 5. semester;  
ICT Engineering; Compulsory Course for all ICT Engineering;

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