Faculty of Economic Sciences, Communication and IT
Computer Science

Syllabus

Course Approval
The syllabus was approved by the Faculty Board of Economic Sciences, Communication and IT on 11 October 2007, and is valid from the Spring semester of 2008 at Karlstad University.

Course Code: DVGB02
Computer Networking I, 7.5 ECTS Credits
(Datakommunikation I, 7.5 Swedish credit points)
Degree Level: Bachelor
Progression Level: B

Language of Instruction
Swedish

Prerequisites
Computer Science 30 ECTS cr. including Software Development Methodology 7.5 ECTS cr. or equivalent.

Major Field of Study
Computer Science

Learning Outcomes

Upon completion of the course students should be able to:
- give an account of the structure of the modern computer network and the services offered to various applications,
- describe the functionality of the different TCP/IP stack layers and how the layers interact,
- explain how the most important protocol of the TCP/IP stack works and is used,
- write simple client/server applications, and
- give a written account of an application in computer networking.

Content and Form of Instruction

The course includes, for instance:
- the structure of the Internet, cpmponents and services
- the function of different network applications (the web and http, FTP, e-mail, DNS)
- socket programming
- functionality and protocol in the different TCP/IP stack layers
- permanent and wireless local networks

Instruction is in the form of lectures, literature studies with reading instruction, study material, and hand-in assignments. There are also exercises and laboratory work.

Reading List

See separate document.

Examination

Examination is in the form of laboratory work, hand-in assignments and a written test.

Grades

One of the grades 5 (Distinction), 4 (Some Distinction), 3 Pass , or Fail (U), is awarded in the examination of the course and its modules.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University, ref. C2007/368, stipulate the obligations and rights of students and staff.