

SYLLABUS

Mobile networks and protocols 7.5 credits D7002D

Mobila nätverk och protokoll

Course syllabus admitted: Spring 2017 Sp 3 - Present

**DECISION DATE
2016-06-15**

Mobile networks and protocols 7.5 credits D7002D

Mobila nätverk och protokoll

Second cycle, D7002D

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Mobila system	Computer Technology

Entry requirements

Courses of at least 90 credits at first cycle including discrete mathematics for engineers, programming, data structures and algorithms, computer communications and network programming.

Selection

The selection is based on 30-285 credits

Examiner

Christer Åhlund

Course Aim

The student shall

- Show scientific knowledge about network protocols enabling mobility in IP networks.
- Show the ability to understand and interpretate scientific publications in the area of mobile networks and protocols.
- Show the ability to individually analyse, model complex problems through simulations, and to analyse and evaluate the results.
- Show knowledge in creating network solutions based on existing networks and protocols for mobility, and to evaluate and analyse them.
- Show the ability to identify knowledge gaps and bridging these gaps by gaining new knowledge.
- Show insight in research and development by understanding limitations and possibilities with existing mobile networks and protocol.

Contents

The course covers mobile network communication and discusses mobility in a system perspective. The course gives an overview of mobility concepts like Mobile IP, SIP and SCTP as well as quality of service/quality of experience, mobile network deployment, heterogeneous network access and performance evaluation.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The education consists of lectures, programming and theoretical assignments. The assignments can require written or verbally presentations and may contain a deadline. During the course home-exams may occur.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

The course will adopt a continuous form of examination. This will include assignments consisting of lab exercises, research paper, presentation of a research paper, and final exam.

Literature. Valid from Spring 2017 Sp 3

Course offered by

Department of Computer Science, Electrical and Space Engineering

Items/credits

Number	Type	Credits	Grade
0001	Written exam	3	G U 3 4 5
0002	Seminar	1.5	U G#
0003	Laboratory work	3	U G#

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Jonny Johansson, HUL SRT 2016-06-15

Syllabus established

by LTU Skellefteå 2008-11-19