



# FEP3215 Advanced Performance Analysis Project Course

## 3.0 credits

### Advanced Performance Analysis Project Course

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 FEP3215 valid from Autumn 2012

### Grading scale

### Education cycle

Third cycle

### Specific prerequisites

EP3210 passed.

### Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

The course gives the opportunity for the student to deepen his/her understanding in one specific area of communication network protocol design. By the end of the course the student will learn how to demonstrate with simple tools the results and limitations of a given mathematical model.

## Course contents

The course consists of a small project requiring ca. 20 hours of work. By the end of the course the student has to provide a demonstration tool designed to explain one given phenomena in the area of communication networks.

The addressed topic has to be selected from the following fields:

- Multi-access communication: CSMA/CD - reservation techniques (token and polling) - packet radio networks (WLANs)
- Routing in data networks: shortest path routing - optimal routing and topology design
- Flow control (TCP)
- Quality of service (QoS) in IP networks: requirements for multimedia transmission - network support: scheduling, shaping, forward error correction

## Disposition

Project course with independent work.

## Equipment

Own computer.

## Examination

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.

## 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.

