



# FEL3600 Wireless Sensor Network Programming 3.0 credits

Programutveckling för trådlösa sensornätverk

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 FEL3600 valid from Autumn 2010

## Grading scale

## Education cycle

Third cycle

## Specific prerequisites

- The class targets PhD students in electrical engineering, computer science, and related programs.
- Master level students can be admitted upon request, please contact Olaf Landsiedel (oland AT kth DOT se).
- Non KTH students are also very welcome to take this class, please contact Olaf Landsiedel (oland AT kth DOT se)
- You shall have some background in communication systems, for example, some class on mobile or wireless communication.
- As this class includes hands-on programming of wireless sensor networks, some background in programming C or C++ is essential.

## Language of instruction

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

## Intended learning outcomes

In this class we introduce you to wireless sensor networks (WSN). Lectures combined with hands-on labs and projects give you the knowledge and hands-on experience to design and implement own communication protocols, algorithms, and applications.

## Course contents

Introduction to Wireless Sensor Networks, Operating Systems and Basic Communication, Medium Access Control, Contiki Programming, Advanced Communication Protocols, TinyOS Programming, High Level Programming, Programming Communication Functionality,

## Disposition

Lectures, Homeworks, Project

## Course literature

See course homepage

## 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.

## Other requirements for final grade

Homeworks, project

## 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.