

# EL2747 Programming Wireless Sensor Network - A System Perspective 7.5 credits

Programmering av trådlösa sensornät - ett systemperspektiv

This is a translation of the Swedish, legally binding, course syllabus.

#### **Establishment**

Course syllabus for EL2747 valid from Autumn 2010

#### **Grading scale**

P, F

### **Education cycle**

Second cycle

### Main field of study

**Electrical Engineering** 

#### Specific prerequisites

120hp, english B or equivalent

#### 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

http://www.ee.kth.se/~oland/teaching/wsn2010/index.html

#### **Examination**

- INL1 Homework, 5.0 credits, grading scale: P, F
- PRO1 Project, 2.5 credits, grading scale: P, F

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.

If the course is discontinued, students may request to be examined during the following two academic years.

### 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.