

EP270V Internet of Things 3.0 credits

Sakernas internet

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

Establishment

On 19/01/2022, the Head of the EECS School has decided to establish this official course syllabus to apply from autumn semester 2022, registration number: J-2021-2885.

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

- Documented knowledge in calculus, 5 ECTS-credits.
- Documented knowledge in computer communication, 5 ECTS-credits.
- Documented knowledge in probability theory, 5 ECTS-credits.
- The upper secondary course English B/English 6.

Language of instruction

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

Intended learning outcomes

After passing the course, the student should be able to

- give an account of the central tools in communication technology for Internet of Things (IoT)
- develop the design of practical IoT-systems

in order to

- understand and explain which design options there are for a specific communication system
- be able to argue for which type of performance that should be prioritised in the design.

Course contents

The focus of the course is on communication protocols for Internet of Things. The course starts with an introduction to applications and network architecture. Thereafter, methods for communication protocols are treated and it is shown, how these methods can be applied in the design of important aspects of the communication protocol stack.

Examination

• PRO1 - Project assignment, 3.0 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.

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.