

# EF112X Degree Project in Electrical Engineering, First Cycle 15.0 credits

Examensarbete inom elektroteknik, grundnivå

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**

On 04/21/2021, the Head of the EECS School has decided to establish this official course syllabus to apply from spring semester 2021, registration number J-2020-0563.

# **Grading scale**

P, F

# **Education cycle**

First cycle

# Main field of study

**Technology** 

### Specific prerequisites

At least 104 higher education credits from courses in the programme syllabus up to period 1 in year 3 must be completed latest at the start of period 2, in order for the student to be allowed to start the degree project.

# Language of instruction

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

## Intended learning outcomes

On completion of the course, the student should be able to:

- 1. describe basic concepts in at least one application field of electrical engineering
- 2. identify where there is a need for additional knowledge; take responsibility for own development of knowledge; independently plan and carry out simple projects which require interaction with others to achieve an agreed-upon goal
- 3. Solve larger problems at first cycle level within one application field of electrical engineering, as well as independently analyse and discuss questions and issues involved
- 4) show awareness of social and ethical aspects including economic, social and ecologically sustainable development
- 5) reflect on, evaluate and critically review own and others' technical and scientific results
- 6. document and present, orally as well as in writing, one's project work, using acceptable structure, formalities and language

#### **Course contents**

- Individual supervised work involving solution of a technical or scientific problem, oral and written communication of the work, as well as evaluation and critical review of own and others' results
- Seminar series addressing set-up of a work plan, information retrieval and source evaluation, reference management, written and oral presentation, as well as written and oral review of others' reports.
- Group assignment with focus on putting the results of project in a larger context, including a summary, a written reflection over the ethical importance of the project for a sustainable society and a popular description.

#### **Examination**

• XUPP - Degree project, 15.0 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.

# Other requirements for final grade

- 1. Attendance at seminars
- 2. Work plan
- 3. Passed session in reference management
- 4) Implementation of the project
- 5) Summary of context
- 6. Report contents
- 7. Report language & structure
- 8. Report layout
- 9. Written and oral feedback
- 10. An oral presentation

# 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.