

# EL111X 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

Course syllabus for EL111X valid from Spring 2019

## Grading scale

A, B, C, D, E, FX, F

#### **Education cycle**

First cycle

#### Main field of study

Electrical Engineering, Technology

#### Specific prerequisites

Eligible for study year 3. It is also recommended that 120 credits have been achieved before the start of the bachelor thesis.

## Language of instruction

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

#### Intended learning outcomes

After the course, the student should be able to:

- 1. apply relevant knowledge and skills from one of the main applications areas of electrotechnology by analysing and discussing issues in this area as well as solving more complex problem on a basic level in this area,
- 2. describe the basic concepts and nomenclature in at least one of the application areas of electrotechnology
- 3. where required, apply international and national regulations and show awareness of social and ethical aspects including economically, social and ecologically sustainable development
- 4. reflect upon and critically assess scientific results,
- 5. document and report the work orally as well as in writing, with strict requirements on structure, format, and language usage,
- 6. identify the need for further knowledge and continuously develop one's own knowledge,
- 7. plan and independently handle a small project, requiring interaction with others to achieve a coordinated goal.

#### Course contents

- Seminar series about information searching, oral and written presentation of technical information, project organisation as well as an introduction to the technical application area.
- Independent work on solving a technical problem related to an application context, oral and written communication as well as evaluation and critical assessment of ones own and other result within the same context.

## Disposition

The main content is work on solving a technical problem related to an application context, oral and written communication as well as evaluation and critical assessment of ones own and other result within the same context. This is supported by a seminar series about information searching, oral and written presentation of technical information, project organisation as well as an introduction to the technical application area.

## **Course literature**

Kompendium som sammanfattar seminarieserien samt utdelad information inom varje teknisk kontext.

#### Examination

• XUPP - Examination Question, 15.0 credits, grading scale: A, B, C, D, E, FX, 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.

The examination is done continuously during the course in a number of specific requirements. All tasks must be passed to give a pass on the whole course. Better results will then contribute to the grade.

## Other requirements for final grade

- 1. Presence at seminars
- 2. Work plan hand in
- 3. Work process in the project
- 4. Written report content
- 5. Written report language and structure
- 6. Peer-review
- 7. Oral presentation
- 8. Final report

## 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.