EF2221 The Sustainable Electrophysics Engineer 1.5 credits

Den hållbara ingenjören i elektrofysik

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 EF2221 valid from Spring 2019

Grading scale

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

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

Completed Bachelor's degree (180 higher education credits), or equivalent academic qualifications. Documented proficiency in English corresponding to English B.

Language of instruction

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

Intended learning outcomes

After completing the course, the students should be able to:

- Understand key issues of the role of engineers in the society.

- Understand the role of technology in society, and its role in achieving economically, socially and ecologically sustainable development.

- Be aware of and show respect to scientific, social and ethical aspects of research and development.

- Be aware of our responsibility for how technology is used, including social and economic aspects as well as environmental and safety aspects.

- Be aware of the ethical and cultural issues and differences in an international environment.

- Discuss and lead discussion considering the above topics, present arguments based on scientific results.

Course contents

The course is spread over one year, that is, four periods. Each period covers a different topic. The main topics of the course are selected from: the role of engineers in the society, work ethic, the international job market, culture and communication and sustainable development. To deepen the connection to relevant industry, the course may include a study trip.

Disposition

Four seminars, home assignments

Course literature

Own Compendium

Examination

- UPP1 - Assignment, 1.5 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.

Other requirements for final grade

Participation at all seminars, submitted and accepted home assignments. The grading is based on the student's active participation in the discussions and on the quality of the submitted reports.

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.