

EF2222 The Sustainable Electrophysics Engineer 3.0 credits

Den hållbara ingenjören i elektrofysik

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

Establishment

Grading scale

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

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

Completed Degree of Bachelor (180 credits) or the equivalent academic qualifications. Documented skill in English equivalent 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 passing the course, the student should be able to

- discuss central questions linked to the importance of engineers in society
- discuss and analyse the role of electrical engineering in society and its role to reach economically, socially and ecologically sustainable development
- discuss and analyse scientific, social and ethical aspects of research and development
- discuss and analyse human responsibility for how the technology is used including aspects of social, economic, environmental and working conditions
- discuss ethical and cultural questions and differences in an international environment
- discuss the above-mentioned subjects at a high level
- present arguments based on scientific results
- · meet deadlines
- write short, clear, analyses including one's own analyses.

Course contents

The course extends over two years i.e. eight periods. Each period includes different subjects. Main themes for the course are: the role of engineers and the technology in society, social and ethical aspects, the responsibility of people for how the technology is used, the international labour market, culture and communication.

Examination

- UPP2 Assignment, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- 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.

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

Other requirements for final grade

Participation in all seminars, submitted and passed 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.