FAK3119 Ethics in Engineering Practice and Research 3.0 credits

Etik i teknisk verksamhet och forskning

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 FAK3119 valid from Autumn 2015

Grading scale

Education cycle

Third cycle

Specific prerequisites

The course is given for PhD students. The course is taught in English.

Language of instruction

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

Intended learning outcomes

Identify and describe common ethical problems that arise in engineering practice and research, with particular focus on problems that arise in one's own field of research/specialization

• analyze the problems taking relevant empirical factors into account

• suggest possible solutions to the problems and justify the chosen solution by means of basic ethical principles and concepts

• systematically reflect on the role of science and technology in society and the engineer's responsibilities for how they are used

Course contents

The course covers the major themes and concepts in engineering ethics, such as: professional responsibilities of engineers, dual-use problems, whistleblowing and workplace rights, scientific misconduct, authorship and credit in research, conflicts of interest, and the engineer's responsibility for the environment. Professional engineering codes of ethics and major research ethical declarations will be introduced.

Course literature

Course literature will be announced no later than four weeks before the course starts.

Equipment

The course is given for PhD students. The course is taught in English.

Examination

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.

- Attendance, 0.5 credit, grade scale: P, F
- Home assignments, 1 credit, grade scale: P, F
- Written exam, 1.5 credits, grade scale: P, F

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.