



FAK3129 Ethics in Engineering Practice and Research 2.0 credits

Etik i teknisk verksamhet och forskning

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

Establishment

Course syllabus for FAK3129 valid from Spring 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Language of instruction

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

Intended learning outcomes

This is an introductory course in engineering ethics. The course aims at providing the students with tools and concepts that are necessary for discussing ethical aspects of engineering practice and research. After completing the course the students should be able to:

- 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 solutions by means of basic ethical principles and concepts
- systematically reflect on the possibilities and limitations of research, its role in society and the engineer's responsibilities for how it is used

Course contents

The course covers the major themes and concepts in engineering ethics, such as the professional responsibilities of engineers, dual-use problems, whistleblowing, scientific misconduct, authorship and credit in research, informed consent, conflicts of interest, and the engineer's responsibility for sustainable development. 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.

Examination

- SEM1 - Seminar, 0.5 credits, grading scale: P, F
- TEN1 - Exam, 1.5 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.

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

Other requirements for final grade

- Seminar attendance, 0.5 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.