



AK2003 Technology and Ethics

7.5 credits

Teknik och etik

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 AK2003 valid from Autumn 2011

Grading scale

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

Education cycle

Second cycle

Main field of study

Built Environment

Specific prerequisites

120 credits (corresponding to two full years) of university studies and proficiency in Swedish corresponding to Swedish **gymnasium** Svenska B.

Language of instruction

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

Intended learning outcomes

Upon completion of the course, the student will be able to

- summarize important ethical theories,
- discuss and analyze, orally and in written form, ethical problems that may arise in engineering,
- analyze more thoroughly ethical problems that arise in some particular field related to engineering or technology.

Course contents

Our point of departure will be practical ethical problems, for example conflicts between safety and economy or function, the environmental effects of technology, the conflict between the engineer's professionalism and her/his loyalty to the employer, work with morally disputable technologies, insider problems and industrial espionage, integrity issues related to IT, etc. In order to analyze such questions we will use tools from moral philosophy (ethics). We will acquaint ourselves with important ethical theories such as utilitarianism and deontological ethics, as well as with useful notions, e.g. moral dilemmas. We will also study a few important examples of ethical codes for engineers.

An important part of this course is an individually written essay under supervision. This work deepens the knowledge of a particular ethical problem that can be selected in accordance to the student's previous experience and education.

Disposition

Lectures, seminars, essay supervision.

Course literature

- Hansson, S.O., **Teknik och etik**, compendium.
- Information on additional course literature will be made available at the course web page before the course starts.

Equipment

None.

Examination

- DEL1 - Participation and Preparatory Assignments, 1.5 credits, grading scale: P, F
- INL1 - Home Assignment, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Exam, 2.0 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.

Other requirements for final grade

Written exam, home assignment (essay) and active participation in seminars.

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.