MJ1521 Risk Assessment 3.0 credits

Riskhantering

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

Establishment

Course syllabus for MJ1521 valid from Autumn 2013

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Basic requirements for engineering program

Language of instruction

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

Intended learning outcomes

After having passed the course the student should be able to:

- Describe and explain the concept of risk from a socio-technical perspective
- Describe and apply the most common methods, qualitative and quantitative, for risk assessment and know when they are applicable
- Analyze principles of how risks can be evaluated and communicated to various stakeholders within decision making processes
- Describe the key EU legislation in the field of safety in process plants and for chemical hazards
- Describe the fundamental principles of inherent safety in process systems

Course contents

The course will examine the different paradigms that exist in research on risk and risk perception, which are also reflected in the difficulties of communicating and comparing risks of different technological systems in society.

In the course, the most common methods for qualitative and quantitative risk analysis will be described.

Chemical hazards will be described and discussed from different current examples and from the EU's REACH legislation.

In an independent group work on various cases of conflicts around environmental risks, an analysis will show how conflicts are handled and how information is used by various interest groups.

Course literature

Meddelas vid kursstart

Examination

- PRO1 - Project Work, 0.5 credits, grading scale: P, F
- TEN1 - Examination, 2.5 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.

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.