



# MJ2670 Risk Management 6.0 credits

## Riskmanagement

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 MJ2670 valid from Autumn 2009

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

Chemistry and Chemical Engineering

## Specific prerequisites

At least 100 academic credits (ECTS) in a program of engineering or natural science.

## Language of instruction

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

# Intended learning outcomes

After you have passed the course you should be able to:

- Explain the most commonly used methods for risk assessment and know when they are applicable
- Outline an accident investigation in terms of man-machine-organisation causes
- Explain the principles for an integrated management system for Safety-Health-Environment in an organisation
- Explain the principles how to communicate results of risk analyses to stakeholders
- Define the important principles for inherent safety design in the processes industry
- Utilize the principles for setting up criteria for risk evaluation and risk communication

## Course contents

- Description of typical accident scenarios with root cause analysis.
- Methods for risk identification.
- Risk estimation and reliability analysis.
- Principles for risk evaluation in industry and society.
- Inherent design of industrial processes.
- Integrated management systems for safety, health and environment.

## Disposition

Lectures: 5 \* 2 h

Seminars: 2 \* 2 h

## Course literature

Distributed compendium

## Examination

- NÄR1 - Attendance, 1.0 credits, grading scale: P, F
- PRO1 - Project, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 1.0 credits, grading scale: P, F
- UPP1 - Assignment, 1.0 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.

## **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.