

# Risk and Accident Analysis

Single subject and programme course

6 credits

Risk- och olycksanalys

729A98

Valid from:

**Determined by**

The Quality Board at the Faculty of Arts  
and Sciences

**Date determined**

2010-09-24

**Offered for the last time**

Spring semester 2022

**Replaced by**

769A22

## Main field of study

Cognitive Science

## Course level

Second cycle

## Advancement level

A1X

## Course offered for

- Master Programme in Cognitive Science

## Entry requirements

For admission to the course, the specific entry requirements that apply for the master's education in Cognitive Science, or the equivalent, must be satisfied.

## Intended learning outcomes

On completion of the course, the student should be able to

- account for theories/models and methods in the area of risk control and system security that are appropriate for describing, analysing and understanding risks and accidents in socio-technical systems
- demonstrate knowledge of common accident models, natural accident theory, high reliability organisation theory, and resilience engineering, and be able to recognise concepts from these theories in (non-) scientific accident reports
- demonstrate knowledge of common risk analysis methods, such as fault trees, event trees and functional modelling, and be able to apply selected methods on smaller systems and accident descriptions in a practical way

## Course content

The contents of the course are focused on

- models and methods for describing and analysing accidents and risks
- human-technology-organisation
- normal accident theory
- high reliability organisations
- resilience engineering
- practical application in real investigations

## Teaching and working methods

The course is built around seminars with discussions of literature, exercises, practical assignments and lectures. Some parts have compulsory attendance. The student is expected to study independently, individually or in groups.

## Examination

The course is examined through written assignments, a final report, compulsory participation in a final review, and a critical review. Detailed information can be found in the study guide.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

## Grades

Three-grade scale, U, G, VG

## Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is carried out in such a way that both men's and women's experience and knowledge is made visible and developed.

## Department

Institutionen för datavetenskap