AK109X Degree Project in Risk and Safety, First Cycle 15.0 credits

Examensarbete inom risk och säkerhet, grundnivå

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

Establishment

Course syllabus for AK109X valid from Autumn 2019

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Courses about least 135 credits in degree programme.

Language of instruction

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

Intended learning outcomes

After completed degree project, the student should be able to

1. demonstrate knowledge of the disciplinary foundation of the chosen subject area, applicable methods and orientation in current research and development and show advanced knowledge within some part of the subject area

2. demonstrate the ability to search, collect and use relevant information critically and identify one's needs of additional knowledge

3. demonstrate the ability to formulate, assess and handle problems and critically discuss phenomena, issues and situations

4. demonstrate the ability to plan and carry out assignments with applicable methods within given time frames

5. demonstrate the ability to account for and discuss information, problems and solutions, orally and in writing in dialogue with different groups

6. demonstrate the ability to make assessments considering relevant scientific, social and ethical aspects

7. show a level of proficiency that is required to independently work within some part of the main technical field.

Course contents

The knowledge field risk and safety includes analyses of environmental and health risks, reliability, vulnerability and safety in technical and social systems. Such analyses are intended to provide a foundation for decisions about risk preventive and security-promoting measures. The research within this field draws on use of knowledge from those fields of technological, natural, medical, social and behavioural science that may contribute to risk and safety assessments. Even if the research domain of risk and safety is thus strongly interdisciplinary, a degree project in risk and safety at KTH must have a clear connection to technology and technological science.

The choice of method is strongly dependent on the type of risk and safety issues that are treated. Statistical methods have a central role in many cases but in other cases, other methods can be the more suitable. The subject-specific skills consist of assessing such a basis in a collected way that gives a justified and true image for the decision.

Course is presented in a thesis. The work is carried out individually or jointly by two students. In the latter case the individual contributions shall be clearly separable. The topic of the essay can be suggested by the student, teacher or some outside client. The student designs a work plan. When the work plan is approved, at the latest, a supervisor is appointed whom the student should be able to continuously consult during the work.

Disposition

Individual studies and supervised essay writing.

Course literature

Fastställs individuellt.

Equipment

None.

Examination

- XUPP - Examination, 15.0 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.

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.