



AL250X Degree Project in Strategies for Sustainable De- velopment, Second Cycle 30.0 credits

Examensarbete inom strategier för hållbar utveckling, avancerad nivå

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 AL250X valid from Autumn 2015

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Built Environment, Environmental Engineering

Specific prerequisites

Engineering: at least 240 credits, Master's (120 credits) programme: at least 60 credits of which 30 with specialisation at second cycle level in the main field of study.

To carry out a degree project within Strategies for sustainable development, basic knowledge is required about dominating environmental problems from the course Natural Resources Theory (AE1101) or equivalent.

Language of instruction

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

Intended learning outcomes

The overall aim of the degree project is to provide knowledge of connections between environmental problems, social change and technical development. The degree project should also give an understanding of how prevailing or changed human activity and behavior can influence the environment.

The following applies to both Master of Science in Engineering (civilingenjör) and master's degree students:

After completed degree project, the student should be able to

1. demonstrate knowledge and understanding of the scientific foundation and best practices for the chosen subject, as well as an advanced understanding in current research and development within the area, and in-depth knowledge of research methodology.
2. demonstrate the ability to search, collect, compile, and integrate knowledge and to identify if there is a need for additional knowledge, all with a holistic, critical and systematic work approach.
3. demonstrate the ability to identify, analyse, assess and handle complex phenomena, issues and situations also with limited information
4. demonstrate the ability to plan and with adequate methods carry out qualified assignments within given time frames and to evaluate this work
5. demonstrate the ability to develop and evaluate products, processes, systems, methods or technical solutions with respect to humans' circumstances and needs as well as society's goals in term of economically, socially and ecologically sustainable development.
6. demonstrate the ability, both orally and in writing, in dialogue with different groups, to clearly account for and discuss the conclusions and the knowledge and arguments on which these are based
7. demonstrate the ability to make assessments considering relevant scientific, social and ethical aspects
8. show such skills that are required to participate in research and development or to work independently in other qualified activities

Course contents

The degree project should constitute a part of the specialisation within the main field of study Civil Engineering and Urban Management (samhällsbyggnad) at second cycle level to satisfy the requirements for a degree. This implies that the degree project normally should be carried out in strategies for sustainable development.

Disposition

The course is designed as a limited research project.

The course design can include literature studies, problem formulation, collection and compilation of data and analysis.

The degree project should be presented at a seminar. The degree project should be written and presented in Swedish or English. A summary should be included in both languages. The Master thesis will be checked for plagiarism.

Course literature

Relevant literature to be able to carry out the degree project.

Examination

- XUPP - Examination, 30.0 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.

The degree project should normally be carried out under the programme's last semester. To pass the degree project the achievement must not be below the requirements for any of the expected learning outcomes of the course.

Other requirements for final grade

Passed degree project report that has been presented at a seminar.

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.