AL230X Degree Project in Environmental Engineering and Sustainable Infrastructure, Second Cycle 30.0 credits

Examensarbete inom miljöteknik och hållbar infrastruktur, avancerad nivå

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

Establishment

Course syllabus for AL230X valid from Autumn 2019

Grading scale

P, F

Education cycle

Second cycle

Main field of study

The Built Environment, Environmental Engineering

Specific prerequisites

All courses that are required for issuing the Degree of Bachelor should be fully completed with a pass mark. At least 60 credits of courses for second-cycle studies should be fully

completed with a pass mark. These 60 credits should include all courses in the programme relevant to the degree project and a course in theory of science and research methodology.

The examiner is responsible to evaluate special admission requirements

Language of instruction

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

Intended learning outcomes

After a completed degree project, the student should be able to

1. show knowledge of the disciplinary foundation of the chosen subject area and best practice, an advanced understanding of current research and development work and advanced knowledge of methods.
2. demonstrate the ability to search for, collect and integrate knowledge in a comprehensive, critical, and systematic way and to identify his or her needs for further knowledge.
3. demonstrate the ability to identify, analyse, assess and handle complex phenomena, issues and situations, even with limited information.
4. demonstrate the ability to plan, and with adequate methods, carry out high-quality assignments within given time frames, as well as to evaluate this work.
5. demonstrate the ability to develop and evaluate products, processes, systems, methods or technical solutions, taking into consideration people's abilities and needs, and society's goals for economic, social and ecological sustainable development.
6. demonstrate orally and in writing the ability to, in dialogue with different groups, clearly account for and discuss his or her conclusions, including the knowledge and arguments that are the basis of such conclusions.
7. demonstrate the ability to exercise judgement, considering the relevant scientific, social and ethical aspects.
8. demonstrate the skills required to participate in research and development work or to independently work in other advanced contexts.

Course contents

The degree project should constitute a part of a specialisation within main field of study civil engineering and urban management at the second-cycle level to satisfy the requirements for the degree. This implies that the degree project should normally be carried out within Environmental Engineering and Sustainable.

Disposition

The course is designed as a delineated research project.

The course structure may include, among other things, 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.

If the course is discontinued, students may request to be examined during the following two academic years.

To pass the degree project, the performance must not be unsatisfactory in any of the expected learning outcomes of the course.

Other requirements for final grade

An approved 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.