



LT200X Degree Project in Technology and Learning, Second Cycle 30.0 credits

Examensarbete inom teknik och lärande, 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

The official course syllabus is valid from the spring semester 2023 in accordance with the decision by the Head of the ITM School: M-2023-1876. Date of decision: 2023-10-05

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Technology and Learning

Specific prerequisites

To be admitted to the course, the student is required to have completed at least 240 ECTS credits in the "Civilingenjör och Lärare" degree programme. All courses in the first three years of the programme, as well as the courses EH2070, Project Management and Business De-

velopment; LT2032, Teaching and Assessment in Mathematics and Technology or Science; and LT2033, School Placement III with Subject Didactics” completed with at least grade E. The student must also be registered on the course AK2055, Theory of Science and Research Methodology for Teachers.

Language of instruction

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

Intended learning outcomes

After completion of the course, the student should be able to independently, in dialogue with supervisors:

- demonstrate knowledge and understanding of the scientific foundation and best practices for the chosen subject, as well as an advanced understanding of current research and development within the area and in-depth knowledge of research methodology.
- demonstrate the ability to search for, collect and integrate knowledge, and identify their needs of further knowledge, in a comprehensive, critical, and systematic way
- demonstrate the ability to identify, analyse, assess and handle complex phenomena, issues and situations, even with limited information.
- demonstrate the ability to plan and, with adequate methods, carry out high-quality tasks within given time frames, as well as evaluate the work.
- 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 economically, socially and ecologically sustainable development.
- demonstrate the ability to, orally and in writing, in dialogue with different groups, account for and discuss their conclusions, including the knowledge and arguments on which the conclusions are based
- demonstrate the ability to exercise judgement considering relevant scientific, social and ethical aspects.
- demonstrate the skills required to participate in research and development work or to independently work in other advanced contexts.

Course contents

The course comprises the independent design and completion of a project, including the accompanying documentation. This implies deciding on a research question, systematically collecting data, analysing and processing the question using scientific methodology, and presenting this piece of work. The work should display the ability to methodically reflect on knowledge that is related to future professional work.

Examination

- XUPP - Examination Question, 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.

Assessment comprises a written report, an oral presentation, as well as critical examination of another student's degree project. In the assessment of the degree project, the following points are specifically considered:

the process, including an understanding of the assigned task and its relevance for future professional work, as well as independence and ability to follow the established time plan for the work.

engineering and scientific content; knowledge of the theoretical background.

presentation of the work in written and oral form, including an interpretation and analysis of results, and a critical review of another degree project.

A student who has not completed their degree project within eight months risks failing the course, subject to the examiner's assessment

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.