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.

Establishment

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 must have acquired at least 240 credits within the program Master of Science in Engineering and in Education, amounting to a total of 300 credits. All courses during the school years 1-3, and the courses Learning and Assessment; Project Management and Business Development; and Mathematics, Technology and Science Education should be completed with a lowest grade E, or the equivalent.

Language of instruction

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

Intended learning outcomes

On course completion, the student should have the ability to individually, and in dialogue with supervisors:

â€¢ 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, and advanced knowledge on methods.

â€¢ demonstrate the ability to search for, collect and integrate knowledge and identify his or her needs in a comprehensive, critical, and systematic way for further knowledge.

â€¢ demonstrate the ability to identify, analyse, assess and handle complex phenomena, issues and situations, even with limited information.

â€¢ demonstrate the ability to plan, and with adequate methods, carry out high-quality assignments within given time frames, as well as to evaluate the work.

â€¢ 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.

â€¢ 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.

â€¢ demonstrate the ability to exercise judgement considering relevant scientific, social and ethical aspects.

â€¢ show the required skills to participate in research and development or to work independently in other qualified activities.

Course contents

The course includes an independent formulation and completion of a project and its documentation. This implies choosing, collecting materials in a systematic way, analysing and processing an issue with scientific methodology, and presenting the work. The work should display the ability to methodically reflect on knowledge that is related to future professional work.

Disposition

The course consists of an independent project, individual or together with another student, and a number of optional but recommended meetings in the format of seminars.

Course literature

The literature is based on scholarly journals and reports within a particular field, which have been compiled by the student through literature searches, and literature distributed by the main supervisor and/or the assistant supervisor.

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.

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

The degree project is carried out individually or together with another student. The course should be followed up with supervisors and an examiner at KTH as well as supervisors at Stockholm University. In addition, external supervisors can also be used.

Other requirements for final grade

The examination comprises a written report, an oral presentation and a review of another student's degree project. When assessing a degree project, considerations will be given to the points below:

The process of performing the work, including the understanding of the assignment and its relevance for future professional work, as well as independence and ability to hold the established time plan for the work.

The engineering and scientific content and knowledge of the theoretical background.

Presentation, i.e. written and oral presentation, including an interpretation and analysis of results and a review of another degree project.

A student who has not completed his or her degree project within eight months risks, after an examiner's assessment, failing the course.

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.