ML103X Degree Project in Mechatronics and Robotics, First Cycle 15.0 credits

Examensarbete inom mekatronik och robotik, grundnivå

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

Establishment

Course syllabus for ML103X valid from Spring 2021

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Language of instruction

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

Intended learning outcomes

After passing the degree project course, the student should be able to:

- demonstrate knowledge of the chosen topic's disciplinary foundation and proven experience, and some insight into current research and development
- holistically, critically and systematically search, collect and integrate knowledge, and identify one´s need for further knowledge
- formulate, assess and handle problems and critically discuss issues
- plan and with adequate methods carry out tasks within given time frames, and to evaluate this work
- design and handle products, processes, methods, systems or technical solutions, taking into consideration human conditions and needs, and the society's aim for economically, socially and ecologically sustainable development
- orally and in writing, in dialogue with different groups present and discuss information, problems and solutions
- make judgements considering relevant scientific, social and ethical aspects
- work independently as an engineer

Course contents

Pilot study
Problem formulation, goal, aim and delimitations
Literature study or information search that presents state-of-the-art knowledge within the field of technology
Choice of method, the problem-solving approach
Problem-solving
Report, where strong emphasis is placed on analyses, results, independent conclusions and recommendations

Examination

- XUPP - Thesis Project, 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.

KTH's established criteria to pass degree project for Bachelor of Science in Engineering is in the document "Comprehensive guidelines for degree project courses".

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.