



FMF3010 Research methods in Mechatronics 3.0 credits

Forskningsmetoder inom Mekatronik

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

Establishment

Course syllabus for FMF3010 valid from Autumn 2021

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Admitted to PhD studies

Language of instruction

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

Intended learning outcomes

After concluded course, students are expected to be able to:

- Summarize and discuss important challenges and trends on a higher level

- Discuss how research questions and methods to answer these are applied in a general perspective
- Discuss and value different research methods from their applications and implications for validity
- Value, discuss and argue around ethical research- and product development aspects

Course contents

The course gives an overview of concurrent scientific and industrial development trends within the area Mechatronics and Cyber-physical systems. Scientific research methods and tools, and aspects of research ethics are included both in an overview and on a detailed level in relation to research and development of mechatronics products as well as cyber- physical systems.

Examination

- INL1 - Assignment, 3.0 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.

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.