MF2102 Machine Design Project Course 6.0 credits

Maskinkonstruktion projektkurs

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

Establishment

Course syllabus for MF2102 valid from Autumn 2019

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

Starting course MF2101 Machine design

Language of instruction

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

Intended learning outcomes

After passing the course, the students should be able to:

- Plan a design project for development of a mechanical product.
- Develop a detailed specification for the mechanical product.
- Independently and methodologically carry out a design process to generate a new product.
- Apply and deepen previous knowledge, as well as independently acquire new knowledge that is needed to implement the project.
- Critically reflect on the methods chosen in the design process.
- Evaluate the final result and compare them with alternative solution proposals and existing solutions.

Course contents

The course is based on a project where a mechanical system or product should be designed or redesigned. The design solution is delivered as a CAD model and described in a technical report. The design is verified using relevant calculations and if applicable with physical models.

Course literature

Will be announced no later than four weeks before the start of the course.

Examination

- PRO1 - Project, 6.0 credits, grading scale: A, B, C, D, E, FX, 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.