MF1024 Product Development 11.0 credits

Produktutveckling

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

Establishment

Course syllabus for MF1024 valid from Autumn 2019

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

The courses SD1001 Mechanics I Inclusive Project, SG1132 Vehicle Engineering

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:

- understand function for some common machine elements.
- dimension some common machine elements.
- choose the appropriate standard components and common construction materials.
- analyze and simulate the machine components from a system perspective.
- collaborate on technical problem solving in an engineering way.
- use 3D CAD and modeling of parts and make summaries
- describe the most common activities in the product development process and apply them from idea to concept
- present results from completed projects information in writing and orally.

Course contents

This course includes some of the most common machine elements, design aspects, project work and CAD.

Disposition

Lectures, tutorials and laborations.

Course literature

Maskinelement, Mägi M., Melkersson K., Evertsson M., Studentlitteratur, ISBN:9789144109053

Maskinelement Handbok, Maskinkonstruktion, KTH

SKF-katalog

Examination

- INL1 - Hand in Exercise, 3.0 credits, grading scale: P, F
- PRO1 - Project, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Written examination, 4.0 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.

Other requirements for final grade

Examination includes written assignments, project work and written exam.

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.