

# MF1024 Product Development 11.0 credits

#### **Produktutveckling**

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

#### **Establishment**

# **Grading scale**

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

## **Education cycle**

First cycle

### Main field of study

**Technology** 

## Specific prerequisites

Achieved at least 30 credits and the courses SD1001, SG1132.

# 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

Olsson, K-O., Maskinelement

Maskinelement Handbok, Maskinkonstruktion, KTH

SKF-katalog

Olsson, K-O., Maskinelement **Maskinelement Handbok**, Maskinkonstruktion, KTH SKF-katalog (All in Swedish)

#### **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.