

ML1206 Machine Components 10.5 credits

Maskinkomponenter

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

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

On 12/04/2022, the Dean of the ITM school has decided to establish this official course syllabus to apply from autumn term 2022 (registration number M-2022-0502).

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Completed courses ML1110, ML1101 and ML1209

Passed module TENA in ML1200

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 student should be able to:

- identify and describe the aim and function of commonly used machine components
- analyse and simulate selected machine components from a system perspective
- systematically structure, solve, report and discuss technical problems
- carry out systematic problem-solving and presentation of solutions
- give and take constructive criticism on the implementation and result of a project

Course contents

- Commonly used machine components: Springs, joints, brakes, bearings, clutches, gears, axles and rotors
- Decomposition and modelling of function

Examination

- INL1 Assignment, 2.5 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 Project work, 4.0 credits, grading scale: P, 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.

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.