MF2014 Fluid Systems and Machines 6.0 credits

Fluida system och maskiner

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

Establishment

Course syllabus for MF2014 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

MJ1112 Applied Thermodynamics. (4A1112)

Language of instruction

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

Intended learning outcomes

The aim of the course is to provide general basic knowledge about the energy transfer in turbines, pumps, motors and cylinders and about the construction of components used. Additionally, the course covers fundamental knowledge required for students to be able to design and construct simple systems with the help of available components.

Course contents

The course treats the fundamental theory of fluid mechanics, turbomachinery and fluid power, as well as the design of systems. It also deals with the construction of the general components in these systems.

Course literature

Literature issued by the department (in Swedish, department of Machine Design, KTH).

Examination

- TENA - Examination, 5.2 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 0.8 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.

Other requirements for final grade

Laboratory exercises (0,8 credits). Written exam (5,2 credits).

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.