MF1011 Design and Product Realization, Introduction 9.0 credits

Design och produktframtagning, perspektivkurs

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

Establishment

Course syllabus for MF1011 valid from Autumn 2008

Grading scale

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

Education cycle

First cycle

Main field of study

Mechanical Engineering, Technology

Specific prerequisites

Language of instruction

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

Intended learning outcomes

The course **Components Design** aims at improving the understanding for how components in mechanical products are designed.

Course contents

A number of components are analyzed in the course with regard to function, reliability, forces, stresses, causes of failure etc. The components are partly analyzed by means of known design tools such as Finite Elements and Monte Carlo simulation, but the students are also practiced in making and evaluating models and algorithms of their own.

Disposition

Period 1, 2
Lectures 30h
Tutorials 50h
Laboration 40h

Course literature

Folkeson, A., Kommunikation för ingenjörer, Maskinkonstruktion, KTH, 2003
Kursmaterial som omfattar bl a Matlab, CAD, Arbetsmetodik och Industridesign

Examination

- PRO4 - Project, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- PRO3 - Project, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- INL3 - Assignment, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- INL4 - Assignment, 1.5 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.