

# MF101X Degree Project in Mechanical Engineering, First Cycle 15.0 credits

Examensarbete inom maskinteknik, grundnivå

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

#### **Establishment**

Course syllabus for MF101X valid from Spring 2009

### **Grading scale**

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

#### **Education cycle**

First cycle

#### Main field of study

Technology

#### Specific prerequisites

Qualified for studies in grade 3, 5B1132/SF1224 ,5B1133/SF1626 , 4C1010/SE1010 , MG1003/4G1162

# Language of instruction

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

#### Intended learning outcomes

After finished thesis work the student shall be able to:

- identify and formulate engineering design problems and search for solutions with the aid from model-based methods and modern computer tools;
- reflect on which models that are most suitable to use in different phases of an industrial project;
- shape and dimension a system component and then verify the properties of the system;
- apply, value and integrate obtained knowledge and abilities on problems in the chosen domain of specialization;
- independently deepen the personal engineering knowledge in the subject area;
- present the work in a written thesis and as an oral presentation.

#### Course contents

Exercises and laborations are performed by groups of 2 - 3 students. The project assignment is performed by a group of 2 - 3 students. Literature survey. Written thesis with an oral presentation. Written and oral opposition.

## Disposition

Period 3, 4 Seminars

#### Course literature

Journal Papers and Reports, Handbooks, Manuals.

#### **Examination**

• PRO1 - Project, 15.0 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

Passed course (PRO1;15hp).

# 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.