

# MF1050 Design and Product Realization for Teachers in Technology 7.5 credits

Design och produktframtagning för tekniklärare

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

### **Establishment**

Course syllabus for MF1050 valid from Autumn 2016

### **Grading scale**

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

# **Education cycle**

First cycle

### Main field of study

**Technology** 

# Specific prerequisites

### 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:

- the working methodology around the product realisation process and be familiar with the engineer's role in this
- understand the importance of industrial design in the product development and working methods for design, visualisation and production of models
- use some of the engineer's computer tools especially:

CAD programmes to make models in two and three dimensions for communication and as manufacturing specification

word processing software to write reports

- work in a project group with formal project meetings and assignment of tasks
- be able to plan and carry out oral presentations

### Course contents

The main part in the course consist of a project task aiming at the design of a new or the improvement of an existing product.

Aspects such as form, function and manufacturing should be observed. The proposals should then be illustrated with physical and virtual models (e g cardboard and 3D CAD models).

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In addition to supervision the project work is also supported through lectures, exercises and laboratory sessions.

The aim of these teacher-supervised classes is also to widen the context and perspective on design and product realisation. In the teacher-supervised classes, CAD, design, product realisation and oral and written communication are introduced,

### **Examination**

- INL1 Hand in Tasks, 2.0 credits, grading scale: P, F
- PRO1 Project, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 Laboration, 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.

The examination takes place continuously with oral and written presentations of written assignments, laboratory sessions and projects.

# 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.