MF1040 Design and Product Realization Methodology 9.0 credits

Design och produktframtagning, metodik

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

Establishment

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

MF1061 Introduction to Design and Product Realisation,
MF1062 Design and Product Realization,
MF1063 Materials in Design and Product Realisation,
MF1064 Modelling and Simulation in Design and Product Realisation,
MF1039 Design and Product Realization, Components,
MG1016 Manufacturing Technology.

Language of instruction

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

Intended learning outcomes

The overall aim is to provide basic knowledge about the development and manufacture of products.

After passing the course, the student should be able to:

- methodically propose solutions to technical problems
- metodically compare and evaluate different solutions to technical problems
- describe product properties and client/user desire and how these affect each other and the product
- propose and illustrate the exterior shape of a product
- implement or contribute in development of a common project plan
- describe and use a structured approach to product development
- apply established support methods in product realization
- apply earlier gained knowledge from the program Design and Product Realization

Course contents

The course will include a number of lectures and exercises tailored to the project work in the course. Methods in product realization are handled and some aspects with regard to the functioning of delivery systems, production or industrial design will be addressed. The focus of this course is on a product realization project where the student uses theoretical elements from previous courses in real cases.

Disposition

The course includse teaching elements applying project planning, structured approach and support methods in product realization. This is then implemented in the product realization project.

The students are divided in groups of 5-6 persons. The groups are given a commitment for which the result is presented in the end of the course. Examination includes the project as well as a written exam.

Course literature

Will be announced when course starts

Examination

- PRO1 - Project, 6.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Written examination, 3.0 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.

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.