



MF1061 Introduction to Design and Product Realisation 9.0 credits

Introduktion till design och produktframtagning

Course syllabus for MF1061 valid from Autumn 14

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

Grading scale: A, B, C, D, E, FX, F

Education cycle: First cycle

Main field of study: Technology

Intended learning outcomes

On completion of the course, the student should:

- have knowledge of the working methodology in a product realization process and the engineer's role.
- be familiar with the importance of industrial design in a product development process, and working methods for design, visualisation and creation of models.
- be able to use some engineering computer tool, especially CAD, to make 3D models for visual communication and manufacturing drawings.
- have experience of working in small groups and in larger project groups with formal project meetings and distribution of tasks, following a process.
- understand the structure of a technical report and have trained language and content aspects of a technical report.
- be able to plan and carry out oral presentations.
- have knowledge of the concept of sustainable development.

Course main content

The course starts with a design part that consists of exercises in sketching, modelling and morphology. In parallel, a CAD tool is introduced.

A large part of the course consists of a project work. The project goes out on to design a new or improve an existing product. Aspects that form, function and production should be observed. The product idea should then be illustrated with physical and virtual models. The project starts with a kick-off with exercises in project work.

The aim of the project work is to obtain a wider context for, and perspective on design and product realization.

In parallel with the project, the field of sustainable development is introduced, with the aim to understand and be able to reflect critically.

Disposition

In the course, Exercises and laboratory sessions that intend to give skills within fields as sketch are included modelling, morphology and CAD . the exercises be interleaved with lectures within respective field.

The project work be supported apart from via supervision through lectures, exercises and laboratory sessions.

In this part sustainable development includes lectures, exercises in the form of game and reflecting seminars.

The examination takes place continuously with oral and written presentations of project and laboratory sessions and be completed with a written examination.

Language of instruction

Language of instruction is specified in the course offering information in the course and programme directory.

Eligibility

Compulsory for CDEPR school year 1.

Literature

Course material that includes e.g. written communication, the product realization process, CAD and sustainable development.

Examination

- INL1 - Hand in Task, 3.0 credits, grading scale: P, F
- PRO1 - Project, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Written Exam, 2.0 credits, grading scale: A, B, C, D, E, FX, F