



*Course syllabus*

## Design i företag Industrial Design

**MMKF35, 7,5 credits, G2 (First Cycle)**

**Valid for:** 2023/24

**Faculty:** Faculty of Engineering, LTH

**Decided by:** PLED M

**Date of Decision:** 2023-04-11

### General Information

**Elective Compulsory for:** I3

**Elective for:** M4, MPRR2

**Language of instruction:** The course will be given in English

### Aim

Industrial design has become more and more important for companies producing products for a increasingly competitive and demanding market. Products have to be better profiled towards specific target groups with unique requirements regarding product form, expression and function. The aim of the course is that the student shall be able to value and argue about what can be achieved through integration of industrial design efforts and industrial design research in industry.

### Learning outcomes

*Knowledge and understanding*

For a passing grade the student must

- be able to evaluate a product from a user perspective during the phase of product development.
- be able to account for and apply basic theory and approaches in the field of industrial design.
- be able to determine and value which aspects have to be taken in consideration during the development of a specific product from a user perspective.
- be able to describe and scrutinize a product interface from a cognitive and semiotic perspective.

- be able to criticize and examine a project group paper and then argue for the judgement.

#### *Competences and skills*

For a passing grade the student must

- be able to produce and present a design concept towards a company.
- be able to examine how industrial products can be adapted to human abilities and limitations.
- be able to reflect upon a selected aspect of industrial design.
- be able to argue for a design proposal towards industry.

#### *Judgement and approach*

For a passing grade the student must

- understand that industrial products always concern users
- realize how complex the conditions are behind a successful product

## Contents

The course introduces the main aspects of industrial design used by designers in their everyday work together with aspects of contemporary design research. Lectures on design management and the design process and environmental concerns are included as well as introduction to modelling techniques. The product is examined from a user centered and sociological perspective. The course also contains an industrially related project in which the insights obtained during the course are practiced. In this project the students work in groups of 3-4 students. Guidance is provided and the workshop is open for the students. The students plan when and how they work during the project. Industrial designers active in industry teach and give feedback on the project work. Field trip to design bureau is also included.

## Examination details

**Grading scale:** TH - (U,3,4,5) - (Fail, Three, Four, Five)

**Assessment:** Each project group accounts for its work in a paper and by presenting a mock-up model. Each group does also criticize and evaluate the other group projects. The individual grade is then based on the group projects. The grade is also based on attendance on the first part of the course and on assignments being comments on film clips.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

## Admission

**The number of participants is limited to:** No

## Reading list

- Lecture notes from Lectures of P. Kristav Division of Machine Design and Department of Design sciences.
- Literature of reference to choose from for personal paper:.
- Monö, Rune, Design for product understanding, 1997, Liber. Available at the department of Design sciences.
- Ahl Zandra & Olsson Emma, Svensk smak, myten om den moderna formen, Ordfront, 2002.
- Bessant John, Bruce Margaret, Design in business strategic innovation through design, Prentice hall, 2002.

- Bourdieu Pierre, Distinction, Routledge 1994.
- Cooper Rachel, The design agenda, a guide to successful design management, Wiley, 1995.
- De Léon David, Artefactual Intelligence, the development and use of cognitively congenial artefacts, Lund University Cognitive Studies 105, 2003.
- Fiske John, Kommunikationsteorier, en introduktion, Wahlström & Widstrands, 1991.
- Klein Naomi, No Logo, Picador, 2002.
- Linn Carl Eric, Värdeskapandets dynamik –Hur metaprodukt, varumärken och design ger resultat på sista raden, Meta Management, 2002.
- Mc Cormick J Ernest, Sanders S Mark, Human factors in engineering and design, Mc Graw-Hill 2000.
- Norman Donald A, The design of everyday things, MIT press, 1990.
- Norman Donald A, Things that make us smart, Perseus books, 1993.
- Norman Donald A, Emotional design, Why we love (or hate) everyday things, Basic books, 2004.
- Olofsson Erik, Sjöln Klara, Design Sketching. Keeos Design Books AB. 2005.
- Powell, Dick, Presentation Techniques. A guide to drawing and presenting design ideas, London, 1995.
- Rodwell, Jenny, Lär dig teckna steg för steg, Strömbergs förlag, 1994.
- Shimizo, Yoshinohary et al, Models & Prototypes, Graphic-sha Tokyo, 1991.
- Smith Ray, Perspektivgrunderna, Richters, 1999. (Walsh, Vivien et al, Winning by Design).
- Tillman Barry, Tillman Peggy, Woodson E Wesley, Human factors design handbook, Mc Graw-Hill 1992.

## Contact and other information

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**Course homepage:** <http://www.product.lth.se/education/>

**Further information:** Invited industrial designers participate. Field trip to industrial design company is included. With less than 12 participants, the course may be given with reduced teaching and more self studies.