

**SYLLABUS**

# **Design: Interaction and prototypes 15 credits D0039A**

**Design: Interaktion och prototyper**

**Course syllabus admitted: Autumn 2023 Sp 1 - Present**

**DECISION DATE  
2022-02-11**

# Design: Interaction and prototypes 15 credits D0039A

## Design: Interaktion och prototyper

### First cycle, D0039A

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG *	Industriell design	Other Subjects within Technology

## Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and completed the following course with at least the grade Pass: Design: process and method (D0030A) 15 credits, or equivalent knowledge.

## Selection

The selection is based on 1-165 credits.

## Course Aim

The overall objective of this course is to develop and deepen the knowledge of the course participant within a width of topics such as design methods, design techniques, interaction design, model building and prototyping by integrating theory with practical design tasks. The course participant should after course completion be able to design and develop interactive products or systems (physical artefacts, interfaces, systems, services, environments) based on human needs, prerequisites, understanding and experience. The course participant should after course completion be able to use mock-ups and prototypes as a natural step in the design process. The course participant should also be able to use form, colour, and product semiotics as a part of the design process. The course participant is expected to demonstrate ability to apply knowledge in the planning and conducting of exercises and tasks both individually and in cooperation with others, and take responsibility for visually, verbally and in writing communicate knowledge and abilities. The course participant should:

1. Demonstrate basic knowledge of industrial design engineering
2. Demonstrate basic skills in collaborating in, planning of, and managing and implementing projects
3. Demonstrate basic skills in creating and developing user-centred solutions
4. Demonstrate basic problem-solving skills
5. Demonstrate basic skills in academic conduct
6. Demonstrate basic skills in communicating the design process and its results in writing, orally and visually
7. Demonstrate basic ability in acting professionally
8. Demonstrate basic ability of individual development with support of feedback
9. Demonstrate an understanding of norm-critical perspectives with regard to products, services and systems
10. Demonstrate ability to implement norm-critical and norm-creative perspectives in a design project
11. Show the ability to apply and reflect on this knowledge in design projects

## Contents

The course consists of design theory, such as form, colour, aesthetics, product semiotics, and user experience, and its practical application in product design. The course deals with the subject of interaction design and adjacent topics, such as, user experience regarding methods and tools. The course contains a project assignment where the course participant practices his or hers ability to carry through a project with practical implementation of knowledge by the use of prototypes, mock-ups, and models in a relevant design process.

## Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The course consists of lectures, tasks, and assignments to be carried out both individually and in groups. A large part of the course is carried out in the form of independent work, both individually and in collaboration with others. The course is based on learning-by-doing where the course participant practices and implements skills in order to develop his or hers independent skills within industrial design engineering. The course contains a project where project teams design concepts solutions and present them by using oral communication, visual communication by using models, and in written form in an individual workbook.

## Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Aim 1 is examined by the course tasks and assignments related to different aspects of design theory

Aim 2, 3, 4, 6 & 7 is examined by a workbook based on a project

Aim 5 is examined by the course assignments and labs as well as the parts of the workbook that deals with theory

Aim 6 is examined by assignments and as well as the parts of the workbook that deals with process and results

Aim 8 is examined by the parts of the workbook dealing with the course participant's reflections

Detailed descriptions of assignments as well as criteria for grades are available in the study guide for the course.

## Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

## Remarks

Students must register to the courses themselves or contact the ETKS educational administration [eduetks@ltu.se](mailto:eduetks@ltu.se) not later than three days after the quarter commences. Failure to do so can result in the place being lost. This also applies to the students with a place guarantee.

Due to similar content, the course can not be included in a degree together with the course D0037A or other courses with similar content.

## Course offered by

Department of Social Sciences, Technology and Arts

## Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Exercises and laboratory work	U G#	5	Mandatory	A17	
0002	Workbook part 1	U G VG *	2.5	Mandatory	A17	
0003	Assignment reports	U G#	2.5	Mandatory	A17	
0004	Workbook part 2	U G VG *	5	Mandatory	A17	

## Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

## Last revised

by Director of Undergraduate Studies Daniel Örtqvist, Department of Social Sciences, Technology and Arts 2022-02-11

## Syllabus established

by Director of Undergraduate Studies Daniel Örtqvist, Department of Business Administration, Technology and Social Sciences 2017-02-15