

**SYLLABUS**

# **Design of IT 7.5 credits**

## **I0006N**

**Design av IT**

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

DECISION DATE  
**2022-08-22**

# Design of IT 7.5 credits I0006N

## Design av IT

### First cycle, I0006N

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG *	Informatik	Informatics/Computer and Systems Sciences

### Main field of study

Social Informatics, Information Systems Sciences

## 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

## Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

## Course Aim

### Knowledge and understanding

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

- Describe and explain interaction design as a phenomenon
- Give examples of, select and apply methods and explain how these are used in, and affect the design work
- Explain and use general design principles as well as key concepts and methods for IT design

### Skills and Abilities

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

- Design a user-centric study
- Design a prototype of an IT system
- Describe and carry out the design process in groups

### Evaluation ability and approach

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

- Critically review and evaluate other people's designs
- Explain what gender equality is about and how it relates to the design of IT

## Contents

The course is a basic course in the design of IT systems with emphasis on the design process and the activities included in it. During the course, theory is interspersed with practice. The student learns the key concepts used in system design as well as the different perspectives that exist. The student also learns the basic concepts of different interaction designs and how to apply these to IT systems. In the design part, the student must be able to apply and use different methods and tools to support development and be able to analyze the role these have in the development work.

## Realization

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

During the course, the student participates in various teaching elements, individual work and group work as well as in discussions with teachers and other students. During the course, the student is trained in working both individually and in groups, as well as in being able to account for their work in scientific reports. The student also works independently and actively with using design methods to develop and evaluate IT systems, as well as critically review and reflect on the work of others. The work is presented in the form of oral and written presentations.

Teaching takes place in the form of lessons and seminars. At the meetings, the teaching takes place partly in the form of teacher-led reviews of elements, partly of tasks and problems that the student has solved individually or in groups and presents orally or in writing. Between meetings, students communicate with classmates and teachers via email, an online learning platform and a web conferencing system. The learning platform has access to information, course materials and assignments. With the help of the learning platform, students can participate in group discussions and submit both individual assignments and group work.

## 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. This course is examined through both individual assignments and group assignments. Reported in writing and orally.

In the individual assignments, the student is examined for the ability to:

- Describe and explain interaction design as a phenomenon
- Understand and apply the key concepts and methods used in system design
- Explain and apply general principles for IT design
- Analyze and discuss how different approaches lead to different design solutions

In the project assignment, the student's ability to, in collaboration with group members:

- Be able to plan, implement, analyze and motivate the implementation of a user-centered design study in relation to relevant theory
- Gather knowledge about, and analyze a specific design situation
- Design a prototype for an IT system
- With a critical approach, and in connection with theory, analyze and evaluate the design of others
- Present the work orally
- Express yourself well in writing in a linguistically correct way

All included examination parts must be completed for the final grade on 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

Other courses that focus on design of IT: I0005N IT-design and systems thinking. For those interested in how IT develops organisations we recommend I0001N Organisational Development through IT.

The course might be in English.

## Course offered by

Department of Computer Science, Electrical and Space Engineering

## Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0003	Assignment reports	U G VG *	1.5	Mandatory	A16	
0004	Group work	U G#	3	Mandatory	A16	
0005	Individual Assignment reports	U G VG *	3	Mandatory	A18	

## 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 Jonny Johansson, HUL SRT 2022-08-22

## Syllabus established

by Department of Business Administration and Social Sciences 2007-02-28