

SYLLABUS

Interaction design 7.5 credits D7015A

Interaktionsdesign

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2022-02-11**

Interaction design 7.5 credits D7015A

Interaktionsdesign

Second cycle, D7015A

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

Entry requirements

Completed courses of at least 120 credits, of which at least 30 credits in the subject area Industrial design, with at least the grade Pass.

Selection

The selection is based on 30-285 credits

Course Aim

The focus of this course is interaction design; design and development of interactive products (artefacts, user interfaces, systems, services, environments) with starting point in the users needs, preconditions, understanding and experience. The purpose of this course is to develop and deepen the student's proven experience in a breadth of areas such as design processes, design expertise, as well as products and design as part of a larger context to be applied in interaction design.

Knowledge and understanding

The student should after the course be able to:

- demonstrate knowledge and understanding of the concept of interaction design and its history, and related fields.
- demonstrate knowledge and understanding of the theories and methods for interaction design related to design and development.
- demonstrate knowledge and understanding of how the fundamental elements of user interface is designed and integrated for good usability and user experience.
- demonstrate knowledge of the theories in the emotional and pleasurable design
- Demonstrate knowledge of inclusive design

Skills and Abilities

The student should after the course be able to:

- design and develop interactive products (physical artifacts, interfaces, systems, services, environments) based on human needs, preconditions, understanding, and user experience by sketches and prototypes.
- develop concepts and detailed solutions for interactive products and services based on the interaction between users and systems, with a focus on usability and accessibility.
- present design proposals orally, in writing and visually using sketches and working prototypes.
- Show ability to develop products, interfaces and systems with respect to a diversity of user needs and experiences.

Judgment and approach

The student should after the course be able to:

- demonstrate an understanding of sustainable, ethical and aesthetic aspects on the basis of people's needs, abilities and experience.
- demonstrate the capacity for critical analysis and evaluation of both existing systems and the student's own conceptual solutions.
- describe the relevance to users, businesses and society of technology and design.
- demonstrate the ability to consider ethical and aesthetic considerations to meet good usability, accessibility and user experience.
- Demonstrate ability to reflect on the role of technology in society

Contents

The course covers:

- Knowledge of the concept of interaction design and its history and related fields
- Methods for interaction design
- Principles of usability and user experience; contextual design
- Basic user interfaces
- Sketch Methods for interaction
- Prototyping for interaction
- Analysis and evaluation of interactive products (eg. Physical artifacts, user interfaces, systems, services, environments)
- Emotional / pleasurable design
- Product / User Experience

Realization

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

Instruction consists of lectures interspersed with tutorials and independent work individually with smaller tasks and a group project in which students themselves may make use of the methods and tools that are applicable in interaction design. Students will analyze existing interactive systems to finally sketch up and prototypical own interactive system with the starting point of human needs, abilities and understanding. The practical elements of the course are integrated with the theory to ensure a good learning process according to established learning theories. The students practice oral, written, and graphic communication skills in several parts of the course, and the ability to practice independently and in collaboration with others to plan and implement the project.

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. The individual workbook is examined regarding the understanding of basic concepts and theories of interaction design and adjacent fields, and how user interfaces should be designed to the user. The workbook also examines the ability to critically reflect on the assignments' realization and achievements and the learning process and the skills necessary for any further work. The project work as well as possible shorter individual assignments are examined in terms of skills and abilities to critically analyze and understand the technology's shortcomings and opportunities based on human needs, abilities and understanding and translate that into final design solutions and prototypes. The project work will address how ethical, aesthetic, and sustainability aspects are used to meet good usability, accessibility and user experience for businesses and users. The project work also examines the student's ability to communicate the main merits of the interactive systems in the project work.

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 for the courses themselves, or contact ETKS educational administration eduetks@itu.se, not later than three days after the quarter commences. Failure to do so can result in the place being lost. This rule also applies to students with a guaranteed place.

Course offered by

Department of Social Sciences, Technology and Arts

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0004	Individual workbook and project work	U G VG *	7.5	Mandatory	S17	

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 Bo Jonsson, Department of Business Administration, Technology and Social Sciences 2014-02-14