#### **SYLLABUS**

# Interaction and Mobility 7.5 credits Z0021E

Interaktion och Mobilitet

Course syllabus admitted: Autumn 2022 Sp 1 - Present

DECISION DATE **2022-06-28** 



## Interaction and Mobility 7.5 credits Z0021E

**Interaktion och Mobilitet** 

First cycle, Z0021E

**Education level Grade scale** Subject Subject group (SCB)

First cycle UG# Informatik Informatics/Computer and 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 + or corresponding knowledge acquired through work.

#### Selection

#### **Examiner**

Anna Ståhlbröst

#### Course Aim

After passing the course, the student has knowledge of design principles for the use and design of responsive solutions for different types of digital platforms. The student can design application details that support interaction between users regardless of where the user is and which technological platform they use. The student also learns to design and construct IT systems that enable people to use IT systems in a satisfactory way. The student can argue for their design choices, adaptation and use of different methods to understand what should be designed and how.

#### **Contents**

Within the framework of the course, the importance of designing IT systems that enable users to perform their tasks more efficiently than before, primarily for mobile use, is discussed first and foremost. The course deals with areas such as how the mobile IT system can be designed to stimulate the user to a certain behavior when he uses the system. Furthermore, different approaches for responsive design and how details in the interaction can be designed depending on the digital platform together with the user's needs are treated. The course also deals with the area of mobility and design for mobile use, which includes the mobile user, different digital platforms and technologies, responsive design principles and which design patterns are important to know when designing digital solutions that are adapted for different digital platforms.

## 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 is given both on campus and at a distance. The teaching consists of teacher-led reviews (on campus or online), tasks that the student solves individually or in groups, discussions and supervision. During the course, students communicate with classmates and teachers via e-mail, video conferencing and a web-based learning platform where information and course materials are communicated.

The course may be given in English.

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## 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. In the individual assignments (5 credits, U / G) the student must show the ability to account for and discuss the relevance of different design principles for the design of responsive solutions with a clear connection to theory. The student should also be able to account for, discuss and compare important design choices in relation to the mobile area of use and with a critical approach, and with a clear connection to theories, argue for how different design choices stimulate different interaction patterns in the mobile situation. Individual assignments are reported in writing.

In the group assignment (2.5 credits, U / G), the student must design a functional digital solution and write a report in which the ability to choose, adapt and motivate the choice of method as support for the design process must be demonstrated. The student must also describe how different choices affect the design of the responsive solution. The student must also demonstrate its ability to design responsive solutions that support site-independent interaction for a specific situation and on the basis of their own work be able to analyze and motivate their design choices in relation to theoretical design principles. Group assignment is reported in writing and orally.

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

## Literature. Valid from Autumn 2022 Sp 1

The mobile frontier: a guide for designing mobile experiences / Hinman, Rachel

ISBN:9781457102646 ISBN:1457102641

## **Course offered by**

Department of Computer Science, Electrical and Space Engineering

#### **Modules**

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Individual assignments	U G#	5	Mandatory	A22	
0002	Group assignment	U G#	2.5	Mandatory	A22	

## 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.

## Syllabus established

by Jonny Johansson, HUL SRT 2022-06-28



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