



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DIT096 Human-Computer Interaction, 7.5 credits

Människa-datorinteraktion, 7,5 högskolepoäng

First Cycle

Confirmation

This course syllabus was confirmed by Department of Computer Science and Engineering on 2022-11-17 to be valid from 2024-01-15, spring semester of 2024.

Field of education: Science 100%

Department: Department of Computer Science and Engineering

Position in the educational system

The course is provided as a part of the Computer Science and Engineering Bachelor's Programme. It is also a single subject course at the University of Gothenburg.

The course can be part of the following programmes: 1) Applied Data Science Master's Programme (N2ADS), 2) Computer Science, Bachelor's Programme (N1COS) and 3) Software Engineering and Management Master's Programme (N2SOF)

Main field of studies

Computer Science-Interaction Design

Interaction Design

Specialization

G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

Entry requirements

The requirement for the course is to have successfully completed a course in programming.

Applicants must prove knowledge of English: English 6/English B or the equivalent level of an internationally recognized test, for example TOEFL, IELTS.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- Describe phases in the design process
- Describe methods for development and evaluation of human-computer interaction
- Describe similarities and differences in design for different user groups
- Describe considerations for involving users in the design process
- Understand the role of human computer interaction (HCI) in the software development process and information technology

Competence and skills

- Design interfaces for certain user groups
- Adapt design methods to suit users' context and needs
- Investigate and describe user needs and requirements
- Include ethical issues in the design process and adapt the process for ethical needs

Judgement and approach

- Analyze designs based on user needs
- Make a well-founded evaluation of the ethical and societal consequences of a design
- Critique design and design processes with respect to user needs

Course content

Human Computer Interaction (HCI) is a field which deals with the design, evaluation and implementation of interactive systems and studying phenomena around them. The aim of the course is to allow students to experience the most important phases of user-centered design:

- understanding context of use,
- charting requirements,
- generating multiple design solutions and
- evaluating prototypes with users.

The course consists of both theoretical and practical parts, and students learn about the different steps in the design process and relevant methods for designing for users. The course covers a broad area of designing interactive systems, which includes different types of interfaces and interaction modalities. The course prepares students to collaborate in an interdisciplinary environment with specialists in design and cognitive science.

Sub-courses

1. **Written hall examination** (*Skriftlig salstentamen*), 4.5 credits

Grading scale: Pass with distinction (5), Pass with credit (4), Pass (3) and Fail (U)

2. Project (Projekt), 3 credits

Grading scale: Pass (G) and Fail (U)

Form of teaching

The course consists of lectures, exercises, a project and a written hall examination. The exercises and the project are carried out in groups.

Language of instruction: English

Assessment

The course is examined through two modules, namely:

- Written hall examination, 4.5 credits (U, 3,4,5)
- Project, 3 credits (Pass, Fail)

To be approved for the course, both modules must be approved. The grade for the entire course is determined by the exam.

If a student, who has failed the same examined element on two occasions, wishes to change examiner before the next examination session, such a request is to be submitted to the department in writing and granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, though at most two years after the course has ceased/been changed. The same applies to work experience and VFU, although this is restricted to just one additional examination session.

Grades

The grading scale comprises: Pass with distinction (5), Pass with credit (4), Pass (3) and Fail (U).

To pass the course, students must receive a passing grade in both modules. The grade for the entire course will be determined by the written hall examination.

Course evaluation

The course is evaluated through meetings both during and after the course between teachers and student representatives. Further, an anonymous questionnaire is used to ensure written information. The outcome of the evaluations serves to improve the course by indication which parts could be added, improved, changed or removed.

Additional information

The course is a joint course together with Chalmers.

Course literature to be announced the latest 8 weeks prior to the start of the course.

The course replaces the course DIT095, 7.5 credits. The course cannot be included in a degree which contains DIT095. Neither can the course be included in a degree which is based on another degree in which the course DIT095 is included.