

# DEP OF APPLIED INFORMATION TECHNOLOGY

### TIA100 Human-Centered Design, 7.5 credits

Human-Centered Design, 7,5 högskolepoäng Second Cycle

#### Confirmation

This course syllabus was confirmed by The IT Faculty Board on 2010-12-21 and was last revised on 2017-08-07 by Department of Computer Science and Engineering to be valid from 2017-08-20, autumn semester of 2017.

*Field of education:* Science 100% *Department:* Dep of Applied Information Technology

#### Position in the educational system

The course is provided as a part of the Computer Science Master's Programme N2COS. The course is also offered as a programme course in the Computer Science Bachelor's Programme N1COS. Please note the entrance qualifications for programme students in N1COS below for this course.

The course can be part of the following programmes: 1) Computer Science, Master's Programme (N2COS), 2) Applied Data Science Master's Programme (N2ADS), 3) Computer Science, Bachelor's Programme (N1COS) and 4) Software Engineering and Management Master's Programme (N2SOF)

Main field of studies	Specialization
Interaction Design	A1N, Second cycle, has only first-cycle course/s as entry requirements
Computer Science-Interaction Design	A1N, Second cycle, has only first-cycle course/s as entry requirements

#### **Entry requirements**

To be eligible to the course tha student must have a Bachelor degree of 180 hec. Additionally, the course TIG095 Human Computer Interaction 7.5 credits, or the equivalent is required. To be eligible for this course as a programme student in Science Bachelor's Programme N1COS, the student must have passed at least 90 credits in programme courses and the additional course TIG095 Human Computer Interaction 7.5 credits.

### Learning outcomes

After completing the course the student is expected to be able to:

# Knowledge and understanding

• Understand and explain user-centrered design processes and different usability test methods at a deep level

## Skills and abilities

- Give a good overview of the field of Human-Centered Design theories and practices
- Modify user centered design methods to fit the specific resources available
- Apply, in a new context, the practical experience gained by performing the usercentered design process in a real world setting

## Judgement and approach

• Motivate the feasibility of usability to improve development processes.

### **Course content**

The course consists of both theoretical and practical parts. The theoretical part presents the history and development of Human-Centered Design (HCD) from research to industrial applications. Relevant design theories and processes, such as user-centered design, rational unified process, ecological interface design and design of products for leisure and entertainment are covered in the course. Literature seminars provide additional theoretical grounding and reflection, as well as different industrial practical experience/problems where speakers representing different types of companies are invited. The practical parts consist of laboratory work with usability evaluation methods and carrying out an investigation project at industry. The industrial project will emphasize on

1) how to investigate existing design process and usability problems in products,

2) how to implement a HCD process in a specific company, and 3) how to motivate potential benefits of the usability concept and human-centered design process in industry.

The project will be carried out in small groups.

## Form of teaching

Language of instruction: English

#### Assessment

The course is examined by one module, namely Project 7.5 credits (U-VG).

A student who has failed a test twice has to right to change examiners, if it is possible. A written application should be sent to the Department.

#### Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

### **Course evaluation**

Continuous evaluation will be used, including three meetings between teacher(s) and student representatives. Additionally, the course will be evaluated with a course questionnaire, and discussed with the student representatives.

### Additional information