

# DM2624 Human Centered Technology for Disabilities 7.5 credits

Människocentrerad teknik för funktionshinder

This is a translation of the Swedish, legally binding, course syllabus.

#### **Establishment**

On 2019-10-15, the Head of School of EECS has decided to establish this official course syllabus to apply from the spring semester 2021 (registration number J-2019-2173).

## **Grading scale**

A, B, C, D, E, FX, F

## **Education cycle**

Second cycle

## Main field of study

Computer Science and Engineering

#### Specific prerequisites

Basic course in Human-Computer Interaction equivalent to DH1620 or DH1622.

# Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

Having passed the course, the student should be able to

- describe different types of disabilities to be able to relate to consequences they may have when using technology
- describe technical systems from an accessibility perspective using correct terminology
- identify and problematise accessibility in technical systems in order to describe the social consequences for different types of disabilities
- modify existing technical systems in order to design solutions and products for individuals with different types of disabilities
- list and apply national laws and guidelines in order to carry out appropriate studies and data collections from legal, ethical and practical perspectives
- summarise rights to available technology in society in order to point out needs for development of technical systems.

#### Course contents

Design for disability and universal design, classification of disabilities, terminology for disability and accessibility, assistive technologies and aids, different perspectives on disabilities such as medical and social, perception and expression, design of products for accessibility, design of products for development and training, collection of data from experiments, social consequences of disabilities, cooperation with health-care and industry, current research and experimental method.

#### **Examination**

- INL1 Home assignments, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- SEM1 Seminars, 1.5 credits, grading scale: P, F
- PRO1 Project work, 3.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

## Other requirements for final grade

Active participation in seminars.

## **Ethical approach**

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.