



LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Universal design, teori

Universal Design, Theory

TNSA01, 2 credits, G1 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED ID

Date of Decision: 2023-03-16

General Information

Main field: Industrial Design.

Compulsory for: KID2

Language of instruction: The course will be given in English on demand

Aim

In a society for all products, services and environments are designed based on the knowledge that people are different and have different potential, and for the same person this will vary over time and with different situations. This course focuses on universal design (Universal Design), which can be explained as the design of products, services and environments that are usable by all people, to the greatest extent possible, without the need for special adaptation or specialized design.

The aim of the course is that the students, in their future professional roles, can take into account people's different conditions and abilities and get a practical training in how to analyze and evaluate products, services and environments and determine how well they meet the criteria for universal and inclusive design. The aim is also to give necessary prerequisites for the course "Universal design, project".

Diversity and inclusion are part of sustainable development, and link to several of the goals in Agenda 2030, eg 3: good health and well-being, goal 4: good education for all, goal 5: gender equality, goal 8: decent work and economic growth, goal 10: reducing inequality, goal 11: sustainable cities and communities, goal 16: peaceful and inclusive communities.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- be able to account for inclusive design principles and evaluation methods (eg, based on Universal Design, Design for All, Inclusive design) that can be used as guidelines in the development or evaluation of products, services and environments
- be able to describe the benefits of universal and inclusive design in a society that supports and strives for diversity
- identify and analyze situations, products, services and environments from an inclusive perspective
- have knowledge about how universal design, accessibility and social sustainability are interrelated and what the differences are.

Competences and skills

For a passing grade the student must

- be able to apply evaluation techniques for universal and inclusive design.
- identify shortcomings of products, services and environments and propose improvements according to the seven principles of universal design.

Judgement and approach

For a passing grade the student must

- be able to describe the quest that lies in the design of products and services so they are aesthetic and useful to as many people as possible regardless of age and ability.
- to take into account that people are different with a great variety of conditions and abilities and that they have different desires and needs.
- be able to express how universal design contributes to an inclusive society.

Contents

The course consists of seminars and assignments on universal design, accessibility and social sustainability.

The course focuses on the seven principles of universal design and how perspectives and attitudes affect people with different abilities and their opportunities enjoy new developments in society. Empathy exercises will also be carried out.

In the course, students will meet people with different life experiences, including persons with disabilities and people with a foreign background who are invited as guest lecturers. The course provides examples of technological assistance for different situations.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)

Assessment: The assessment is based on individual compulsory assignments. A passing grade will be given to students who pass compulsory assignments and have at least 80%

presence at scheduled lectures.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

The number of participants is limited to: No

The course overlaps following course/s: TNX153, TNSF10

Reading list

- Handed-out material about the principles and goals of universal design.
- All compulsory literature is available in the course learning platform.
- Maisel & Steinfeld: Universal design and the built environment. CRC Press, 2022. Maisel, J., & Steinfeld, E. (2022). Universal design and the built environment. In A. Mihailidis & R. Smith, *Rehabilitation Engineering* (1st ed., pp. 295–318). CRC Press. <https://doi.org/10.1201/b21964-16>. PDF is available on Canvas.
- Hedvall, Price, Keller & Ericsson: *Towards 3rd Generation Universal Design: Exploring Nonclusive Design*. IOS Press, 2022. Hedvall, P.-O., Price, M., Keller, J., & Ericsson, S. (2022). *Towards 3rd Generation Universal Design: Exploring Nonclusive Design*. 85–92. <https://doi.org/10.3233/SHTI220824>. PDF is available on Canvas.

Contact and other information

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