



LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Digital gestaltningsteori Computational Design Theory

ASEN20, 7,5 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED A

Date of Decision: 2023-03-28

General Information

Main field: Digital Architecture and Emergent Futures. **Depth of study relative to the degree requirements:** Second cycle, has second-cycle course/s as entry requirements.

Compulsory for: MAEF2

Elective for: A4

Language of instruction: The course will be given in English

Aim

This course aims to develop the students' ability for academic and creative writing and to further their understanding of research-by-design methodologies. It will provide the students with extensive depth and breadth of theoretical knowledge of an individually chosen study field in the main area and is the base for further exploring this area in future design driven courses.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- demonstrate knowledge and understanding within an individually chosen study area

relating to digital design.

- demonstrate knowledge and insight about research-by-design methodologies and how these can lead to the production of generalizable knowledge.

Competences and skills

For a passing grade the student must

- demonstrate the ability to describe, interpret and discuss theoretical foundations, objectives, resources and concepts in the field of experimental architectural design,
- demonstrate the ability to conduct in-depth analysis of theoretical or experimental concepts and describe how these can be applied in design processes
- demonstrate the ability to communicate, using words and pictures, a theoretical content in a professional manner.

Judgement and approach

For a passing grade the student must

- demonstrate analytical skills to critically evaluate knowledge and theory related to forward-looking aspects of society and construction
- demonstrate the ability to assess the relevance and value of concepts in architectural applications.

Contents

The course investigates the ways in which digital tools – for both design and fabrication – are being implemented in the field of architecture, how they are influencing the built environment, and how they can change the design process. The students independently study concepts, tools and theories, and relate these to their own interests in architectural design as of trends in the outside world. The student presents the course as a written report. The teaching is in the form of lectures, seminars, individual tutoring and literature studies. The teaching is conducted both individual and in group tutorials.

Examination details

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

Assessment: Accepted assignments, including written works, and 80% attendance at seminars and lectures. If a failing grade is assigned to the students, the student has the right to re-examination after completion. Examiner informs the student what is required to achieve a pass. 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.

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Admission

Admission requirements:

- ASEN10 Spatial Experiments I, Theory

The number of participants is limited to: No

Contact and other information

Course coordinator: David Andréen, david.andreen@abm.lth.se