



LUNDS UNIVERSITET  
Lunds Tekniska Högskola

*Course syllabus*

## **Spatiala experiment I, teori** **Spatial Experiments I, Theory**

**ASEN10, 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:** Architecture with specialization in Spatial Experiments.

**Main field:** Digital Architecture and Emergent Futures.

**Compulsory for:** MAEF1

**Elective Compulsory for:** MARK2

**Elective for:** A4

**Language of instruction:** The course will be given in English

### **Aim**

This course aims to develop the students' ability to engage with interdisciplinary knowledge, practice, and expertise, particularly from the areas of biology, engineering and the physical sciences, and their application in the field of architecture. This course will support the students' ability to collaborate across disciplines and to identify experimental potential in the intersection of form and function as an aid to the course "Spatial Experiments I". The course also aims to develop the student's ability to communicate and discuss theoretical concepts, both orally and in written form.

### **Learning outcomes**

*Knowledge and understanding*

For a passing grade the student must

- demonstrate knowledge and understanding of particular scientific knowledge, practice or expertise within a chosen area,
- demonstrate knowledge and insight about the theory and method for implementation, within the field of architecture, of scientific facts and discoveries in other disciplines.

### *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 built structures with respect to their functional and design-related properties,
- demonstrate the ability to communicate, using words and pictures, a theoretical content in a professional manner, with the clarity required for interdisciplinary contexts.

### *Judgement and approach*

For a passing grade the student must

- demonstrate analytical skills to critically evaluate scientific 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
- demonstrate the ability to critically evaluate one's own performance, which has been conducted in a parallel design process.

## **Contents**

The course presents theoretical tools to use knowledge and discoveries in other scientific fields to further the performance of buildings, and to further the adoption of cutting edge science in architecture. Learning takes place through studies of principles and examples, which are implemented in the design processes, both to test the concepts and to develop the design conceptually and functionally. Teaching as lectures, seminars, writing assignments, workshops, study tours and literature studies. Teaching can be in both group and individual form.

## **Examination details**

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

**Assessment:** Accepted assignments, including written works, and 80% attendance at seminars, mandatory field trips and lectures. The quality of the theoretical work and its integration in the design project is assessed and discussed by an evaluation team consisting of the course examiner, teachers, and external critics, after which the examiner determines whether the project qualifies for a pass. If the outcome is a fail, the student has the right to re-examination after completion or revision of the project. 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.

## **Admission**

**Admission requirements:**

- ATHA10 The Theory and History of Architecture II (Year 2) or ATHA25 The Theory and History of Architecture IV (Year 2)
- ATHF01 The Theory and History of Architecture V
- AADA20 Digital Tools 5
- ASBF05 The Fundamentals of Urban Design
- AAHF01 Sustainable Technology in the Built Environment
- AAHF10 Sustainable Architectural Design
- ATHF01 The Theory and History of Architecture V
- ATHF05 The Theory and History of Architecture VI
- VBEA05 The Construction Process, Basic Course
- AADA25 Digital Tools 6
- AAHF35 Documentation and Communication
- AAHF20 Architecture - In Time and Space or AAHF26 Architecture - In Urban Contexts or AAHF30 Architecture - In the Contemporary

**The number of participants is limited to: 36**

**Selection:** Completed university credits within the program. Within programmes where the course is given as a mandatory or elective mandatory course students are guaranteed admission. There after priority is given to students enrolled in programmes that include the course in the curriculum.

## **Reading list**

- Literature is available through a digital course library, which is updated annually.

## **Contact and other information**

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

**Further information:** The course is obligatory linked with "Spatial Experiments I".