

## Sustainability transitions in the construction sector

Hållbar omställning inom byggindustrin  
6 credits

TNBJ41

Valid from: 2024 Spring semester

<b>Determined by</b> Board of Studies for Mechanical Engineering and Design	<b>Main field of study</b> Construction Engineering	
<b>Date determined</b> 2023-08-31	<b>Course level</b> First cycle	<b>Progressive specialisation</b> G2X
<b>Revised by</b>	<b>Disciplinary domain</b> Technology	
<b>Revision date</b>	<b>Subject group</b> Civil and Environmental Engineering	
<b>Offered first time</b>	<b>Offered for the last time</b>	
<b>Department</b> Institutionen för teknik och naturvetenskap	<b>Replaced by</b>	

## Course offered for

- Bachelor of Science in Civil Engineering

## Prerequisites

Sustainable construction, Building physics, Drawing technology and object-oriented modeling, Building production

## Intended learning outcomes

The course is solution-oriented with a focus on society's sustainable development within the construction industry. After completing the course, the student should be able to:

- modeling sustainable urban planning and facilities
- explain environmental positions in management and reconstruction
- value materials and technologies
- explain how technical systems affect the building's environment, as well as how to reduce the environmental impact of a house.

## Course content

- quantitative spatial assessments and modeling
- construction and management
- new materials and technologies
- circular economy in the construction sector
- sustainability assessment tools for buildings and the built environment

## Teaching and working methods

The teaching consists of lectures, literature seminar, study visits, computer exercises, calculation exercises and workshop.

## Examination

UPG1	Litterature Seminar	1 credits	U, G
PRA1	Group work	2 credits	U, G
TEN1	Written examination	3 credits	U, 3, 4, 5

Grades for examination modules are decided in accordance with the assessment criteria presented at the start of the course.

## Grades

Four-grade scale, LiU, U, 3, 4, 5

## Other information

### About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is “Swedish”, the course as a whole could be given in Swedish, or partly in English. Examination language is Swedish, but parts of the examination can be in English.
- If teaching language is “English”, the course as a whole is taught in English. Examination language is English.
- If teaching language is “Swedish/English”, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English depending on teaching language.

### Other

The course is conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

The planning and implementation of a course should correspond to the course syllabus. The course evaluation should therefore be conducted with the course syllabus as a starting point.

The course is campus-based at the location specified for the course, unless otherwise stated under “Teaching and working methods”. Please note, in a campus-based course occasional remote sessions could be included.