

Sustainability transitions in the construction sector

Hållbar omställning inom byggindustrin
6 credits

TNBJ41

Valid from: 2024 Spring semester

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

Course offered for

- Bachelor of Science in Civil Engineering
- Bachelor of Science in Construction 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.