

Course Syllabus

Energy and Urban Planning 7.5 Credits*, Second Cycle Level 1

Learning Outcomes

Upon completion of the course, students shall be able to:

- obtain, analyse and synthesize information from multiple sources so as to describe the energy consumption of a town;
- show a basic understanding of infrastructure systems;
- demonstrate, both orally and in writing, an understanding of the climate and energy impacts of various infrastructure systems solutions;
- analyse and critically evaluate existing or planned neighbourhoods from the perspective of the environment and energy;
- give suggestions and recommendations for how neighbourhoods should be developed so as to be more sustainable;
- work in international and/or multi professional teams;
- communicate their knowledge, analyses and proposals in both oral and written form.

Course Content

The course addresses the integration of climate and energy considerations into the planning of the built environment. Students will study large-scale infrastructure systems (such as energy systems) and learn about their energy use and their contribution to climate change through activity-based learning. During the course, students will assess an existing or planned neighbourhood, and deliver recommendations or alternative proposals that respond to current energy and climate challenges. The course also includes lectures on communication, information-search processes and plagiarism.

Assessment

Active participation seminar 1 credit

Individual assignment 1 credit

Group assignment 1 credit

Project presentation and report 2 credits

Reflection report 2.5 credits

Forms of Study

Lectures, active participation in obligatory seminars, supervision and workshops, as well as oral and written presentations of group work.

Grades

The Swedish grades U, 3, 4, 5.

Reflection report (U/G).

Seminar activity (U/VG).

The final grade is determined by an overall evaluation of student work and activities.

Prerequisites

Bachelor of Science degree from building-, energy technology or civil engineering related fields of at least 180 credits and English 6

Other Information

Guest lectures and site visits will be arranged if opportunities should arise.

Subject:

Construction

Group of Subjects:

Building Technology

Disciplinary Domain:

Technology, 100%

Approved:

Approved 14 December 2017

Valid from 15 January 2018