SYLLABUS

Climate, Landscape and Build-up Areas, Technical Assessments 7.5 credits F7019B

Klimat, landskap och bebyggelse, tekniska bedömningar

Course syllabus admitted: Autumn 2024 Sp 1 - Present

DECISION DATE
2024-02-14

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LULEÅ TEKNISKA UNIVERSITET

Climate, Landscape and Build-up Areas, Technical Assessments 7.5 credits F7019B

Klimat, landskap och bebyggelse, tekniska bedömningar

Second cycle, F7019B

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Arkitektur	Architecture

Entry requirements

At least 180 ECTS from the areas civil engineering, built environment, architecture, physical planning, urban planning, or landscape architecture and design. Good knowledge in English, equivalent to English 6.

Selection

The selection is based on 30-285 credits

Course Aim

The aim of the course is for the student to gain knowledge about local climate and how to carry out technical assessments of local climate in urban planning. After completing the course, the student should have

Knowledge about:
• Impact of landscape, built environment and buildings on the local climate.
• The impact of human activities on local climatic conditions.
• Local climatic aspects such as topography, solar radiation, cold air steams, local winds, shading, reflection, drainage, infiltration, etc.

Understanding of:
• How local climate adaptation of built up areas and buildings can be analyzed and carried out

Skill and ability to:
• Analyse, evaluate and interpret basic knowledge of the impact of the landscape, built environment and buildings on the local climate
• Apply technical assessments of local climate in the design of landscapes, urban areas, and buildings, as well as the location of built-up areas and buildings

Contents

• Local climate conditions as topography, solar radiation, precipitation, cold air steams, local winds, shade, reflection, drainage, infiltration, etc.
• Possibilities to improve local climate conditions in the landscape, the built environment and buildings
• Possibilities of adaption and resilience based on changes of aspects in local climate and climate changes in the landscape, built environment and buildings

Realization

Each course occasion´s language and form is stated and appear on the course page on Luleå University of Technology's website.
Lectures, Exercises, Assignment

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. Knowledge about the course and basic understanding will be examined by Lecture Quiz (Module 0006) and Literature Seminar (Module 0007) while the skills and ability acquired by students will be examined by Project Assignment (Module 0008).

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term “unauthorized aids” refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Course offered by

Department of Civil, Environmental and Natural Resources Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0006	Lecture Quiz	G U 3 4 5	3	Mandatory	A24	
0007	Literature Seminar	U G#	1.5	Mandatory	A24	
0008	Project Assignment	G U 3 4 5	3	Mandatory	A24	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Assistant Director of Undergraduate Studies Eva Gunneriusson, Department of Civil, Environmental and Natural Resources Engineering 2024-02-14

Syllabus established

by Assistant Director of Undergraduate Studies Eva Gunneriusson, Department of Civil, Environmental and Natural Resources Engineering 2020-10-13