

## COURSE SYLLABUS

### Urban Space Design with GIS, 7.5 credits

*Samhällsplanering med GIS, 7.5 högskolepoäng*

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Course Code: TSGK16	Education Cycle: First-cycle level
Confirmed: Feb 01, 2025	Disciplinary domain: Technology
Valid From: Jan 19, 2026	Subject group: Building Technology
	Specialised in: G1F First cycle, has less than 60 credits in first-cycle course/s as entry requirements
	Main field of study: Civil Engineering

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## Intended Learning Outcomes (ILO)

On completion of the course the student shall:

### Knowledge and understanding

- demonstrate knowledge of the development of urban planning and public spaces from a historical perspective.
- demonstrate knowledge of fundamental concepts and theories within urban planning.
- demonstrate knowledge of various methods for geographic analysis.
- demonstrate an understanding of the factors influencing urban planning from a technical, social, economic, and ecological perspective.

### Skills and abilities

- demonstrate proficiency in spatial analysis using GIS tools.
- demonstrate the ability to analyze the city as a living space and apply this knowledge in a design project.

### Judgment and approach

- demonstrate the ability to assess and critically evaluate the reliability and usability of GIS analyses.
- demonstrate the ability to identify, analyze, and assess factors that influence the design of public spaces and contribute to long-term sustainable development.

## Content

The course includes the planning and design of public spaces from technical and qualitative aspects, considering applicable norms and legislation.

The course includes the following elements:

- Urban development from a holistic perspective.
- Fundamental scientific theories and concepts.
- Actors, perspectives, and factors that influence the design of public spaces.
- Sustainability issues impacting design and urban development.
- Analytical methods as a basis for the design and planning of cities.
- Sketch and presentation methodology
- Geographical data and analysis
- Cartographic presentation

## Type of instruction

Lectures, exercises and study visits.

Language of instruction is in Swedish or English.

## Entry requirements

General entry requirements and taken course Sustainable Built Environment, 7.5 credits (or equivalent).

## Examination and grades

The course is graded 5, 4, 3 or U.

The final grade for the course is based upon a balanced set of assessments. The final grade will only be issued after satisfactory completion of all assessments.

Registration of examination:

<b>Name of the Test</b>	<b>Value</b>	<b>Grading</b>
Assignment 1. Analysis	2.5 credits	5/4/3/U
Assignment 2. Design	2.5 credits	5/4/3/U
Assignment 3. Theory	2.5 credits	5/4/3/U

## Course literature

Please note that changes may be made to the reading list up until eight weeks before the start of the course.