



AG2412 Geovisualisation 7.5 credits

Geovisualisation

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for AG2412 valid from Autumn 2021

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Built Environment

Specific prerequisites

A completed bachelor's degree in civil engineering, urban planning, geomatics, geography, engineering physics, computer science, statistics, economics, and/or mathematics, including at least 3 university credits in each of the following or their equivalents: Programming, Linear Algebra, Calculus in One Variable, and Probability & Statistics together with Eng B.

Eng B/6 according to the Swedish upper secondary school system.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The major objective of this course is to learn principles of cartography and techniques for effective visualization of geographic data. On the completion of this course, students should be able to design analogue and digital cartographic products using an existing geographic information system, and to gain critical thinking skills essential to avoid being misled by cartographic products.

Course contents

- Map symbols
- Visual variables: spacing, size, orientation, shape, arrangement, height, hue, value, saturation.
- Data classification
- Topographic and thematic map design and symbolization
- Map design for presentation, synthesis, analysis and exploration of spatial data
- Exploratory data analysis, graphical data analysis techniques
- 2D, 2.5D, and 3D data and their representation
- Temporal data and their representation

Examination

- LAB2 - Laboratory Work, 3.0 credits, grading scale: P, F
- PRO2 - Project, 1.5 credits, grading scale: P, F
- TENA - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Other requirements for final grade

Written exam (TEN1; 3,0 cr) (A/B/C/D/E/FX/F)
Approved laboration (LAB1; 3.0 cr) (P/F)
Project (PRO1; 1,5 cr) (P/F)

Participation in study visit and final presentation sessions

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.