



# AG2412 Geovisualisation 7.5 credits

## Geovisualisation

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

## Establishment

Course syllabus for AG2412 valid from Autumn 2010

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

The Built Environment

## Specific prerequisites

A Bachelor's degree in surveying engineering (geoinformatics, GIS, cartography, photogrammetry, remote sensing, geodesy) or in relevant science and engineering fields, for example: civil engineering in the built environment or equivalent, urban, transport or regional planning, environmental sciences, geography, etc. including courses corresponding to a minimum of 30 ECTS credits in the field of geoinformatics, GIS, cartography, photogrammetry, remote sensing, geography, urban, transport or regional planning or environmental sciences.

In addition \*\* documented proficiency in English B or equivalent (TOEFL, IELTS e g.).

GIS for the Built Environment (AG1323), or equivalent.

# Language of instruction

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

# Intended learning outcomes

After the course the student should be able to design analogue and digital maps and 3D models of geographical objects; and to publish maps as electronic atlases.

# Course contents

- Map symbols and graphic variables: size, colors, textures, orientation, patterns.
- Topographic and thematic map design and symbolisation
- Map design for presentation, synthesis, analysis and exploration of spatial data
- exploratory data analysis, graphical data analysis techniques
- 2D, 2.5D, 3D and 4D graphics and its representation
- virtual models
- cartography on internet, publication alternatives for distribution of electronic atlases
- programming, scripting and automation for visualization and publishing electronic atlases

# Disposition

Lectures 26h

Laboration 40h

Written examination

# Course literature

M.-J. Kraak & F. Ormeling, Cartography – Visualization of Geospatial Data, Prentice Hall, 2nd edition, 2003.

# Examination

- PRO1 - Project, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- LAB2 - Laboratory Work, 3.0 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.

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

## **Other requirements for final grade**

Written exam (TENA; 3,0 cr)

Approved laboration (LABA; 3 cr)

Approved project (PRO1; 1,5 cr)

## **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.