AG1323 GIS for the Built Environment 7.5 credits

GIS för samhällsbyggnad

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

Establishment

Course syllabus for AG1323 valid from Spring 2014

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Completed upper secondary education including documented proficiency in Swedish corresponding to Swedish B/ Swedish 3 and English corresponding to English A/ English 6. Mathematics E/Mathematics 4, Physics B/ Physics 2.

Course AG1311 Graphic Information Systems

For single course students: at least 6 ECTS in a GIS course

Basic computer skills are recommended

Language of instruction

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

Intended learning outcomes

The course aims to introduce students to how geographic information systems (GIS) store, process, and present geographic data, i.e. data pertaining to the surface of the earth and how this technology helps us analyze spatial phenomena of urban or regional scale. On the completion of this course, students should acquire basic theoretical understanding of GIS as well as practical skills of using GIS software in various contexts.

Course contents

- Basic GIS architecture
- Spatial data models and structures
- Data sources
- Database concepts
- Vector data operations
- Raster data operations
- Spatial query
- Spatial analysis
- Network analysis

Disposition

Lectures 20h

Laboration 40h

Course literature

Meddelas vid kursstart

Examination

- PRO1 - Project, 1.5 credits, grading scale: P, F
- TEN2 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB2 - Laboratory Work, 3.0 credits, grading scale: P, 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 (TEN2, 3 cr)
Approved laboratory reports (LAB2, 3 cr)
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.