

SYLLABUS

Geographical Positioning System 7.5 credits L0013B

Geografiska positioneringssystem

Course syllabus admitted: Autumn 2008 Sp 1 - Spring 2011 Sp 4

DECISION

**The plan is established by the Department of Civil and
Environmental Engineering 2007-01-31 and is valid from H07.**

Geographical Positioning System 7.5 credits L0013B

Geografiska positioneringssystem

First cycle, L0013B

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G#	Geografisk informationsteknologi	Geographic Informations Technology and Surveying

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and Basic Course in Geographical Information Technology, for example ABL001 or analogous knowledge acquired through other courses or proved practical work.

Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

Examiner

Folke Stridsman

Course Aim

The students shall be familiar with concepts, terminology and tools related to geographical positioning systems and their applications. Further more the students shall understand different techniques for construction of geographical positioning systems and also be able to apply some.

Contents

Geographical positioning systems are information systems where geographically related real time information is managed. The course gives an introduction to geographical positioning system and the different techniques that can be involved. Example of such techniques are satellite and ground based positioning systems, serial and network based communication, Further more limitations and possibilities with geographically related real time information presentation is discussed.

- Techniques for positioning; Satellite based positioning techniques (e.g. GPS, dGPS, GLONSS and Galileo). Ground based positioning techniques (e.g. positioning in mobile telephone net, positioning with wireless network, RFID and other existing and future positioning techniques)
- Sensors; In general and for instance silicon based sensors, smart sensors, environment sensors and example of sensors in vehicles
- Applications in the area of geographical real time systems

Realization

Lectures, laboratory work and examination on campus or as Internet based distance course. No compulsory lectures.

Examination

Assignment reports.

Remarks

Courses followed through Internet demands access to some sort of broadband.

Overlap

The course L0013B is equal to ABL035

Literature. Valid from Autumn 2007 Sp 1

To be announced.

Course offered by

Department of Civil, Environmental and Natural Resources Engineering

Items/credits

Number	Type	Credits	Grade
0001	Assignment	7.5	U G#

Last revised

The plan is established by the Department of Civil and Environmental Engineering 2007-01-31 and is valid from H07.

Syllabus established

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