AH1816 Geodetic Surveying II 9.0 credits

Geodetisk mätningsteknik II

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 AH1816 valid from Autumn 2010

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

For single course students: completed upper secondary education including documented proficiency in Swedish corresponding to Swedish B, English corresponding to English A.

Additional entry requirement as folows:

Mathematics B and physics B

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:

- understand the principles for how geodetic instruments are functioning and how they are used
- understand how local and regional geodetic reference and height systems are built up
- measure and compute simple densifications of geodetic networks
- plan and perform the different main parts in a setting out project
- plan and perform the different main parts in a detail surveying project
- evaluate the quality in different types of observed data and in the result

Course contents

Instruments and methods for different types of positioning.

Control networks: the structure of local reference systems in different dimensions. Setting out: planning, coordinate computations, measure and computation methods and report writing.

Positioning, detail measurements: measurement and computation methods and further handling in a CAD-software. Quality in the measured data and in the final results.

The exercises and laboratory work includes e.g. two larger projects, one for a setting out project and one for a positioning project. The aim of these projects is that the student will work with and understand the whole process chain in such types of projects.

Course literature

Egeltoft, T.: Geodetisk mätningsteknik. KTH, Sthlm 2003.

Lecture notes, lab assignments and project instructions

Examination

- PRO1 - Project, 1.5 credits, grading scale: P, F
- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercises, 4.5 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.

TEN1 - Written exam, 3,0 p, grading scale: A, B, C, D, E, FX, F

ÖVN1 - Laboratory works, 4,5 p, grading scale: P, F

PRO1 - Project work, 1,5 p

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.