



Faculty of Social and Life Sciences
Geo-Science

Syllabus

Course Approval

The syllabus was approved by the Faculty Board of Social and Life Sciences on 25 October 2012, and is valid from the Autumn semester of 2013 at Karlstad University.

Course Code: NGGB64

Applied geodesy, 7.5 ECTS Credits

(Tillämpad geodesi, 7.5 Swedish credit points)

Degree Level: Bachelor

Progressive Specialisation: G1F (First cycle, has less than 60 credits in first-cycle course/s as entry requirements)

Language of Instruction

Swedish

Prerequisites

The course Geodesy (NGGA24) or Introduction of Engineering Surveying (NGGA26), or equivalent.

Major Field of Study

MÄT (Surveying and Mapping), NGA (Physical Geography)

Learning Outcomes

Upon completion of the course, students should be able to:

- independently perform coordinate estimation using data manually and in geodesy software programme,
- give an account of quality aspects of measuring and quality assured measurement,
- use an estimation programme in connection with a minor measuring task,
- plan and carry out a measuring task,
- estimate the cost of a surveying assignment,
- give an account of the rules applying to detail measuring according to HMK,
- demonstrate familiarity with the set of regulations applying to MBK (measuring, estimation and cartography) in the case of new construction sites,
- control, calibrate and adjust geodetic measure-equipment.

Content and Form of Instruction

Instruction is in the form of lectures, mandatory field measuring exercises and data analysis.

Areas included are:

- managing instruments (setting-up, batch measuring)
- different measuring methods, plane and height
- positioning buildings
- traffick line marking
- cartography measurement
- planning, marking and measuring base-lines

- coordinate estimation
- processing measurement data
- measurement rules
- theory of error,
- classification of measuring errors
- error propagation
- quality assurance

Reading List

See separate document.

Examination

Examination is in the form of written tests, hand-in assignments and a practical test.

Grades

One of the grades 5 (Distinction), 4 (Some Distinction), 3 Pass , or Fail (U) is awarded in the examination of the course .

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

The course NGGB64 cannot be included in the same degree programme as the course NGGA28.

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.

The course is mandatory for the GIS-engineering programme.

Thw syllabus was established at the Faculty of Social and Life Sciences 2009-03-27.