



Faculty of Health, Science and Technology
Geo-Science

Syllabus

Engineering surveying

Course Code:	NGGB66
Course Title:	Engineering surveying <i>Byggmätning</i>
Credits:	7.5
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has at least 60 credits in first-cycle course/s as entry requirements (G2F)

Major Field of Study:
MAT (Surveying and Mapping)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2016-09-05, and is valid from the Spring semester 2017 at Karlstad University.

Prerequisites

The course NGGB64 Applied Geodesy 7.5 ECTS cr, or equivalent.

Learning Outcomes

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

- give an account of the standards for building construction,
- interpret construction drawings before surveying,
- apply the building construction standards regarding accuracy and tolerance,
- use a field-specific software to handle the measuring data regarding calculation and presentation of results,
- perform the planning, measuring and analysis of building-site network regarding quality requirements,
- perform volume calculations,
- report on a surveying project, the process and practical performance,
- critically review a fellow-student's project.

Content

The course comprises the following components:

- study of basic documents, plans and standards used in planning and construction
- planning, completing and follow-up of building-site network and terrain models
- study of tolerance levels in building construction and installations
- theories on structures in plane and height
- practical training in handling measuring data in the planning, measuring and follow-up stage

- measuring exercises and reports
- control, follow-up and documentation of surveying with regard to tolerance and accuracy requirements.

Reading List

See separate document.

Examination

Assessment is based on surveying reports in groups, individual hand-in assignments, oral and written presentations and performance as a peer reviewer.

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 evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

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

Required course for the survey and mapping programme.