



Faculty of Technology and Science
Construction Engineering

Syllabus

Course Approval

The syllabus was approved by the Faculty Board of Technology and Science on 12 March 2014 , and is valid from the Spring semester of 2014 at Karlstad University.

Course Code: BYGA93

**Elementary Building Technology, 12.0 ECTS Credits
(Byggteknikens grunder, 12.0 Swedish credit points)**

Degree Level: Bachelor

Progressive Specialisation: G1N (First cycle, has only upper-secondary level entry requirements)

Language of Instruction

Swedish

Prerequisites

Upper Secondary level English B, Mathematics C and Civics A (field-specific eligibility 4)

OR

Mathematics 3b alt. Mathematics 3c, Civics 1b alt. Civics 1a1 + 1a2 ((field-specific eligibility A4)

Major Field of Study

BYA (Building Technology)

Learning Outcomes

The course is mandatory for students on the real estate management programme and is the first course in building technology. The aim of the course is that students acquire basic knowledge of construction materials, building technology and urban design and architectural history.

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

- describe the properties and functions of building materials,
- describe the structure and function of foundation, structure, structure completion and building envelope
- outline common damages to buildings and the principles of building conversion,
- outline the technical requirements for fire resistance and acoustic demands on buildings,
- read building blueprints,
- outline the content of energy statements and property conveyance inspection,
- recognise and describe the typical features of urban design and architecture from different epochs,
- compile and present technical information of a building clearly and accessibly.

Content and Form of Instruction

The course contains the following components:

- building materials,
- the structure and function of foundation, structure, structure completion and building envelope
- building damages

- conversion
- rebuilding guarantee system
- the fire and acoustic aspects of buildings
- blueprint reading
- energy statement
- property conveyance inspection
- history of urban design and architecture

Reading List

See separate document.

Examination

Assessment is based on a written test and oral and written presentation of projects.

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

Examination based on this syllabus may be completed up to one year after the syllabus is replaced. Two examination opportunities are provided during the first academic year in which the course is not offered, and one in the second year.

Group projects require students to be present beyond scheduled hours.