



Faculty of Health, Science and Technology  
Construction Engineering

## Syllabus

### Introduction to building engineering

**Course Code:** BYGA14

**Course Title:** Introduction to building engineering  
*Introduktion till byggteknik*

**Credits:** 7.5

**Degree Level:** Undergraduate level

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

**Major Field of Study:**

BYA (Building Technology)

**Course Approval**

The syllabus was approved by the Faculty of Health, Science and Technology 2018-02-01, and is valid from the Autumn semester 2018 at Karlstad University.

**Prerequisites**

Introduction to Energy Systems, 7.5 ECTS cr and Sustainable Development for Engineers, 7.5 ECTS cr, or equivalent

**Learning Outcomes**

Upon completion of the course, students should be able to

- create by hand simple construction drawings in accordance with industry standards,
- draw up a time plan and a specification of materials for a project,
- build a part of a construction solution in groups based on the drawings produced,
- follow up the project regarding time and resources used,
- reflect on group methodology in a project,
- relate their own contribution to group project activities with the help of group dynamics concepts,
- give an account of, reflect on, and evaluate their own contribution to the project,
- write an academic report according to given templates and structure,
- seek information with the help of library staff,
- identify search words and information sources,
- show familiarity with the library services and resources,
- distinguish between academic texts and other informative texts,
- make correct references in the text and in the list of references according to a given system,
- demonstrate good ability to communicate orally and in writing,
- plan and complete projects within given time limits.

## **Content**

The course introduces building engineering at a practical level. Basic drawing technique is treated and in groups students build part of a building according to drawings and plan, follow up and evaluate a project.

Knowledge of group projects and their function, composition and dynamic processes are treated in theory and practice, as are academic writing, including literature searches, formal aspects, structure and referencing.

Students are required to attend sessions on library services and laboratory and workshop safety routines.

## **Reading List**

See separate document.

## **Examination**

Assessment is based on

- a project presented orally and in writing in groups and individual hand-in assignments
- mandatory attendance at instruction on laboratory and workshop safety routines
- individual hand-in assignments, including a mandatory introduction to library services and resources.

## **Grades**

One of the grades Distinction (VG), Pass (G), 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.

Students who have not attended the Introduction to safety routines in laboratories and workshops do not have access to the premises in which the required project is carried out.