



## Course syllabus

Faculty of Technology

Department of Building Technology

2BY083 Detaljprojektering - inriktning byggkonstruktion, 7,5  
högskolepoäng

Building and Civil Engineering - Design Project, 7.5 credits

**Main field of study**

Civil Engineering

**Subject Group**

Building Technology

**Level of classification**

First Level

**Progression**

G1F

**Date of Ratification**

Approved 2009-07-24

Revised 2014-12-11 by Faculty of Technology. Review of prerequisites.

The course syllabus is valid from autumn semester 2015

**Prerequisites**

Basic eligibility and completed the courses (or equivalent courses) Construction Management 1 7.5 credits, Computer Aided Drawing CAD 7.5 credits, Building Technology 1 7.5 credits, Project Management and Technical Communication 7.5 credits, Building Technology 2 7.5 credits, Housing, Building Technology and Town Planning 7.5 credits, Structural Mechanics 7.5 credits, Concrete Structural Engineering 7.5 credits, Foundation Structure 7.5 credits.

### Objectives

After completing the course the students individually and in groups will be able to use knowledge obtain in previous program courses supplemented with in-depth knowledge within the actual projects problem areas.

The building's design and engineering construction shall in principle be showed in documents. The required calculations for the construction shall be able to be done.

## Content

The course covers the design of a planned construction project, it shall as far as possible mimic the reality. This course includes detailed design in building construction and architecture for building projects. The system documents for the project shall only to be adjusted according to detail project conditions.

- description of the background and purpose
- adjustment system documents with regard to detail project conditions
- architect's construction documents with dimensioned floor plans, detailed drawings and selected layout drawings
- engineering construction documents (choise of frames, column spacing, load conditions, dimensioning, foundations and heat balance calculation etc.)

## Type of Instruction

Education consists of lectures, tutorials and independent study. Some parts are mandatory. The scope of the compulsory elements provided by the examiner at the start of the course.

Students plan and implement the project components parts and solve the technical problems that may occur. The project is divided into different phases in which different problems are identified. The solutions to the problems is found by the students with support of the teachers and the results are presented in a within the industry acceptable manner.

Theoretical depth is provided by lectures and exercises which are mandatory for the student. Discussions about the project occurs at specific workshops and tutor meetings.

## Examination

The course is assessed with the grades U, 3, 4 or 5.

Assessment of student performance will be written and oral presentation of the project's various parts. The assessment can also include a written exam.

In order to pass, the objectives of the course should be achieved.

## Course Evaluation

A course evaluation will be carried out and compiled after the course is completed. The compilation will be presented to the current board as well as to the students and filed.

## Required Reading and Additional Study Material

### **Required reading**

Depending on the nature of the project the literature may vary slightly from time to time, for example when it comes to various regulations and standards for the project.

### **Reference literature**

For example, newspaper articles about the current building type, reference documents for similar items, Construction Documents.