



## Course syllabus

Faculty of Technology

Department of Building Technology

1BY008 Byggt teknik 1, 7,5 högskolepoäng

Building Technology 1, 7.5 credits

### **Main field of study**

Civil Engineering

### **Subject Group**

Building Technology

### **Level of classification**

First Level

### **Progression**

GIN

### **Date of Ratification**

Approved 2009-12-15

Revised 2015-06-11 by Faculty of Technology. Review of examination.

The course syllabus is valid from autumn semester 2015

### **Prerequisites**

General entry requirements and Mathematics C or Mathematics 3b / 3c (Field-specific entry requirements 3/A3).

## Objectives

After completing the course the student is expected to have acquired:

- knowledge of building technology constructions knowledge of certain building materials
- knowledge of construction moisture and heat functionality.
- the ability to perform detailed building technology drawings

## Content

The course comprises the following elements:

- Building physics: Heating, energy balance, U values, heat conduction. Moisture, moisture technology concepts, moisture transportation, moisture sources,

critical moisture conditions, moisture measuring.

- Material science: Building materials and their properties.
- Elements of building construction such as foundations, framework, additional framework components, facing, fittings and equipment.
- Drawing techniques: Basic drawing techniques.
- Laboratory work in the areas of concrete, wood and moisture

- Study visits and mentor company tasks. Study visits in accordance with teacher instructions. Programme students perform pre-determined mentor company

assignments, which are presented in writing.

Independent-course students make the corresponding written presentations of course elements and/or study visits in accordance with teacher instructions.

### Type of Instruction

The teaching consists of lectures, laboratory work, exercises and study visits. The extent of the compulsory parts appears from the schedule.

### Examination

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

The course is examined through the practical elements with accompanying written reports, project documentation accompanying written report and a written exam.

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

### Course Evaluation

A written course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The course evaluation will be filed at the department.

### Other

On request, a Swedish University course certificate will be awarded upon successful completion of the course. Some elements of the course may entail costs defrayed by the course participant.

### Required Reading and Additional Study Material

#### Required reading

Bodin, Hidemark m fl Arkitektens Handbok, Studentlitteratur,2014 eller senare, 552 sidor

Burström, Per Gunnar , Byggnadsmaterial Studentlitteratur 2007, 562 sidor

Strandberg, Bengt, Bygga hus-Illustrerad bygglära, Byggegenskaps förslag, 2014, 291 sidor

Avdelningens kompendier . Ca 200 sid

#### Recommended Literature

Hemgren & Wannfors, Husets ABC, 384 sidor

Hamrin, Byggnadsritning – ritsätt och regler, 72 sidor

Sandin, Kenneth, 2007, Praktisk Husbyggnadsteknik, Studentlitteratur, 100 sidor