



## Course syllabus

Faculty of Technology

Department of Building Technology

1BY033 Installationsteknik och energihushållning, 7,5 högskolepoäng  
Heating, Ventilation, Sanitation and Energy, 7.5 credits

### **Main field of study**

Civil Engineering

### **Subject Group**

Building Technology

### **Level of classification**

First Level

### **Progression**

G1F

### **Date of Ratification**

Approved 2009-12-15

Revised 2016-06-09 by Faculty of Technology. Review of examination.

The course syllabus is valid from autumn semester 2016

### **Prerequisites**

Basic eligibility and having completed at least 30 ECTS points or the equivalent in Building Technology or the course Energy systems- project (2BT002/BT9113).

## Objectives

After completing the course the student is expected to

- have an insight into the importance of building services engineering for maintaining thermal comfort, good air quality as well as good hygienic conditions indoors
- have knowledge of general principles for heating, ventilation, water and sanitation
- know the background to the dimensioning of the systems of building services engineering

## Content

The course comprises the following elements:

- Energy demand
- Energy economics
- Thermal comfort
- Ambient air quality
- Air control
- Ventilation principles
- Heat production
- Heat distribution

- Heating equipment
- Indoor sanitation systems
- Drawing interpretation for building services engineering

## Type of Instruction

The teaching consists of lectures and exercises.

## Examination

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

The examination of student performances will be shown in a written examination.

## Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

## Required Reading and Additional Study Material

### **Required reading**

Projektering av VVS-Installationer, Catrina Warfvinge och Mats Dahlblom,  
Studentlitteratur, latest edition. 314 pages