



Course syllabus

Faculty of Technology

Department of Building Technology

1BY000 Grunder för anläggningsteknik, 7,5 högskolepoäng
Geosciences, 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 2018-06-21 by Faculty of Technology. Review of prerequisites.

The course syllabus is valid from spring semester 2019

Prerequisites

Building Technology 1 (1BY008) 7,5 credits, Structural Engineering and Design (1BY034) 7,5 credits, and Computational Methods for Technical Applications (1MA112) 15 credits or similar, alternative 52,5 credits within the programme Building Technology Programme with specialisation in Architectural Engineering.

Objectives

After completing the course the student should:

- understand the basic concepts in geology
- apply basic knowledge in geotechnics
- understand the basic concepts in water & wastewater handling
- understand the basic concepts in road engineering

Content

The course comprises the following elements:

Geology

- The structure of the earth: earth's materials
- minerals and rocks

Geotechnics

- Soil properties
- Stress analysis
- Strength of soils
- Consolidation

Water and Wastewater Technology

- Terminology of water & wastewater systems
- Historical aspects and changes in priorities
- Water distribution network
- Sewer & stormwater net
- Water & wastewater treatment in central system
- Local water supply treatment
- Wastewater treatment in local systems

Road Tehnology

- Road and traffic terminology
- Road structure
- Maintenance of road structuree

Type of Instruction

The teaching consists of lectures, workshops, laboratory work, exercises. Some of the items are compulsory. The extent of the compulsory parts appears from the schedule.

Examination

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

The assessment of student performance are written exam.

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

Kompendium i teknisk geologi AK, 2012, Conny Svensson, Avdelningen för teknisk geologi, Lund.

Dahlblom, Ola, Kompendium i geoteknik, 2015, 120 pages

Lindström, V, 2012: *Vårt Vatten, grundläggande lärobok i vatten- och avloppsteknik, Svenskt vatten*. ISSN nr: 1654-5117

Granhage, L. 2007: Kompendium i vägbyggnad, Chalmers tekniska högskola

Utdrag ur: Alm L-O. 2010: Kurskompendium väg-och gatuutformning, KTH

Utdrag ur: Trafikverkets Vägar och gators utformning 2012