

# AH1907 Installation 1. Road, Railways and Wastewater Networks 7.5 credits

Anläggning 1. Väg-, järnväg och VA-teknik

This is a translation of the Swedish, legally binding, course syllabus.

#### **Establishment**

Course syllabus for AH1907 valid from Autumn 2011

## **Grading scale**

A, B, C, D, E, FX, F

## **Education cycle**

First cycle

## Main field of study

**Technology** 

#### Specific prerequisites

Completed upper secondary education including documented proficiency in Swedish corresponding to Swedish B and English corresponding to English A, Mathematics D and Physics B.

# Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

#### Course contents

Highway- and track technology:

Highway and railway (track) technology.

Geometric design of highways and railways.

Different types of highways, roadways, and railways.

Highway- and railway construction material (bitumen, asphalt, unbound material).

Climate, environment and drainage aspects.

Mechanistic-empiric modeling / formulation of asphalt highways.

Road hydrology.

Water-technological questions related to road construction.

Storm water and traffic.

Knowledge of materials for water and sewage piping system.

Management and maintenance of water and sewage piping system.

Planning process.

Construction process.

Operation and maintenance of water and sewage piping system.

#### **Examination**

- ÖVN1 Exercises, 3.0 credits, grading scale: P, F
- TEN1 Exam, 4.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

## Other requirements for final grade

Passed written exam (2,5 ECTS credits)

Passed exercises (5 ECTS credits)

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.