



AH1908 Installation 2. Construction, Management and Maintenance of Roads and Railways

7.5 credits

Anläggning 2. Byggande, drift och underhåll av vägar och järnvägar

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

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

Establishment

Course syllabus for AH1908 valid from Spring 2012

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:

Design of roads and railways.

Construction of roads and railways.

Management of road construction – System perspective versus project perspective.

Maintenance of highways and railways.

Assessing the condition of roads.

Life cycle cost (LCC) for maintenance of highways.

Swedish highway design methods – PMS object.

Characterization of heavy vehicles and traffic for dimensioning of highways.

Loading and stresses in highways.

Road hydrology:

The maintenance model.

Control of state.

Performance metrics.

Life cycle cost (LCC) for wastewater network foundations.

Examination

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

Other requirements for final grade

Passed written exam (4,5 ECTS credits)

Passed exercises (3 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.