



AH1025 Public Transport Systems, Buses and Rail, BC 7.5 credits

Kollektivtrafiksyste, bussar och spårtrafik, gk

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

Establishment

Course syllabus for AH1025 valid from Autumn 2025

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

AI1527- Introduction to the Planning and Building Process

AI1128- Economics of the Built Environment

Language of instruction

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

Intended learning outcomes

The students should after the course:

- be able to reason about the role and market of public transport and its contribution to economic and social sustainability
- explain the various steps in the planning of public transport
- describe the properties, e.g. capacity of different public transit systems, and be able to make realistic estimates
- account for good and poorer conditions for public transport in geographic planning
- describe the design of various types of infrastructure; stops, bus lanes, track and other infrastructure for bus and rail
- be able to describe how public transport in general is organized, its procurement and financing
- be able to carry out a simple planning and analysis of public transport route networks

Course contents

The course provides a basic knowledge of the condition, design, management and control of a public transportation system. Environmental impact, market, vehicle systems, planning, financing and organization are treated on a general level. The project task highlights the dimensioning of a public transport system using tools, traffic planning and the implementation of the traffic system in an urban region.

Examination

- PRO1 - Project exercise, 3.5 credits, grading scale: P, F
- TEN1 - Written Examination, 4.0 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.

Particular examination, written or oral exam, administered in the middle of the course

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.