



AH102V Public Transport Systems, Buses and Rail 4.0 credits

Kollektivtrafiksystem, bussar och spårtrafik

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

Establishment

The official course syllabus is valid from the autumn semester 2026 according to the Faculty Board decision HS-2025-0982. Date of decision: 2025-05-15

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

or at least 15,0 ects credits in urban planning, or at least 2 years of professional experience in public transport planning.

Intended learning outcomes

After passing the course, students should 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
- describe how public transport in general is organized, its procurement and financing.

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.

Examination

- 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.

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.