



# AH2173 Public Transport 7.5 credits

## Planering och analys av kollektivtrafiksystem

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

## Establishment

The official course syllabus is valid from the spring semester 2026 as decided by the Director of First and Second Cycle Education: HS-2025-0670. Date of decision: 2025-09-25.

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

The Built Environment

## Specific prerequisites

For admitted students to the Master of Science in Civil Engineering and Urban Management (CSAMH) or the Master of Science in Transport and Geoinformation Technology (TTGTM), there are no additional requirements.

For other students:

- A completed bachelor's degree in civil engineering, urban planning, geomatics, geography, engineering physics, computer science, statistics, economics, and/or mathematics, with at

least 60 university credits (hp) in mathematics, physics, statistics and/or computer science; and

- English language proficiency equivalent to (the Swedish upper secondary school) English course B/6.

## Intended learning outcomes

- Account for the main steps in the public transport planning process
- Discuss the primary stakeholders and factors influencing public transport development
- Account for and compare alternative financial and organizational structures in the public transport sector
- Compare alternative public transport service patterns and network structures
- Calculate and interpret measures of service and network performance
- Apply methods for frequency determination, timetable design and vehicle scheduling

## Course contents

- Demand and supply factors
- Strategic planning
- Network design and analysis
- Public transport sector organization
- Service quality assessment
- Public transport performance, analysis and modeling
- Operations planning
- Service reliability and control
- Demand management and demand-responsive services

## Examination

- PRO2 - Project, 3.5 credits, grading scale: A, B, C, D, E, FX, F
- TEN2 - Written exam, 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.

- PRO1 - Project, 3.5 credits, grade scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 4.0 credits, grade scale: A, B, C, D, E, FX, F

## Other requirements for final grade

Written examination (4,0 cr) and exercises and projects (3,5 cr)

## 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.