



# AH220X Degree Project in Transport- and Location Analysis, Second Cycle 30.0 credits

Examensarbete inom transport- och lokaliseringsanalys, avancerad nivå

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

## Establishment

Course syllabus for AH220X valid from Autumn 2013

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

The Built Environment

## Specific prerequisites

In general the rule is that the main part of the studies, at least 60 credits should be ready before the thesis work is allowed to start. The student should have read at least the basic course AH2301 Transport Policy and Evaluation or equivalent knowledge. The examiner must make sure that the student has focused in the relevant area and that the main part of the program is ready before the thesis work starts. Exceptions can be made by the person responsible for basic education. The master's thesis should normally be written during the last term of the program.

## Language of instruction

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

## Intended learning outcomes

The master's project should develop the student's ability to work independently, to acquire deepened knowledge about a problem in transport and location analysis and to delimit, plan and carry out a longer project. The student should get training in scientific methodology, report writing and oral presentations.

## Course contents

The subject comprises theory and model development for studies of settlement, transport, communication and environmental systems. Computer based decision support systems are designed for use in planning, e.g. traffic forecasting systems and simulation models for person trips or goods transport. Other examples are models of how transport impacts on location of activities or economic development. These tools can be used to evaluate policy measures from efficiency, equity or environmental perspectives. Examples of such measures are congestion tolls, infrastructure investments or policies to reduce traffic noise. The subject also includes studies of other aspects of infrastructure, such as its vulnerability, its importance for regional development and the need for and effects of maintenance.

## Disposition

The master's project is performed either individually or by two students. In the latter case, it should be possible to distinguish between the contributions of each individual. For the individual student, the thesis work should correspond to 20 weeks. The topic can originate from the student, a teacher or an external actor. The student prepares a work plan. When the examiner has approved the work plan, a supervisor is appointed. The project contains literature studies, documentation of theory and method, and analyses of results. The project can also contain model building and model analyses. The work should be summarised in a pedagogical report, which proves that the student has been trained in scientific work and reporting. The report is presented at a seminar with the examiner and an appointed opponent. The examiner decides on necessary revisions. After revising the manuscript the examiner can approve the thesis without further seminar. The student shall normally act as opponent at another master thesis seminar.

## Course literature

Bestäms individuellt av examinator.

## Examination

- XUPP - Examination Question, 30.0 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.

## Other requirements for final grade

Approved master thesis and seminar presentation.

## 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.