# AH202X Degree Project in Railway Operation, Second Cycle 30.0 credits

**Examensarbete inom järnväg och tågtrafik, avancerad nivå**

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

## Establishment

Course syllabus for AH202X valid from Autumn 2014

## 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, including:

- AH2026 Railway Traffic: Markets and Planning 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 aim is to develop the ability to apply scientific methods to analyze problems and issues in the field of railway traffic, to identify, find and compare the various options and evaluate its solution.

The aim is also to ensure that the students will be trained in an engineering work and accounting manner on a scientific basis. This includes planning and conducting the process of problem definition, model construction, analysis and evaluation, which should lead to the final outcome. In addition also to improve understanding of the oral presentation and written report writing.

## Course contents

The thesis work should at least include information retrieval, literary studies, theory and methodology and results analysis. The time will be equal to 20 weeks of full-time studies. Draft degree theses formulated by the student, companies or of the Train traffic group. The proposal describes the background and the intended task at one A4 page. In consultation with the supervisor the student prepares a project plan with the purpose and work to be done. A preliminary project plan will be drawn up and discussed. After the examiner has approved the plan the student will be registered on the course. The aim and content will then be presented at a public Pre-seminar.

The thesis work will result in a report that reflects a scientific approach. The final report will be presented at a so-called Final seminar. At this seminar the participating examiner and opponents as well as company representatives will be present. At the seminar, the examiner will determine what revisions / additions to the student need to be done. The thesis work can later be approved without further seminar treatment.

## Course literature

Litteratursökning och referat ingår i examensarbetet.

## 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.

XUPP – Graduate task, 30,0 hp, grade: A, B, C, D, E, FX, F

## Other requirements for final grade

For the approved work (in the three areas of scientific and technological content, process and presentation) requires an approved project plan and an approved final report, the seminar presentation of the thesis, and participation as opponent at another thesis 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.