AH1022 Traffic and Road Engineering, Basic Course 7.5 credits

Trafik- och vägteknik, grundkurs

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

Establishment

Course syllabus for AH1022 valid from Spring 2011

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Completed and documented upper secondary education including documented proficiency in Swedish B.

Experience within traffic subject is recommended.

Language of instruction

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

Intended learning outcomes

The course provides basic knowledge of the road traffic process and impacts needed for sustainable planning, analysis and design of road traffic facilities. Furthermore the course disseminates methods for road design, construction and maintenance.

Course contents

- Traffic legislation
- Travel habits and driver behaviour
- Basic traffic flow theory
- Traffic studies & data collection
- Impacts of road traffic facilities (level of service, traffic safety, environment)
- Project work: Data collection, analysis and design of a traffic facility
- Use of AutoCAD for traffic facility design

Course literature

- Course folder including traffic and road engineering guidelines and manuals. In Swedish
- Vägar och gators utformning (VGU). Vägverket 2004. In Swedish.
- Effektsamband 2000, Vägverket, delen nybyggnad och förbättring (VV 2001:78). In Swedish
- Manual för CAPCAL. In Swedish
- Manual för TRANSYT. In Swedish
- ATB Väg 2003. In Swedish

Examination

- ÖVN1 - Exercises, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 4.5 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

Written examination (TEN; 4,5 cr) and project work (ÖVN; 3 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.