



FAF3305 Pavement Design and Performance Prediction 3.0 credits

Vägdimensionering och prestandautvärdering

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

Establishment

Course syllabus for FAF3305 valid from Spring 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Master degree or equivalent basic eligibility to PhD studies in engineering

Language of instruction

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

Intended learning outcomes

After the course, the student shall:

- have sufficient knowledge of numerical and experimental tools for pavement structural design and performance prediction, to be able to apply them for pavement structural and material design optimizations.
- have a systematic knowledge of material and loading factors affecting pavements performance in the field.
- have an up-to-date knowledge regarding emerging approaches to pavement design and performance prediction.

Course contents

The course is based on the lectures and laboratory sessions on the following topics:

- State-of-practice structural design of flexible pavements
- Functional properties of pavement materials
- Mechanics-based pavement performance prediction approaches
- Impact of climate change on infrastructure

Examination

- INL1 - Hand in assignment, 3.0 credits, grading scale: P, 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.