



# AF2020 Research Methodology in Infrastructure Engineering 3.0 credits

## Research Methodology in Infrastructure Engineering

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

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for AF2020 valid from Autumn 2010

## Grading scale

P, F

## Education cycle

Second cycle

## Main field of study

## Specific prerequisites

180 credits academic studies in Engineering, Science, Economics or Planning and documented proficiency in English B or equivalent (TOEFL, IELTS e.g).

AK2030- Vetenskapsteori och vetenskaplig metodi (naturvetenskap) or equivalent

## Language of instruction

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

## Intended learning outcomes

The aim of the course is to provide necessary tools for students to conduct research in the area of infrastructure engineering and to present their results. The course deals with research processes including information retrieval, discussion and evaluation of results, how to write reports as well as oral presentation techniques. After finishing the course, the students shall be able to design a research project, choose appropriate research methodology and conduct a literature review. The students should also be able to write a paper in the format which is required by international scientific journals, and know how to submit an article to an international journal on line. Furthermore, students should be able to make oral presentations and critically evaluate research papers.

## Course contents

The course will involve lectures and a project task involving:

- Design of research papers
- Preparation of papers for international scientific journals
- Submission of papers on line
- Reviewing of papers
- Oral presentations

## Examination

- PRO1 - Project, 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.

## Other requirements for final grade

Attendance at lectures and exercises, and passed project task (3 ECTS credits)

## 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.