



FAG3106 Advanced Remote Sensing 7.5 credits

Avancerad fjärranalys

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

Establishment

Course syllabus for FAG3106 valid from Autumn 2018

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

AG1321 Remote Sensing Technology or equivalent

AG2413 Digital Image Processing and Application or equivalent

Language of instruction

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

Intended learning outcomes

This course intends to provide a comprehensive overview of sophisticated techniques for acquiring remotely sensed data, state-of-the-art algorithms for image processing and analysis, and real-world applications of remote sensing in various fields such as urban planning, environmental monitoring and natural resource management.

Course contents

- 1) Earth Observation Big Data
- 2) Image Pre-processing
- 3) Advanced Image Analysis
- 4) Advanced Image Classification
- 5) Digital Change Detection
- 6) Earth Observation Big Data Analytics
- 7) Remote Sensing Applications

Course literature

Introductory Digital Image Processing: A Remote Sensing Perspective (4th Edition)

Multitemporal Remote Sensing: Methods and Applications

Examination

- LAB1 - Laboratory exercises, 3.0 credits, grading scale: P, F
- PRO1 - Project work, 4.5 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.

Other requirements for final grade

LAB1 - Laboratory Work, 3.0 credits, grade scale: P, F

PRO1 - Project, 4.5 credits, grade scale: P, F

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.