



FAG5126 Advanced Theory of Errors 7.5 credits

Felteori högre kurs

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 FAG5126 valid from Spring 2015

Grading scale

G

Education cycle

Third cycle

Specific prerequisites

Theory of errors

Language of instruction

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

Intended learning outcomes

After completing this course, students should be able to apply some advanced error analysis methods, with proper understanding of their potential and limitations.

Course contents

Generalized matrix inverses and free network adjustment. estimation of variance-covariance components. Reliability, local redundancy and gross error detection. Smoothing, filtering and prediction.

Course literature

Sjöberg (1984). Lecture notes on general matrix calculus, adjustment and variance-covariance component estimation. In Nordiska Forskarkurser "Optimization of Geodetic Operations". Fan (1997). Theory of errors and least squares adjustment.

Examination

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

PROJ, projekt work

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.