SI1130 Cartesian Tensors 1.5 credits

Kartesiska tensorer

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

Establishment

Course syllabus for SI1130 valid from Autumn 2007

Grading scale

P, F

Education cycle

First cycle

Main field of study

Physics, Technology

Specific prerequisites

Recommended prerequisites: Basic mathematics courses and vector analysis.

Language of instruction

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

Intended learning outcomes

The goal is that the students should be able to derive complicated expressions containing derivatives and integrals of vectors and scalars with methods from tensor calculus.

Course contents

Cartesian tensors med with some applications to electrodynamics and continuum mechanics.

Course literature

A. Ramgard, Vektoranalys, THS AB, Stockholm, chapter 13.

Examination

- INL1 - Hand in Exercises, 1.5 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

Hand in problems (INL1; 1,5 hp).

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.