HL2011 Magnetic Resonance Imaging 4.5 credits

Magnetresonansavbildning

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 HL2011 valid from Autumn 2007

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

Bachelor's degree in Engineering Physics, Electrical Engineering, Computer Science or equivalent. Basic knowledge of anatomy.

Language of instruction

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

Intended learning outcomes

To provide the students with a thorough understanding of the underlying physics of Magnetic Resonance Imaging.
Topics include nuclear magnetic resonance, image formation, sources of contrast, sources of noise and artefacts, instrumentation and safety aspects.

Course contents

Course literature

To be decided.

Examination

• ANN1 - Assignment, 1.5 credits, grading scale: P, F

• TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, 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

Passed written exam (TEN1; 3 cr.) grading A-F.
Passed lab/home work (ANN1; 1.5 cr.) grading 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.