



# FEK3153 Topics in Electromagnetic Interactions with Microsystems III 3.0 credits

Ämnen i elektromagnetiska interaktioner med mikrosystem III

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

Kursplanen gäller från och med VT 2025 enligt fakultetsnämndsbeslut: J-2024-0270.  
Beslutsdatum: 2024-08-27.

## Grading scale

P, F

## Education cycle

Third cycle

## Specific prerequisites

MSc degree in electrical engineering, technical physics, or equivalent. Furthermore, the student must be enrolled in a PhD student programme with a project in the interdisciplinary field of electromagnetic waves and microsystems. Successful completion of the FEK3152 basic course.

## Language of instruction

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

## Intended learning outcomes

In the course of these meetings, the student will be able:

- To critically analyze the technical content of a scientific publication in the field on an advanced level.
- To critically analyze the quality of paper writing of a scientific publication on an advanced level.
- To present a scientific paper on an advanced level, in his/her field, but not of his/her own work, to a critical audience.
- To write his/her own publications with improved quality, on an advanced level.
- To assess ethics in science questions in connection with scientific publications, both in terms of how to conduct research work in an ethical appropriate way and also how to publish research results under considerations of ethics in science questions.

## Course contents

Monthly meetings, with every event having a presentation phase, a technical discussion phase, and a scientific writing phase. Before each event, a homework must be submitted to the examiner with an analysis of the journals under discussion.

## Examination

- EXA1 - Examination, 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

To get the full credits after a full academic year period, the student must:

- be present at 10 meetings (corresponding to a full academic year)
- have been at least once in the presenter, and at least once in the moderator's role
- have submitted all homework assignments in time

## 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.