

MH2450 International Seminar in Material Processes 6.0 credits

Internationellt seminarium inom materialprocesser

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

Establishment

Grading scale

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

Education cycle

Second cycle

Main field of study

Materials Science, Materials Science and Engineering

Specific prerequisites

A sound knowledge of Materials science and engineering

Language of instruction

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

Intended learning outcomes

After the course the student should be able to:

- Plan and manage a technical project
- Writing a scientific report within a specific area of materials and process design
- Present a scientific report writing and orally in national and international seminars
- Oppose on presentations of the corresponding scientific reports
- Relate to and discuss society's expectations concerning ethics, economy and environment

Course contents

The course consists of a major project aiming to provide a deepened understanding of Materials Science and Process Design together with training in general engineering abilities.

The different projects should deal with problems within Science and Process Design, integrating technical aspects and society's demands as to laws and regulations, ethics, economy and environment.

The course responsible provides suitable projects and a special supervisor is assigned to each project. It is possible to suggest projects, but a KTH supervisor is always assigned.

The work is done individually or in groups of 2-3 participants.

The project should contain the following parts

- · Project planning
- Project meetings, possibly with the supervisor (about 1 h/week)
- A literature survey
- Performing experiments, calculations and similar
- Analysis and conclusions
- Written report
- Oral presentation

Disposition

Period 1

Lectures 10 h Project 60 h

**Period 2

**Lectures 4 h

Project 60 h

Seminar 24 h

Course literature

Litteraturstudie.

Examination

• PROA - Project, 6.0 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.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

The student must:

- Make an oral presentation at the final seminar (in English)
- Orally oppose a project at the final seminar (in English)

And submit:

- A problem formulation report including the results of the literary survey (in English)
- A final report (in English)

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.