MH2550 Micro Modelling 6.0 credits

Mikromodellering

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 MH2550 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

4H1954/MH1012 Transport Phenomena
4H1066/MH1003 Advanced course in Metals and Ceramics

Language of instruction

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

Intended learning outcomes

The course is focused on the reaction kinetics, interfacial phenomena, basic concept of transport phenomena in fluids and the interlinking of these micro-blocks. After the study of this course, the students are expected to have an insight into the micro modelling approach towards process models.

Course contents

The course will start with an introduction of the concept of micromodelling. It will be followed by reaction kinetics and their models, interfacial phenomena and some of the models, mass transfer as well as heat transfers and different modeling approaches. The basic principles of interlinking the micro-models will also be briefly discussed.

Course literature

Distributed materials (Published papers, etc)

Examination

• INL1 - Assignment, 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.

Other requirements for final grade

Project work (INL1; 6 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.