MH2503 Reactor and Process Design 6.0 credits

Reaktor- och processdesign

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

Establishment

Course syllabus for MH2503 valid from Spring 2009

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

4H1066/MH1003 Advanced course in metallics 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 aims at providing the students with: advanced knowledge of different metallurgical production lines, a capacity to analyze metallurgical problems in different metallurgical processes.

Course contents

Treatment of metallurgical processes and systems. Basic analysis of present and future alternate processes. Performance characteristics of metallurgical processes. The following processes will be discussed in detail:

- reduction processes
- converter processes
- stainless steel making
- ladle metallurgy
- tundish metallurgy

Results from mathematical CFD modelling is used to analyse process phenomena.

Course literature

Compendium

Examination

- INL1 - Assignment, 1.5 credits, grading scale: P, F
- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 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

Exam (TEN1; 3 cr)
Home assignments, (ÖVN1; 1,5 cr)
Laboratory work (LAB1; 1,5 cr).

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.