

MH1022 Fabrication Processes of Metals and Bio Fibres 7.0 credits

Framställningsprocesser av metaller och fiberbaserade material

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

Establishment

Course syllabus for MH1022 valid from Autumn 2011

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

MH1010 Thermodynamics of Materials, or similar

MH1024 Fundamentals of Materials, or similar

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 students should be abel to:

- have obtained fundamental knowledge about the fundamental processes of metals and paper and their application in industrial settings.
- have obtained basic knowledge of different terminology basic concepts in materials production.
- be able to describe and explain how an industrial process chain for the material production of metals and paper is structured and why.
- have obtained a clear picture of today's professional role of engineers in the metal and paper processing industries.
- apply both Swedish and English as working language in the subject area.

Course contents

The first part of the course covers the basics of metals through hydro-and pyro-metallurgy and electro-chemical metallurgy.

The second part of the course provides an overview of the entire process from raw materials to paper products. The emphasis here is on the different ways you can free tree and plant fibers, how and why they work and what problems each approach brings.

Course literature

Kompendium i Processmetallurgins grunder och utdelat material.

Examination

- SEM1 Seminar, 1.0 credits, grading scale: P, F
- TEN1 Written examination, 5.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 Laboratory, 1.0 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.

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

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.