

MH2504 INDUSTRIAL METALLURGICAL PROCESSES, 6 hp 2018

Objectives:

The objectives are that the students will learn how to apply their theoretical knowledge to solve industrial engineering problems. This includes that the students will obtain a new knowledge that has not been part of previous courses at KTH. They will also learn how to interact with industrial employees. More specifically, they will carry out two weeks of experimental and modeling work focusing on industrial problems, where they will learn practical aspects of production of metals. They will also visit the industrial companies to get acquainted with the industrial process and the particular problem of interest. In addition, they will make an oral presentation of their results. Furthermore, they will write a short technical report to describe their work, including an overall approach to solve the task, and the results of the study.

Course structure:

October 31, 10.15-12.00, red room

An explanation of the course layout will be given. In addition, the students will know how to select projects. Later, based on this information and material on CANVAS, students will select project and submit to bjorn@kth.se on latest Nov 1. After that groups will be formed and the work will begin.

Each group will receive a contact person both at KTH and a company for their specific project. Thereafter, the students will form a project group. From here the students will take over as project leaders. Thus, the students will set up meetings with the assigned assistance at KTH as well as the company.

November 1 – November 20

Preparations for the experimental/modeling work. This includes literature survey, calculations, planning of experiments at KTH or the company as well as other preparations needed for the project.

November 20

This is the final date for each group to provide the assistant at the company as well as KTH with the following:

- A literature survey
- A plan for experimental and/or modeling activities

November 26 to December 7

Experimental and modeling work at KTH and/or at company. Start working on report.

January 20

Final day for submission of written report.

Course examiner:

Professor Pär Jönsson (K113, 08-790 8375)

Teachers

Pär Jönsson (PJ): parj@kth.se

Björn Glaser (BG): bjoerng@kth.se

Student office, ITM

Brinellvägen 68

100 44 Stockholm

Phone: 08-7908200

e-mail: expnord@itm.kth.se

Examination

- LAB1 – Project report and presentation, 6.0 credits, grade scale: A, B, C, D, E, FX, F