

SYLLABUS

Metal Forming II 9 credits

B0006T

Bearbetningsteknik II

Course syllabus admitted: Autumn 2012 Sp 1 - Spring 2014 Sp 4

DECISION DATE
2012-04-03

Metal Forming II 9 credits B0006T

Bearbetningsteknik II

First cycle, B0006T

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	G U 3 4 5	Maskinteknik	Mechanical Engineering

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language

Selection

The selection is based on 1-165 credits.

Examiner

Lennart Wallström

Course Aim

After completed course the student should be able to:

- Basically understand full- and partly-plastic working methods, particularly forging, wire-drawing and sheet-forming
- Account for selection of lubricants and their influence in the different working methods
- Account for the wear-mechanism at drop-forging
- Basically understand the shaping of tools for drop-forging and sheet-forming for achieving the manufacturing and quality of the final product
- Understand the theoretical and empirical background for calculations of plastic deformation
- Make pressure-, force- and moment-calculations for rolling, forging, wire-drawing and sheet-forming

Contents

Basic theories for free-form- and drop-forging. Tool material and tool design at drop-forging. Manner of operation for the commonly used forging machines.

Basic theory for wire-drawing, the influence of the design of the drawing-disc, the material of the drawing disc and the lubricant. Basic theories at sheet-forming including shearing, slitting, bending and pressing.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures and calculation exercises.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Examination and approved assignment.

Remarks

The number of opportunities for the student to obtain approved result is limited to five. The course is included in the Technician education 120 HEC.

The course corresponds to MP1022

Literature. Valid from Autumn 2012 Sp 1

Formningshandboken, Styckskärande bearbetning och plastisk formning.

2 uppl. SSAB Tunnpå, ISBN 91-971592-7-1.

Tråddragning och smidning. Compendium.

Course offered by

Department of Engineering Sciences and Mathematics

Items/credits

No items/credits available

Syllabus established

by Dept TVM Mats Näsström 2012-04-03