

# MG1010 Introductory Welding Technology, General Course 6.0 credits

Svetsteknologi, allmän kurs

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 MG1010 valid from Autumn 2011

# **Grading scale**

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

## **Education cycle**

First cycle

# Main field of study

Mechanical Engineering, Technology

# Specific prerequisites

Basic eligibility and 120 hp in Mechanical Engineering

## Language of instruction

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

## Intended learning outcomes

Upon completion of the course requirements, students will

- know the fundamentals in materials technology of welding
- know the fundamentals in processing of welding
- know the fundamentals in strength of materials in welded constructions
- have the ability to evaluate breakdown safety in a construction during normal operation
- have the ability to choose material and process to give structural strength.

#### Course contents

A survey of problems in welding technology with a focus on weldability of steel and welding methods.

## Disposition

The classes are concentrated to two full days of studies, in average every second week. In between classes homework assignments and preparation work have to be completed. High degree of attendance to classes is required. The course includes laboratory exercises in welding and cutting methods.

#### Course literature

Kompendierna:

"Svetsningens materialteknologi" av NilsErik Hannerz

"Svetsteknologiskt ABC" av Kjell Eriksson

"Vanliga svetsmetoder" av Klas Weman

#### **Examination**

- LAB1 Laboratory Work, credits, grading scale: P, F
- SEM1 Seminar, credits, grading scale: P, F
- TEN1 Examination, 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

LAB1 Laboratory exercises 0,0 cr SEM1 Seminars 0,0 cr TEN1 Written examination 6,0 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.