MG1010 Introductory Welding Technology, General Course 6.0 credits

Svetsteknologi, allmän kurs

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

Establishment

Course syllabus for MG1010 valid from Spring 2020

Grading scale

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

Education cycle

First cycle

Main field of study

Mechanical Engineering, Technology

Specific prerequisites

General entry requirements and a minimum of 120 credits in technology

Language of instruction

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

Intended learning outcomes

After completing the course with a passing grade the student should be able to:

- describe fundamentals in materials technology of welding
- account for the basic process technology for welding
- outline the fundamentals in processing of welding
- describe fundamentals in strength of materials in welded constructions
- based on material and process technology data assess basic risks for cracking in welded joints
- based on material and process technology data assess the breakdown safety of a design during normal operation
- choose an appropriate combination of material and process to give structural strength

Course contents

A survey of problems in welding technology with a focus on the sections about weldability of different steels and welding methods. Welding lab exercises

Disposition

The course is given full-time 2 days/week. on average every second week during 2 months. The course is partly a distance learning course, which implies that quite a lot homework is required. The course has high attendance requirements. The education is given in Swedish. Lab exercises are given in welding and cutting methods

Course literature

Kompendier:

"Svetsningens materialteknologi" av NilsErik Hannerz
"Svetsteknologiskt ABC" av Kjell Eriksson
"Vanliga svetsmetoder" av Klas Weman

Examination

- SEM1 - Seminar, 0.0 credits, grading scale: P, F
- TEN1 - Examination, 6.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 0.0 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.