MG2014 Advanced Welding Technology, Modulus 2 6.0 credits

Svetsteknologi, högre kurs, modul 2

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 MG2014 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

4G1332 Materials Processing I, 4 credits, 4G1632 Materials Processing II, 4 credits.

Language of instruction

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

Intended learning outcomes

To give

- deeper knowledge of materials technology of welding
- knowledge of quality technique at production by welding
- knowledge of current computer systems and cost for welding operations
- ability to accomplish an optimized choice of material, additive, weld parameters etc. including optimization of quality and costs ability to formulate new standards, rules an procedure specifications for welded constructions
- knowledge of applications of strength of materials on welded constructions, pressure vessels etc.
- ability to perform design calculations on a welded component
- ability to analyse defect tolerance of a casualty critical construction

Course contents

Examination

- LAB1 - Laboratory Work, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercise, 1.5 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.

Other requirements for final grade

Written examination (TEN1; 3 credits), lab work (LAB1; 3 credits).

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.