



# MG1011 Introductory Welding Technology, Advanced Course

## 6.0 credits

Svetsteknologi, fortsättningskurs

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

### Establishment

Course syllabus for MG1011 valid from Autumn 2008

### Grading scale

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

### Education cycle

First cycle

### Main field of study

Mechanical Engineering, Technology

### Specific prerequisites

4G1230 Introductory Welding Technology, Materials technology or equivalent.

### Language of instruction

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

## Intended learning outcomes

To give the students

- knowledge of materials technology applied on welded constructions and structural members
- knowledge of application of strength on welded structural members
- knowledge of how welding energy affects conditions of materials technology
- knowledge of application of fracture mechanics on welded constructions, pressure vessels etc.
- ability to perform design calculations on a welded component
- ability to calculate the limitations for an optimised choice of material
- ability to analyse defect tolerance of a casualty critical construction.

## Course contents

### 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.

### Other requirements for final grade

Written examination (TEN1; 6 credits), seminars (SEM1; 0 credits) and lab work (LAB1; 0 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.