

# Engineering Materials, Welding and Manufacturing Technology

Programme course

6 credits

Material, svetsning och tillverkningssteknik

TMKM18

Valid from: 2017 Spring semester

**Determined by**

Board of Studies for Mechanical  
Engineering and Design

**Date determined**

2017-01-25

**Offered for the last time**

Spring semester 2019

## Main field of study

Mechanical Engineering

## Course level

First cycle

## Advancement level

G2X

## Course offered for

- Design and Product Development
- Mechanical Engineering, M Sc in Engineering
- Mechanical Engineering, Master's programme

## Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

## Prerequisites

Engineering materials and Solid mechanics

## Course content

- Joining techniques (welding, brazing, soldering etc.) and their influence on the structure and properties of the materials
- Material aspects on industrial manufacturing processes, like metal forming, metal cutting, casting.
- Non-Destructive Testing (NDT) techniques
- Heat treatments and surface treatments

## Teaching and working methods

The course consist of lectures, tutorials and laboratory work

## Examination

UPG1	Seminar	1 credits	U, G
LAB1	Laboration course	1 credits	U, G
TEN1	Written examination	4 credits	U, 3, 4, 5

## Grades

Four-grade scale, LiU, U, 3, 4, 5

## Department

Institutionen för ekonomisk och industriell utveckling

## Director of Studies or equivalent

Mikael Segersäll

## Examiner

Johan Moverare

## Course website and other links

## Education components

Preliminary scheduled hours: 52 h

Recommended self-study hours: 108 h

## Course literature

Fastställs senare

## Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at [http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning\\_pa\\_grund-\\_och\\_avancerad\\_niva](http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).