

**SYLLABUS**

# **Manufacturing Processes II**

## **7.5 credits T7019T**

**Tillverkningsmetoder II**

**Course syllabus admitted: Autumn 2023 Sp 1 - Present**

DECISION DATE  
**2021-02-17**

# Manufacturing Processes II 7.5 credits T7019T

## Tillverkningsmetoder II

### Second cycle, T7019T

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Produktionsteknik	Mechanical Engineering

## Entry requirements

## Selection

The selection is based on 30-285 credits

## Course Aim

After completion of the course the student shall be able to:

1. Knowledge and understanding
  - explain different metal cutting, metal forming and welding methods,
  - explain for the different methods based on a theoretical and practical approach including terminology and calculation models,
  - take part of the development and research in the area,
2. Skill and ability
  - apply models and equations for metal cutting applications,
  - apply theories and analyse methods for welding,
  - apply plasticity theories and models for metal forming,
  - plan, interpret, analyse and present results from practical experiments,
  - critical interpret and analyse research paper in the area,
3. Valuation and attitude
  - reflect and value own contributes in laboratory and project work.

## Contents

Metal cutting, welding and sheet metal forming, highlighting the factors that affect each process and its influences on product properties. This includes the underlying theories, process understanding and analytical models and simulation models for process analysis.

## Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures and laboratory work, participation in laboratory exercises is compulsory.

## Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Written examination with individual grades, successful completion of the labs including compulsory assignments.

## Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

## Overlap

The course T7019T is equal to T0017T

## Course offered by

Department of Engineering Sciences and Mathematics

## Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Written exam	G U 3 4 5	6	Mandatory	A10	
0002	Laboratory work	U G#	1.5	Mandatory	A10	

## Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

## Last revised

by Head Faculty Programme Director Niklas Lehto 2021-02-17

## Syllabus established

by Institutionen för Tillämpad fysik, maskin- och materialteknik 2010-06-08