

Manufacturing II, 7,5 HE credits

Tillverkningsteknik II, 7,5 hp

Established: 2022-12-12

Established by: Department of Engineering Science

Applies from: V23

Learning outcomes

After completing the course, the student must show:

- knowledge of current research frontoer in metal cutting, welding, thermal spraying and additive manufacturing
- knowledge of the scientific basis for plasticity, metal cutting, welding, thermal spraying and additive manufacturing
- ability to carry out and orally present a process plan in metal cutting
- ability to perform an analysis of Design for assembly
- ability to holistically analyze manufacturing processes in a larger production system

Entry requirements

General entry requirements and approved result from the following course/courses:

MTK200-Materials Science and Engineering and

TVB100-Manufacturing I or the equivalent.

The forms of assessment of student performance

Oral presentation in group. Laboratory exercises. Individual written exam.

Course contents

The main content of the course is:

- Plasticity in metal forming
- Enhanced knowledge in metal cutting in relation to TVB100
- Enhanced knowledge in welding in relation to TVB100
- Enhanced knowledge in thermal spraying in relation to TVB100
- Enhanced knowledge in additive manufacturing in relation to TVB100
- DFA (Design for Assembly)
- Process planning methodology for metal cutting

Other regulations

Course grading: U/3/4/5

Course language: The teaching is conducted in English.

General rules pertaining to examination at University West are available at www.hv.se.

If the student has a decision/recommendation on special support due to disability, the examiner has the right to examine the student in a customized examination form.

Cycle

First cycle

Progressive specialization

G1F - first cycle, has less than 60 credits in first-cycle course/s as entry requirements

Main field of study

Mechanical Engineering