



MG2127 Production Engineering, project course 9.0 credits

Industriell produktion, projektkurs

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

The official course syllabus is valid from the autumn semester 2023 in accordance with the decision by the Head of the school: M-2022-1494. Date of decision: 14/10/2022

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Additional regulations

Replaces the course MG2027 "Production Engineering, Project Course". from autumn semester 2023. Only one of the courses can be taken.

Specific prerequisites

Completed the courses MG2028 "CAD and other IT tools in industrial processes" or MG2128 "CAD and other IT tools in industrial processes, extended course", and MG2029 "Production engineering - planning and control", MG2043 "Circular Manufacturing Systems", MG2100 "Scientific research methodology in production engineering" and MG2130 "Modelling and simulation of industrial processes", and at least 45 higher education credits of second-cycle courses completed in the Master's programme (two-year) in Production Engineering and Management.

Language of instruction

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

Intended learning outcomes

After passing the course, the student should be able to:

1. use relevant models and practical methods to prepare, compare and suggest sustainable solutions to an production engineering related problem supplied by industry
2. use knowledge and skills from earlier courses in the master programme in Production Engineering and Management, and acquire new knowledge when necessary
3. write a well-structured technical report that clearly describes the assignment, the methodology used for implementing and solving it, and clearly reports the results
4. orally present and justify the project results
5. provide arguments for chosen working methods and presented result and their reliability when it is exposed to criticism
6. give constructive criticism on an equivalent production engineering related project work
7. organise, handle and lead a complex and long-lasting project, in collaboration with project sponsors and group members
8. analyse and document one's own contribution to the implementation and result of the project

Course contents

In the course, you carry out a project to solve an production engineering problem with direct industry connection, together with a group of fellow students. The problem can be of different nature depending on the industrial sponsor's activities, size and current needs

Examination

- INL1 - Individual assignment, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 - Project work, 7.5 credits, grading scale: A, B, C, D, E, FX, 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

Active attendance at compulsory activities

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.