



ML1505 Industrial Systems III

9.0 credits

Industriella system III

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

This official course syllabus is valid from the spring semester 2023 in accordance with decision M-2022-1538 by the Dean of the ITM School:

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Completed course ML150

Language of instruction

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

Intended learning outcomes

After completed course, the students should be able to:

1. analyse a sociotechnical system with respect to human, technology and organisation, for design of sustainable work systems
2. explain the function of a work system from technology and work processes to a national level
3. discuss laws and regulations from perspectives of both an employer and employee
4. apply methods for analysis of risk and safety in a production system
5. explain definitions and concepts relevant for equality and equal terms
6. apply inclusive methods for innovation and problem solving
7. plan a development project, including implementation
8. discuss opportunities and challenges for sustainable work in the future from a historical and technical perspective

Course contents

Lectures and seminars with preparatory work and assignments. Performing a risk analysis and work analysis with external partner. Active exercises for creative thinking and problem solving. Debate on future work and sustainability. Project work on sustainable work in production system development.

Examination

- INL1 - Assignments 1, 1.0 credits, grading scale: P, F
- INL2 - Assignments 2, 1.0 credits, grading scale: P, F
- PRO1 - Project, 2.5 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Written examination, 2.5 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercises 1, 1.0 credits, grading scale: P, F
- ÖVN2 - Exercises 2, 1.0 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.

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.