



ML1505 Industrial Systems III

9.0 credits

Industriella system III

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for ML1505 valid from Autumn 2017

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

ML1500 Introduction to industrial technology ML1501 Industrial systems I ML1503 Industrial systems II

or the equivalent knowledge

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 students should be able to:

- account for the fundamentals of socio-technical principles of systems engineering and work content for sustainable working environments
- account for main working environments
- discuss laws and regulations both from an employee and an employer perspective (AFS, OSAHS, MBL)
- apply basic methods and tools for workplace, work task and risk analysis
- discuss human sciences that are relevant for human-technology interaction, as well as for change management and decision making
- simulate and lead improvement work in group exercises

Course contents

- Lectures: Work organisation, psychosocial working environment, physical working environment, safety and risk, automation and human-technology interaction
- Guest lectures and overview of case from industry
- Exercise including observation, analysis and problem-solving in the Safety-Health-Ergonomics field
- Project with contents of industrial change management and improvement work
- Exercises and written assignments: Work task analysis, risk analysis, improvement group simulations

Disposition

Lectures Project Exercises Written assignments

Course literature

Kurslitteratur meddelas senast 6 veckor före kursstart

Examination

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

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

Passed written examination (TEN1)

Passed project assignment (PRO1)

Passed exercises (Å-VN1)

Passed written assignments (INL1)

Passed exercises (Å-VN2)

Passed written assignments (INL2)

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.