

# ML1505 Industrial Systems III 9.0 credits

### Industriella system III

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

#### **Establishment**

# **Grading scale**

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

# **Education cycle**

First cycle

## Main field of study

**Technology** 

## Specific prerequisites

Completed course ML1500 and ML5103 or the equivalent.

# 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 form 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
- 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.

## 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 the entire assignment and solution.	t shall be able to present and answer questions about