



ML1503 Industrial Systems II

6.0 credits

Industriella system II

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

Course syllabus for ML1503 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 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 basic terminology and concepts in production method and production system
- Account for common manufacturing methodologies and production processes in different industries
- Account for the importance of integrated product development in the product realisation process
- Explain the basic principles of digital factories, IT systems and control systems and discuss different sustainability aspects of automation
- Discuss and evaluate different production concepts, given different cases of products and business models

Course contents

- Production technology, production systems, manufacturing methodologies, production processes, automation (sustainable work and sustainable production)
- Guest lectures on digital factories and automation
- Exercises in factory layout, production flow and data management (IT-systems in industry)
- Project for development of production concepts, including observation, analysis and problem-solving

Disposition

Lectures

Course literature

Anges minst 6 veckor före kursstart

Examination

- PRO1 - Project, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Exam, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercises, 2.0 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.

Other requirements for final grade

Passed written examination

Passed project assignment

Passed exercises

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.