ML1504 Logistics in Production 6.0 credits

Produktionslogistik

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

Establishment

The official course syllabus is valid from spring semester 2027 as decided by the Director of First and Second Cycle Education. Decision date: 2026-10-22

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Completede course ML1500 and ML1501

Intended learning outcomes

Upon successful completion of the course, the student should be able to:

1 – Explain various logistics functions and place them in their respective contexts.

2 – Be familiar with and describe reference models that can be used to describe logistics processes in a standardised manner
3 - Explain how the degree of customer order-driven production and the product's structure affect material supply planning
4 - Explain how material and information management systems are structured and how they contribute to improved production logistics performance in manufacturing companies.
5 - Apply methods and calculation techniques for managing production, stock and order logistics
6 - Apply established methods to analyse material and information flows and identify opportunities to improve production logistics performance in manufacturing companies.

Course contents

- Introduction
- Basic logistics functions and their importance for efficiency, cost and quality.
- Material supply
- Forecasts
- Inventory management
- Production planning
- IT in logistics
- Planning of production logistics processes

Examination

- ÖVN1 - Exercises, 1.5 credits, grading scale: P, F
- TEN1 - Written examination, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- INLA - Assignments, 3.0 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.

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

Transitional regulations

Module INL1 and PRO1 is replaced by INLA.

Module INL1 or module PRO1 will hereafter be examined as previous in consultaion with examinar.

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.