

ML2111 Distribution System 7.5 credits

Distributionssystem

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 ML2111 valid from Autumn 2016

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

Higher education equivalent to at least 120 credits and documented proficiency in Swedish B and English A 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 this course, the student should be able to:

- Identify important aspects and using center of gravity calculation as a support for localization decisions.
- Evaluate the economic and environmental effects as well as risks associated with different distribution solutions regarding packaging, cargo carrier, transportation mode and trace-ability under different circumstances.
- Motivate the need for environmental actions within the transport sector, identify possible actions and compare the effect of these.
- Describe warehouse, terminal and transport processes and technical appliances.
- Use a database to search for literature within the area of technics.
- Present a project orally and in writing with requirements on structure, reference management and language.

Course contents

- Infrastructure
- Localization
- Traceability
- Transportation modes
- Multimodal transport solutions
- Route planning
- Sustainable logistic systems
- Warehouse operation
- Terminal operation
- Information search

Disposition

lectures project In the course can also be included: guest lecture, seminar, study visit and laboratory exercise

Course literature

Lumsden, K. (2012) Logistikens grunder. Studentlitteratur.

Examination

- INL1 Assignment, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 Project, 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.

Other requirements for final grade

Grade is weighted according to the weight of the examination parts.

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.