



COURSE SYLLABUS

Distribution and Transport System, 7.5 credits

Distributions- och transportsystem, 7,5 högskolepoäng

Course Code: TDTK12	Education Cycle: First-cycle level
Confirmed by: Dean Mar 1, 2021	Disciplinary domain: Technology
Revised by: Director of Education Jan 9, 2024	Subject group: IE1
Valid From: Aug 1, 2024	Specialised in: G1F
Version: 3	Main field of study: Industrial Engineering and Management

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding

- display knowledge and understanding of distribution and transport systems and their role in industrial operations, including knowledge of the basic concepts, methods and models and sense of current research issues
- display knowledge and understanding of roles and functions required in distribution systems and how these relate to the physical operations
- display knowledge and understanding of the design, planning and management of distribution and transportation systems

Skills and abilities

- demonstrate the ability to analyse and improve material flows by applying different methods for transport selection
- demonstrate the ability to search, collect, value and critically interpret information in relevant distribution and transport systems
- demonstrate the ability to plan, analyse and report on distribution and transportation system issues

Judgement and approach

- demonstrate the ability to propose and compare options for the design, planning and control of material flows with a focus on distribution and transportation systems, and assess their implications and risks
- demonstrate the ability to assess the relevant sustainability aspects of distribution and transport systems especially in terms of tensions inherent in the triple bottom line
- demonstrate the ability to apply the acquired knowledge in an industry context and show insight into their future profession.

Contents

This course gives a comprehensive understanding of basic concepts of transportation and distribution both on their own terms and how they relate to each other. The ideas of functions and roles is used to connect the industrial challenges to the physical activities.

The course includes the following elements:

- Modes of transport
- Intermodal systems and issues
- Roles and functions in distribution systems
- Physical distribution and distribution structures
- Distribution and the connection to marketing channels

Type of instruction

The course consists of a combination of lectures, group work and seminar sessions. Students are expected to prepare for lectures by reading and preparing basic course material.

Coursework including cases will follow the main topics in the course. A significant part of the coursework will be group-based and include in-class presentation and discussion.

Participation in these elements is mandatory.

The teaching is conducted in English.

Prerequisites

General entry requirements and a passing grade in the courses Enterprise Logistics, 15 credits and Purchasing 7,5 credits (or the equivalent)

Examination and grades

The course is graded 5,4,3 or Fail.

The final grade for the course is based on a balanced set of assessments. The final grade will only be issued after satisfactory completion of all assessments.

Registration of examination:

Name of the Test	Value	Grading
Examination ¹	4.5 credits	5/4/3/U
Project	3 credits	U/G

¹ Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

The literature list for the course will be provided two months before the course starts.

The course literature will consist of the course book and supplementary journal articles on selected topics.