

Logistics in Supply Chains

Programme course

6 credits

Logistik i försörjningskedjor

TNK114

Valid from: 2017 Spring semester

Determined by
Board of Studies for Industrial
Engineering and Logistics

Date determined
2017-01-25

Main field of study

Industrial Engineering and Management, Logistics, Transportation Systems Engineering

Course level

Second cycle

Advancement level

A1X

Course offered for

- Intelligent Transport Systems and Logistics, Master's programme
- Communication and Transportation Engineering, M Sc in Engineering

Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Intended learning outcomes

The purpose of the course is to provide theoretical knowledge about logistics in supply chains. The course covers inter organizational as well as intra organizational issues. Inter organizational issues provides insights regarding how the different actors within the supply chain apply/are affected by different logistics strategies. Intra organizational issues provides insights regarding how the different functions within a company apply/are affected by different logistics strategies. The course should provide understanding of different general logistics strategies and their inter- and intra-organizational impacts.

After passing the course should the student be able to:

1. Master theoretical concepts such as supply chain management, flexibility, coordination, integration, outsourcing, vendor managed inventories, postponement, purchasing strategies, production strategies and their relation to logistics and the focal company's logistics strategies.
2. Understand how the theoretical concepts are related and their mutual interdependencies
3. Understand drivers, barriers and prerequisites for different logistics strategies in supply chains.
4. Apply the theoretical concepts and understand their implications and based on this be able to understand, explain, evaluate and question different logistics strategies within companies as well as supply chains.
5. Read and understand academic journal papers within logistics strategies in supply chains.
6. In a structured way evaluate academic journal papers and to be able to explain under what circumstances they are valid

Course content

The course deals with inter-organizational questions in relation to logistics between companies in a supply chain, e.g. the flow of material from the manufacturer, through the wholesaler to the industrial customer. Also intra-organizational questions are an important part of the course content, e.g. materials supply issues and distribution issues and their relation to purchasing, production and marketing. The parts of the logistics structures discussed are e.g. physical structures, roles, physical and information flows. The course deals with barriers and prerequisites for different logistics strategies in supply chains.

Teaching and working methods

At lectures are the theoretical concepts introduced. These are then discussed at seminars as support for the hand-ins.

Examination

KTR2	Written examination	0 credits	U, 3, 4, 5
UPG2	Assignments	6 credits	U, G

The final grade will be based on a summary of the grades of the different course parts.

Grades

Four-grade scale, LiU, U, 3, 4, 5

Department

Institutionen för teknik och naturvetenskap

Director of Studies or equivalent

Erik Bergfeldt

Examiner

Anna Fredriksson

Education components

Preliminary scheduled hours: 48 h

Recommended self-study hours: 112 h

Course literature

Utvalda vetenskapliga artiklar enligt anvisningar på kurshemsida.
Föreläsningsmaterial, praktikfallsbeskrivningar, handledningar, utdrag ur böcker, mm, som presenteras i samband med motsvarande kurstillfällen.

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.