Production and Distribution

Programme course

6 credits

Produktion och distribution

TNSL08

Valid from: 2017 Spring semester

Determined by
Board of Studies for Industrial Engineering and Logistics

Date determined
2017-01-25

Offered for the last time
Autumn semester 2021

Replaced by
TNK122

Main field of study
Logistics

Course level
First cycle

Advancement level
G2X

Course offered for
- Air Transportation and Logistics
- Civic Logistics

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.

Prerequisites
Mathematics corresponding to mathematics for SL, basic knowledge in economics, basic knowledge in statistics and probability theoury

Intended learning outcomes
After completed course, the student shall
- have some knowledge about relevant issues in industrial production
- understand the principles behind Hierarchical Planning and the principles for product structures
- be able to use the most common ways of making demand prognoses be able to use the most common ways of inventory control
- be able to explain the roles of different parties in a distribution system

Course content

- Basic production economics: important concepts and classifications of companies and supply chains
- Prognosis: evaluationg future product demant on short and long terms
- Material and production control, planning on long and short terms, from sales and operations planning, through master planning, to detailed planning and follwo-up
- Inventory control, different principles for inventory control and calcualtions of safety stock
- Vendor managed inventory

Teaching and working methods

The course is delivered using lectures, lessons, and laboratory work. Lectures are used for the major part of theory, lessons are for solving numerical examples for problems relating to the course content. Laboratory work may be used for computer based calcuations.

Examination

UPG2	Case study	2 credits	U, G
UPG1	Hand-in assignments	1 credits	U, 3, 4, 5
TEN1	Written examination	3 credits	U, 3, 4, 5

Grades

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

Other information

Supplementary courses:
Quantitative logistics

Department

Institutionen för teknik och naturvetenskap

Director of Studies or equivalent

Erik Bergfeldt

Examiner

Fredrik Persson

Education components

Preliminary scheduled hours: 42 h
Recommended self-study hours: 118 h

Course literature

Mattsson, Stig-Arne, och Jonsson, Patrik, Logistik : läran om effektiva materialflöden, Andra upplagan, Studentlitteratur, 2011, ISBN: 978-91-44-06918-0

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://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.