

Transport Economics

Programme course

6 credits

Transportekonomi

TNK113

Valid from: 2017 Spring semester

Determined by
Board of Studies for Industrial
Engineering and Logistics

Date determined
2017-01-25

Main field of study

Logistics, Transportation Systems Engineering

Course level

First cycle

Advancement level

G2X

Course offered for

- Communications, Transport and Infrastructure, 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.

Prerequisites

Industrial Economics, Transportation Systems

Intended learning outcomes

The overall aim of the course is to provide knowledge of how transport costs and other economic factors affect the transport system and how the transport system affects the rest of society.

After the course the student should be able to:

- Account for the fundamentals of microeconomics, including the market structures competitive market and monopoly, as well as the basics of welfare theory.
- Account for the role of transport costs in the design of optimal transport systems
- Account for the principles of optimal pricing and its application to different modes of transport.
- Account for the principles of welfare maximizing investment appraisal and be able to apply them in practical cost-benefit analysis of changes in the transport system.
- Account for the effects of the design of the transport system on the location of economic activities.

Course content

The course will discuss some of the main areas of interest in the field of transport economics including:

- Fundamentals of microeconomics and welfare theory.
- The analysis of transport costs.
- Optimal transport pricing.
- Investment appraisal and project evaluation.
- Transport planning and regulation.
- Transport and economic development.

Teaching and working methods

Lectures and group discussions.

Examination

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

Grades

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

Department

Institutionen för teknik och naturvetenskap

Director of Studies or equivalent

Erik Bergfeldt

Examiner

Pernilla Ivehammar

Education components

Preliminary scheduled hours: 46 h

Recommended self-study hours: 114 h

Course literature

Additional literature

Books

Prentice, Barry E., Prokop, Darren, (2016) *Concepts of transportation economics*
ISBN: 9789814656160, 981465616X
Singapore ; Hackensack, NJ : World Scientific Publishing Co. Pte. Ltd., [2016]

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.