

# Logistics of Airline Companies

Programme course

6 credits

Flygbolagets logistik

TNFL07

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

## Course level

First cycle

## Advancement level

G2X

## Course offered for

- Air Transportation and Logistics

## Specific information

The course is not available for exchange students

## 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

Basic knowledge in air traffic, economy, logistics and optimization

## Intended learning outcomes

After the course, the participants should be able to:

- account for the factors that affect the passengers choice of travel
- model demand for airline services
- construct models to optimize the resource management for airlines
- account for methods to utilize the aircraft capacity
- calculate the number of seats to reserve for full fare passengers
- calculate the overbooking point
- give examples on how information sharing may lead to increased efficiency
- account for the consequences of perturbations for an airline, and the actions used to minimize these consequences

## Course content

- demand modelling and forecasting
- resource management
- revenue management
- perturbation management

## Teaching and working methods

The course consists of lectures and seminars. The lectures give the theoretical background. During the seminars, assignments and case studies are discussed.

## Examination

UPG1	Hand-in assignment	3 credits	U, G
TEN1	Written examination	3 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

Valentin Polishchuk

## Education components

Preliminary scheduled hours: 34 h

Recommended self-study hours: 126 h

## Course literature

### Additional literature

#### Books

Abdelghany, Ahmed F., Abdelghany, Khaled, (2009) *Modeling applications in the airline industry. [Elektronisk resurs]*

ISBN: 0754678741, 9780754678748, 0754697258, 9780754697251,  
9780754678748

Farnham : Ashgate, 2009

## 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](http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).