

Air Traffic Management

Programme course

6 credits

Management av flygtrafik

TNFL10

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 and air transport. Optimization.

Intended learning outcomes

After the course, the participants should be able to:

- identify major stakeholders in the air transportation business and their roles in the industry
- describe core new ideas within the ATM field
- give examples of key ATM research directions
- apply the instruments for achieving goals of future air traffic industry operation
- account for tradeoffs between different objectives in ATM development
- explain purposes of on-going and future air transport initiatives

Course content

- Challenges in today's air traffic systems
- Single European Sky ATM Research Joint Undertaking
- Automation, complexity, safety and capacity
- Aircraft trajectory planning
- Information sharing
- Design of economic incentives

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 assignments 6 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: 40 h

Recommended self-study hours: 120 h

Course literature

European ATM Master Plan <http://www.atmmasterplan.eu/> , SESAR workpackages <http://www.sesarju.eu/programme/workpackages>

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.