

Analysis of Communication and Transport Systems

Programme course

6 credits

Analys av kommunikations- och transportsystem

TNK103

Valid from: 2017 Spring semester

Determined by

Board of Studies for Industrial
Engineering and Logistics

Date determined

2017-01-25

Main field of study

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.

Prerequisites

Planning and simulation of traffic systems or Logistics networks and transports or Data communication and the Internet

Intended learning outcomes

The purpose of the course is to gain insights into traffic, logistics and telecommunication systems by the means of project work. The project cover problem definition, choice of methodology and analysis. The aim is that the student, after finalizing the course, be able to:

- Formulate a problem specification based on a problem description
- Find and digest literature relevant for the project
- Analyse problems in the area of telecommunication and transportation from a quantitative perspective
- Use problem specific methods for the analysis of a defined problem
- Plan a project, write documentations and perform project evaluations
- Perform and evaluate a traffic, logistics of telecommunication project
- Present results in writing and in an oral presentation

Course content

Project: formulation of project plan, specification and literature studies
Other course specific content is depending on the different project descriptions, which are provided at the start of the course

Teaching and working methods

The course is project-based. The course has the same administration for the three topic areas. The course has a common introductory lecture and common project presentations. All other parts is handled by group individual supervision.

Examination

PRA1 Project 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

Clas Rydergren

Education components

Preliminary scheduled hours: 16 h

Recommended self-study hours: 144 h

Course literature

Egen litteratursökning samt hänvisningar till viss litteratur beroende på projekt.

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.