Traffic Safety Management

Programme course

6 credits

Traffic Safety Management

TNK091

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
Admission requirements for master programme/master level.

Intended learning outcomes
Road traffic accidents are a worldwide public health and economic problem. The aim of the course is to provide students with the basic theoretical and practical knowledge about traffic safety theories, causes, problems and countermeasures. After completion of the course the student will be able to

- Understand the size, quality and the trend of the road safety problem in different societies.
- Identify the main accident factors, exposure and accident risks.
- Determine which factors influence the number and severity of accidents.
- Study and evaluate different applications e.g. Intelligent Transportation Systems (ITS) that enhance road safety.
- Set up a national traffic safety activity plan over 5-15 years period of time.

Course content

The course is divided into two parts of which the first covers factors of importance to road safety as well as their effects on traffic safety:

- Traffic safety and society development in a global perspective
- Speed and safety
- Alcohol and driving
- Motorcyclists safety
- Pedestrians and cyclists safety
- Data collection and analysis
- Driver education and licensing
- Traffic police management
- Road safety campaigns
- Traffic engineering
- Vehicle safety
- ITS applications in road safety

The second part will be an analysis of the traffic safety situation on a regional or national level covering:

- Setting up of activity plans for safety and analysis of its effects
- Set up of a National Traffic Safety Program

Teaching and working methods

The course includes lectures and group works. Each group of students should prepare seminar presentation by the end of each part of the course and be opponents on each other's papers.

Examination

UPG3	Written project work and oral presentation	3 credits	U, 3, 4, 5
UPG2	Assignment	1 credits	U, 3, 4, 5
UPG1	Written project work and oral presentation	2 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

Ghazwan Al-Haji

Education components

Preliminary scheduled hours: 57 h
Recommended self-study hours: 103 h

Course literature

Additional literature

Books

Evans, Leonard, (2004) *Traffic safety*
ISBN: 0975487108
Bloomfield Hills, Mich. : Science Serving Society, c2004.
Evans, Leonard, (1991) *Traffic safety and the driver*
ISBN: 0442001630
New York : Van Nostrand Reinhold, c1991.

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.