

Planning for Rescue Systems

Programme course

6 credits

Planering av räddningssystem

TNSL13

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

- Civic Logistics
- Air Transportation and Logistics

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

Basics in economics, logistics, optimization and geographical information systems

Intended learning outcomes

The students will get a good overview over today's systems for rescue and response. This includes organization of the systems, how they can be analyzed, planned and controlled. After the course, the students should:

- Be able to account for and critically discuss the organization and function of today's response and rescue systems.
- Understand and be able to use appropriate methods for analyzing rescue systems and for planning and control of the system resources.
- Be able to describe technical tools that are functional within the systems and be able to handle a selection of these tools
- Be able to design and organize new systems for response and rescue, taking into account different factors from the society

Course content

Presentation of rescue and response systems, including fire and rescue services, emergency medical services, police, alarm centers as well as the organization and control of these.

Analysis of rescue and response systems, for example as to regard to cooperation opportunities and difficulties, command and control structures, organization, planning and practical realization of the services.

Presentation, analysis and use of, for the subject, appropriate planning, control and analysis methods such as for example forecasting, resource planning, localization models and methods.

Presentation and use of technical tools that can be used in the systems, for example GIS-tools and planning systems.

Teaching and working methods

The course will consist of lectures and seminars. The lectures will discuss the main part of the theoretical content, while the seminars will be dedicated to case works and assignments. The laboratory work will mainly consist of computer assisted exercises and assignments. Relevant field trips will be taken as a part of the course. .

Examination

UPG2	Case and assignments	6 credits	U, 3, 4, 5
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Grades

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

Department

Institutionen för teknik och naturvetenskap

Director of Studies or equivalent

Erik Bergfeldt

Examiner

Tobias Andersson Granberg

Education components

Preliminary scheduled hours: 46 h

Recommended self-study hours: 114 h

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.