IT

Programme course

6 credits

IT - gk

TNSL04

Valid from: 2017 Spring semester

Determined by
Board of Studies for Industrial
Engineering and Logistics

Date determined
2017-01-25

Offered for the last time
Spring semester 2019

Replaced by
TNSL24

Main field of study

Computer Science and Engineering

Course level

First cycle

Advancement level

G1X

Course offered for

- Air Transportation and Logistics, Bachelor's Programme
- Civic Logistics, Bachelor´s Programme

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.

Intended learning outcomes

The course provides basic knowledge on how to construct programs in a high-level language, on how to create and use spreadsheets (Excel), an introduction to database technology with particular emphasis on the query language SQL, and on several secirity aspects of web applications.
After the course the student should be able to:

- develop algorithms for solving a problem
- use control structures for selection and iteration in programs
- create spreadsheets and display relevant data in graphical format
- explain various concepts of database technology
- explain various concepts of database technology
- create a database and construct queries in SQL in order to retrieve data
- understand issues and problems related to security in web applications

Course content

Essential of programming, spreadsheets, database technology and web security.

Teaching and working methods

The course consists of lectures and lab assignments.
The course runs over the entire spring semester.

Examination

UPG1	Individual, continous examination in front of a computer	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

Camilla Forsell

Examiner

Pierangelo Dell'Acqua

Education components

Preliminary scheduled hours: 30 h
Recommended self-study hours: 130 h

Course literature

Onlinematerial

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.