Introduction to Language Technology

Programme course

4 credits

Introduktion till språkteknologi

TDDE17

Valid from:

Determined by

Board of Studies for Computer Science
and Media Technology

Date determined

2017-01-25

Main field of study

Information Technology

Course level

First cycle

Advancement level

G2X

Course offered for

- Information Technology, M Sc in Engineering

Prerequisites

Discrete mathematics. Basic programming.

Intended learning outcomes

Language technology is technology for the analysis and interpretation of natural language, a key component of smart search engines, personal digital assistants, and many other innovative applications. The goal of this course is to give an introduction to language technology as an application area, as well as to its basic methods. The course focuses on methods that process text. On completion of the course, the student should be able to:

1. explain basic methods for the analysis and interpretation of words, sentences, and texts
2. practically apply language technology methods and systems to texts and text collections
3. evaluate language technology components and systems using standard validation methods

Course content

Basic methods and techniques for the analysis and interpretation of words, sentences, and texts, such as text segmentation, part-of-speech tagging, syntactic analysis, semantic analysis, and text classification. Language technology systems, such as information extraction systems and question answering systems. Validation methods. Language technology tools, software libraries, and data.

Teaching and working methods

The course is given in the form of lectures, lab sessions, and study group sessions.

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Examination

LAB1	Laborations	2 credits	U, 3, 4, 5
KTR1	Written examination	1 credits	U, G
BAS1	Study group sessions	1 credits	U, G

Grades

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

Department

Institutionen för datavetenskap

Director of Studies or equivalent

Jalal Maleki

Examiner

Marco Kuhlmann

Education components

Preliminary scheduled hours: 32 h
Recommended self-study hours: 75 h

Course literature

Kurskompendium som tillhandahålls av institutionen./Lecture notes provided by
the department offering the course.

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.