Project: Computer Language

Programme course

10 credits

Projekt: Datorspråk

TDP019

Valid from: 2017 Spring semester

Determined by
Board of Studies for Computer Science
and Media Technology

Date determined
2017-01-25

Main field of study
Programming

Course level
First cycle

Advancement level
G1F

Course offered for
- Programming, Bachelor's Programme

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
Object oriented programming, including project course.

Intended learning outcomes
After the course the student should be able to:
- construct a small computer language
- discuss and motivate design choices in the student's own computer language, based on theory and own experiences
- implement tools (interpreters, compilers, etc) for the student's own computer language
- write technical documentation for a computer language

Course content
Craft: Knowledge and experience of developing an own computer language in a community. Knowledge and experience of constructing an advanced syntactic formalism for a computer language using parsing. Implemententing the semantics of a language in the form of an interpreter or a translator to another language.

Techniques: Ruby.

Teaching and working methods

The course is centered around an individual IP project, conducted in a community. A large part of the theory comes from the course TDP007 Computer Language Construction, given in parallel during the first study period. Before the end of the semester, the projects and the technical documentation will be presented in front of the whole class. Oral presentations and written documentation will be examined by teachers from CMTS.

Examination

UPG1	Assignments in communication	2 credits	U, G
PRA2	Project assignment	8 credits	U, 3, 4, 5

Grades

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

Department

Institutionen för datavetenskap

Director of Studies or equivalent

Peter Dalenius

Examiner

Jonas Wallgren

Education components

Preliminary scheduled hours: 48 h
Recommended self-study hours: 219 h

Course literature

Beroende på valt 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://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.