COURSE DETAIL

LANGUAGES AND COMPILERS
Country Netherlands
Host Institution Utrecht University
Program(s) Utrecht University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 103
UCEAP Course Suffix
UCEAP Official Title LANGUAGES AND COMPILERS
UCEAP Transcript Title LANGUAGES&COMPILERS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
Many programs use a list of symbols as input. These lists almost always have a structure. Examples are programs in some programming language, packets containing information sent over the internet, or information a program puts into a file to be read in another program. These structures are described by grammars. These grammars can automatically generate programs that recognize the structure. This recognition process is an important component of many programs (like compilers), and the description of the compilation process also uses these grammatical formalisms. By using special classes of grammars you may or may not express more structure or guarantee beforehand that the structure is easily recognized (e.g. in linear time). Students learn how to design grammars, how to construct parsers, and how to further use the results of these parsers (e.g. generate code for a part of the programming language C#). Grammars play a central role in computer science (XML Schemas, database schemas, Game Maker Language, etc.). Prerequisite knowledge: students must have basic knowledge of functional programming, programming in Haskell.

Language(s) of Instruction
English

Host Institution Course Number
INFOB3TC

Host Institution Course Title
LANGUAGES AND COMPILERS

Host Institution Course Details

Host Institution Campus
Science

Host Institution Faculty

Host Institution Degree

Host Institution Department
Information and Computing Sciences

Course Last Reviewed

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