COURSE DETAIL

COMPILER DESIGN
Country Korea, South
Host Institution Yonsei University
Program(s) Yonsei University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 112
UCEAP Course Suffix
UCEAP Official Title COMPILER DESIGN
UCEAP Transcript Title COMPILER DESIGN
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

A compiler is a computer program that translates text written in a given language (called the source language) into another language (the target language). With most compilers the source language is a high-level programming language (e.g., C, C++, Java), and the target language is a lower-level representation such as assembly language or byte code. This course focus is on compiler techniques needed to implement programming languages on a virtual machine. The aims are to improve programming skills by learning how a compiler works; to apply the theoretical foundations of compilation techniques; to design and implement a compiler for a small programming language; to learn about virtual machines (the JVM in particular); and to practice software engineering design principles on a medium-sized project. This course covers both practical and theoretical aspects of a compiler. Our main emphasis is on the compiler frontend (i.e., scanning, parsing, semantic analysis) and on code-generation for the JVM.

Language(s) of Instruction
English

Host Institution Course Number
CSI4104

Host Institution Course Title
COMPILER DESIGN

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Computer Science

Course Last Reviewed

2021-2022

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