

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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