

COURSE DETAIL

ALGORITHMIC THINKING

Country

Korea, South

Host Institution

Yonsei University

Program(s)

Yonsei University

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

60

UCEAP Course Suffix**UCEAP Official Title**

ALGORITHMIC THINKING

UCEAP Transcript Title

ALGORITHMIC THINKNG

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

Computational Thinking is a process of solving problems typically with four steps—decomposition, pattern recognition, abstraction, and algorithmic thinking. This course concentrates on algorithmic thinking and examines how to reformulate problems with step-by-step procedures to solve the problems. Students then practice the implementation of the procedures with Python programming language in their homework assignments. This course also covers various paradigms in designing the procedures such as divide-and-conquer, greedy methods, dynamic programming, backtracking, branch-and-bound, etc., along with fundamental data structures such as linked-lists, stacks, queues, recursion, graphs, trees, binary heaps, and hashing.

Language(s) of Instruction

Korean

Host Institution Course Number

YCS1103

Host Institution Course Title

ALGORITHMIC THINKING

Host Institution Course Details

http://ysweb.yonsei.ac.kr:8888/curri120601/curri_pop2.jsp?hakno=YCS1103&bb=01&s...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2020-2021

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