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 Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

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