

COURSE DETAIL

ALGORITHMS

Country

Korea, South

Host Institution

Seoul National University

Program(s)

Seoul National University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

122

UCEAP Course Suffix**UCEAP Official Title**

ALGORITHMS

UCEAP Transcript Title

ALGORITHMS

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course covers algorithm design techniques and algorithm analysis techniques. It deals with inductive and recursive thinking through which problems can be tackled and solved.

In the class, students learn organized and effective thinking methods for problem solving. Topics include analysis tools (asymptotic complexity, recurrence), sorting and selection, retrieval and insertion of data (search tree, hash table), dealing with sets, dynamic programming, graph algorithms, text pattern matching, limit of computation (NP-Completeness), problem space, etc.

Prerequisite: Data Structure. Students should also be familiar with the basics of discrete mathematics and probability.

Language(s) of Instruction

English

Host Institution Course Number

4190.407

Host Institution Course Title

ALGORITHMS

Host Institution Course Details

<https://sugang.snu.ac.kr/>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2025-2026

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