

COURSE DETAIL

ALGORITHMS

Country

Singapore

Host Institution

Singapore University of Technology and Design

Program(s)

Singapore University of Technology and Design

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

65

UCEAP Course Suffix**UCEAP Official Title**

ALGORITHMS

UCEAP Transcript Title

ALGORITHMS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course introduces algorithms and algorithmic thinking. Students examine common algorithms, algorithmic paradigms, and data structures that can be used to solve computational problems. Emphasis is placed on understanding why algorithms work, and how to analyze the complexity of algorithms. Students learn the underlying thought process on how to design their own algorithms, including how to use suitable data structures and techniques such as dynamic programming to design algorithms that are efficient. The course includes a prerequisite.

Language(s) of Instruction

English

Host Institution Course Number

50.004

Host Institution Course Title

ALGORITHMS

Host Institution Course Details

<https://www.sutd.edu.sg/course/50-004-algorithms>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Information Systems and Technology Design

Course Last Reviewed

2025-2026

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