COURSE DETAIL

COMPUTATION STRUCTURES

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
56

UCEAP Course Suffix

UCEAP Official Title
COMPUTATION STRUCTURES

UCEAP Transcript Title
COMPUTATION STRCTRS

UCEAP Quarter Units
6.00

UCEAP Semester Units
4.00

Course Description

This course introduces architecture of digital systems, emphasizing structural principles common to a wide range of technologies. Topics include Multilevel implementation strategies; definition of new primitives (e.g., gates, instructions, procedures, and processes) and their mechanization using lower-level elements. The course includes analysis of potential concurrency; precedence constraints and performance measures; pipelined and multidimensional systems; instruction set design issues; architectural support for contemporary software structures.

Language(s) of Instruction
English

Host Institution Course Number
50.002

Host Institution Course Title
COMPUTATION STRUCTURES

Host Institution Course Details
https://www.sutd.edu.sg/course/50-002-computation-structures

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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