# COURSE DETAIL

| COMPUTATION STRUCTURES |
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| **Country**<br>Singapore |
| **Host Institution**<br>Singapore University of Technology and Design |
| **Program(s)**<br>Singapore University of Technology and Design |
| **UCEAP Course Level**<br>Lower Division |
| **UCEAP Subject Area(s)**<br>Computer Science |
| **UCEAP Course Number**<br>56 |
| **UCEAP Course Suffix** |
| **UCEAP Official Title**<br>COMPUTATION STRUCTURES |
| **UCEAP Transcript Title**<br>COMPUTATION STRCTRS |
| **UCEAP Quarter Units**<br>6.00 |
| **UCEAP Semester Units**<br>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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