

COURSE DETAIL

INTRODUCTION TO THEORETICAL COMPUTER SCIENCE

Country

China

Host Institution

Tsinghua University

Program(s)

Tsinghua University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

132

UCEAP Course Suffix**UCEAP Official Title**

INTRODUCTION TO THEORETICAL COMPUTER SCIENCE

UCEAP Transcript Title

THEOR COMPUTER SCI

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course is a journey into the essence of computation. Using rigorous mathematical language, the course unveils the deep logic underlying computer science. Following the theme of “Logic and Computation,” it guides you through the intellectual landscape of Turing machines, calculus, time and space complexity, zero-knowledge proofs, and the interplay between logic and computation.

Language(s) of Instruction

Chinese

Host Institution Course Number

40241003

Host Institution Course Title

INTRODUCTION TO THEORETICAL COMPUTER SCIENCE

Host Institution Course Details

<https://www.tsinghua.edu.cn/en/Admissions/Undergraduate/Curriculum.htm>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2025-2026

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