# COURSE DETAIL

| INTRODUCTION TO ALGORITHMS |
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| **Country**<br>China |
| **Host Institution**<br>Tsinghua University |
| **Program(s)**<br>Tsinghua University |
| **UCEAP Course Level**<br>Upper Division |
| **UCEAP Subject Area(s)**<br>Computer Science |
| **UCEAP Course Number**<br>110 |
| **UCEAP Course Suffix** |
| **UCEAP Official Title**<br>INTRODUCTION TO ALGORITHMS |
| **UCEAP Transcript Title**<br>INTRO ALGORITHMS |
| **UCEAP Quarter Units**<br>3.00 |
| **UCEAP Semester Units**<br>2.00 |

**Course Description**

This course is an introduction to algorithms. Lectures are about the fundamental skills of algorithm design and analysis. The course will teach the students how to analysis the asymptotic performance of algorithms with the growth of functions, as well as the probabilistic analysis and amortized analysis. Basic algorithm design skills such as divide-and-conquer, dynamic program functions and greedy algorithm are also included. Some specific topics, such as sorting algorithms, string matching algorithms, NP completeness theory and approximation algorithms will also be discussed.

**Language(s) of Instruction**
Chinese

**Host Institution Course Number**
44100582

**Host Institution Course Title**
INTRODUCTION TO ALGORITHMS

**Host Institution Course Details**

**Host Institution Campus**

**Host Institution Faculty**

**Host Institution Degree**

**Host Institution Department**
School of Software

**Course Last Reviewed**
2023-2024

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