



**GAIN AN EDGE,
LEARN TO CODE.**



I JUST CODEIT.

GET A HEADSTART IN THE PROGRAMMING WORLD.

Computer Science is the future, but do you know where to start?

There may be thousands of Computer Science courses on the Internet, but what is often overlooked are the core workings of Computer Science. As such, we hope to impart the foundational understanding of programming to our students through our Computer Science courses!

Teaching team from

 Meta  ByteDance  BINANCE

Internship & Full-Time opportunities
for outstanding students.



Curriculum

CodeIT: Advanced

CodeIT Advanced trains you on the key skills required in technical interviews for software-related roles. The course builds upon foundations acquired from pre-requisite courses and imparts advanced concepts of programming and computer science. You are recommended to have prior knowledge in fundamental programming methodologies.

Learning Outcomes

- Further knowledge of foundation in programming, learnt through the Python language
- Learn how to adopt computational thinking practices when solving problems, a skill not exclusive to the software industry
- An understanding of Data Structures and Algorithms, concepts which are key tenets in the world of software
- Be prepared to venture into practical fields such as App Development and Machine Learning



PRE-REQUISITES

Knowledge of the following topics:

1. Fundamental programming methodologies
2. Fundamental algorithms: Linear Search, Binary Search, Insertion Sort, Merge Sort
3. Recursion
4. OOP
5. Fundamental Data Structures: Linked Lists / BSTs
6. Basic understanding of time complexity and big O notation

Lesson Flow

Lesson 1: Hash Tables

Lesson 2: Priority Queues

Lesson 3: Graphs 1 (DFS, BFS, Topological Sort)

Lesson 4: Graphs 2 (Dijkstra's SPP, Prim's MST)

Lesson 5: Substring Search

Lesson 6: Dynamic Programming

Upon completing the course and meeting the below criteria, you will be presented with a **Certificate of Achievement**.

Criteria:

- 75% attendance
- Completion of one Programming problem every lesson



CONTACT US

+65 8371 8250

admin@codeitacademy.com