

Data Structures and Algorithms I in Python

Acme-Tutors
Python

Instructor:	Hugh Weng	Location:	Zoom Meeting
Email:	tutors@acme-nyc.com	Group Day/Time:	Thursdays, 6:30 PM - 8:30 PM
Phone:	646-280-7089		
Start Date:	July 7, 2022		
Term:	Summer 2022		

GROUP DESCRIPTION

This group is for Data Structures and Algorithms I in Python programming. This is a rigorous introduction to basic functional and object oriented programming paradigms in Python and algorithmic problem sets with data structures and a complementary group to Data Structures and Algorithms II in Python.

GROUP OBJECTIVES

- To build understanding of algorithms and data structures in Python.
- To develop an adequate working knowledge to be able to build algorithms and data structures in Python.
- Understand the syntax and semantics of the language.
- Engage in active discussions.
- Build algorithms in Python in the lab sessions.

PREREQUISITES

Prior experience with Python. Any prior experience with another programming language is a plus.

TEXTBOOK: *Data Structures and Algorithms in Python*, Wiley

TENTATIVE SCHEDULE

Week	Description
1	Algorithm Analysis
2	Analysis Lab
3	Recursion
4	Recursion Lab
5	Array-based Sequence
6	Sequence Lab
7	Stacks, Queues, and Deques
8	Stacks, Queues, and Deques Lab
9	Linked Lists
10	Linked Lists Lab
11	Trees
12	Trees Lab