

DEE2505: Data Structures

Time/Location: Tue 01:20pm-03:10pm @ED219 Fri 01:20:pm-02:10pm@ ED 116

Instructor: Chia-Tso Chao (趙家佐). **Email:** mango@faculty.nctu.edu.tw.

Office: ED601. ext. 31671. **Office Hours:** Tuesday CD (made by appointment).

Teaching Assistant: Vincent Chang (張碩文) vincent19960524@gmail.com

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Prerequisites: c++ programing

Reference Books:

1. J. Kleinberg and E. Tardos, Algorithm Design, Pearson, 2006. ISBN: 0-321-37291-3.
2. H. Deitel and P. Deitel, C++ How to Program, 5th Ed., Prentice Hall, 2005. ISBN: 0131971093.
3. S. Meyers, Effective C++: 55 specific ways to improve your programs and designs, 3rd Ed., Addison-Wesley, 2005. ISBN: 0321334876.

Course Contents:

1. Basic concepts: C++ and algorithms
2. Arrays
3. Stacks and queues
4. Linked lists
5. Trees
6. Graphs
7. Internal sorting
8. Hashing
9. Selected advanced topics

On-line Resources:

All course-related materials are available at <http://tiger.ee.nctu.edu.tw/course/DS2019/>. Look up the webpage frequently to keep updated.

Grading:

1. Homework (all programming): 40%
2. Two exams (Midterm: 30% + Final: 30%)