

Data Structures and Algorithms (Summer 2008) Prerequisites

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The course requires a knowledge of basic programming techniques and basic mathematical skills. In particular, you should review the following.

- Basic Probability Theory, e.g., [MS08, Appendix] or [CLR90, Chapter 6]
- Summations, e.g., [MS08, Appendix] or [CLR90, Chapter 3]
- Asymptotic Notation, e.g., [MS08, Section 2.1] or [CLR90, Chapter 2]
- Arrays and Lists, e.g., [MS08, Chapter 3, except Section 3.3] or [CLR90, Chapter 11]
- Hash Tables, e.g., [MS08, Sections 4.1 – 4.4] or [CLR90, Chapter 12]
- Quicksort and MergeSort, e.g., [MS08, Sections 5.1 – 5.4] or [CLR90, Sections 8.1 and 8.2]

References

- [CLR90] T.H. Cormen, C.E. Leiserson, and R.L. Rivest. *Introduction to Algorithms*. MIT Press/McGraw-Hill Book Company, 1990.
- [MS08] K. Mehlhorn and P. Sanders. *Algorithms and Data Structures: The Basic Toolbox*. Springer Verlag, 2008.