Ph.D. Qualifier Information
Algorithms Study Guide

The qualifier exam covers CS325 material and the prerequisite material for CS325.


Foundations
Chapters 1-4

Sorting and Order Statistics
Sorting: Insertion sort, Merge sort, Quick sort
Order statistics: Chapter 9

Data structures
Chapters 12-14

Advanced design and analysis techniques
Chapters 15-17

Graph Algorithms
Chapters 22-26

Selected topics
   Linear programming
   NP Completeness
       Poly-time reduction, and well-known NP-complete problems

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