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Discrete mathematics.

Oxford Higher Education. Oxford: Oxford University Press (ISBN 978-0-19-806543-2/pbk). xvi, 567 p. (2011).

This is designed as a textbook for undergraduate engineering students of computer science and postgraduate students of computer applications. The scope of the book becomes clear from the keywords, see above. The book seeks to provide a thorough understanding of the subject and present its practical applications to computer science. Algorithms and programmes have been used wherever required to illustrate the applications. Chapter end exercises to help students apply the mathematical tools to computer-related concepts. (From the publisher's description) Some of the concepts introduced (like random variable) might be formulated more precisely, at least from a mathematical point of view. Some abbreviations from the index cannot be found on the pages indicated, some concepts are missing in the index totally. There is a large number of examples, which may be very helpful. Every chapter starts with a block of so-called learning objectives.

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Classification: N70

Keywords: set; relations; functions; combinatorics; mathematical logic; algebraic structures; matrix algebra; order; lattices; Boolean algebra; complexity; graphs; trees; formal languages; automata