



Introduction to Operations Research

11th Edition
Hillier and Lieberman

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For over four decades, *Introduction to Operations Research* has been the classic text on operations research. While building on the classic strengths of the text, the author continues to find new ways to make the text current and relevant to students. One way is by incorporating a wealth of state-of-the-art, user-friendly software and more coverage of business applications than ever before. When the firstco-author received the prestigious Expository Writing Award from INFORMS for a recent edition, theaward citation described the reasons for the book's great success as follows:

"Two features account for this success. First, the editions have been outstanding from students' points of view due to excellent motivation, clear and intuitive explanations, good examples of professional practice, excellent organization of material, very useful supporting software, and appropriate but not excessive mathematics. Second, the editions have been attractive from instructors' points of view because they repeatedly infuse state-of-the-art material with remarkable lucidity and plain language."

New Features

Four new sections describe analytics as a key new complement to operations research. The benefit is a new understanding of this revolutionary change in the field. These new sections are right up front in Sections 1.3, 2.2, 2.3, and 2.4.

A new section provides an elementary introduction to the theory of simulation optimization. The benefit is a new understanding of what is now one of the most widely used techniques of operations research. The new section is Section 20.5.

A new section describes how decision analysis now is being widely extended to multiple criteria decision analysis. The benefit is a new understanding of how multiple criteria can be considered in operations research studies. The new section (Multiple Criteria Decision Analysis, Including Goal Programming) is Section 16.7.

Significant reorganization and streamlining, including moving more technical material to the supplements on the website. The benefit is providing a better focus on the important material.

Substantial more updating, including two additional completely new sections, many smaller updates, and a considerable number of new up-to-date application vignettes and selected references (while deleting outdated ones). The benefit is providing a completely up-to-date introduction to operations research, including key recent developments. The two additional completely new sections are Sections 17.11 and 19.4.

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