

# Metaheuristics for Production Scheduling

## A Comprehensive Guide to Solving Complex Scheduling Problems

By Dr. Michael Pinedo



### Metaheuristics for Production Scheduling (Iste)

by Adam D. Scott

★★★★☆ 4.4 out of 5

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Screen Reader : Supported  
Enhanced typesetting : Enabled  
Print length : 346 pages



Production scheduling is a critical problem in many industries. The goal of production scheduling is to determine the optimal sequence of operations to perform on a set of resources in Free Download to minimize the total production time or cost. This problem is often complex and difficult to solve, especially for large-scale problems.

Metaheuristics are a class of search algorithms that are used to solve complex optimization problems. Metaheuristics are often able to find good solutions to these problems, even though they may not be able to find the optimal solution.

This book provides a comprehensive overview of metaheuristic algorithms and their application to production scheduling problems. The book begins

with an to metaheuristics and their basic principles. It then discusses the most popular metaheuristic algorithms, including simulated annealing, genetic algorithms, particle swarm optimization, and tabu search.

The book also discusses the application of these algorithms to a variety of production scheduling problems, including job shop scheduling, flow shop scheduling, and resource-constrained scheduling. The book provides a number of case studies that illustrate how metaheuristics can be used to solve real-world scheduling problems.

This book is a valuable resource for anyone who is interested in using metaheuristics to solve production scheduling problems. The book provides a comprehensive overview of the most popular metaheuristic algorithms and their application to a variety of scheduling problems.

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## About the Author

Dr. Michael Pinedo is a professor of industrial engineering at the University of Michigan. He is a world-renowned expert in production scheduling and has published over 200 papers in the field. Dr. Pinedo is the author of several books on production scheduling, including the best-selling text, *Scheduling: Theory, Algorithms, and Systems*.

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