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Autore	Baker Kenneth R.
Titolo	Principles of sequencing and scheduling / / Kenneth R. Baker and Dan Trietsch
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ISBN	1-119-26259-3 1-119-26258-5 1-119-26260-7
Edizione	[Second edition.]
Descrizione fisica	1 online resource (654 pages)
Collana	Wiley series in operations research and management science
Disciplina	658.53
Soggetti	Production scheduling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Single-machine sequencing -- Optimization methods for the single-machine problem -- Heuristic methods for the single-machine problem -- Earliness and tardiness costs -- Sequencing for stochastic scheduling -- Safe scheduling -- Extensions of the basic model -- Parallel-machine models -- Flow shop scheduling -- Stochastic flow shop scheduling -- Lot streaming procedures for the flow shop -- Scheduling groups of jobs -- The job shop problem -- Simulation models for the dynamic job shop -- Network methods for project scheduling -- Resource-constrained project scheduling -- Project analytics -- PERT 21 : analytics-based safe project scheduling.
Sommario/riassunto	An updated edition of the text that explores the core topics in scheduling theory The second edition of Principles of Sequencing and Scheduling has been revised and updated to provide comprehensive coverage of sequencing and scheduling topics as well as emerging developments in the field. The text offers balanced coverage of deterministic models and stochastic models and includes new developments in safe scheduling and project scheduling, including coverage of project analytics. These new topics help bridge the gap between classical scheduling and actual practice. The authors—noted experts in the field—present a coherent and detailed introduction to the basic models, problems, and methods of scheduling theory. This book offers an introduction and overview of sequencing and scheduling

and covers such topics as single-machine and multi-machine models, deterministic and stochastic problem formulations, optimization and heuristic solution approaches, and generic and specialized software methods. This new edition adds coverage on topics of recent interest in shop scheduling and project scheduling. This important resource: Offers comprehensive coverage of deterministic models as well as recent approaches and developments for stochastic models Emphasizes the application of generic optimization software to basic sequencing problems and the use of spreadsheet-based optimization methods Includes updated coverage on safe scheduling, lognormal modeling, and job selection Provides basic coverage of robust scheduling as contrasted with safe scheduling Adds a new chapter on project analytics, which supports the PERT21 framework for project scheduling in a stochastic environment. Extends the coverage of PERT 21 to include hierarchical scheduling Provides end-of-chapter references and access to advanced Research Notes, to aid readers in the further exploration of advanced topics Written for upper-undergraduate and graduate level courses covering such topics as scheduling theory and applications, project scheduling, and operations scheduling, the second edition of Principles of Sequencing and Scheduling is a resource that covers scheduling techniques and contains the most current research and emerging topics.