1. Record Nr. UNISA996217499303316

Titolo	Encyclopedia of Operations Research and Management Science [[electronic resource] /] / edited by Saul I. Gass, Carl M. Harris
Pubbl/distr/stampa	New York, NY : , : Springer US : , : Imprint : Springer, , 2001
ISBN	1-4020-0611-X
Edizione	[2nd ed. 2001.]
Descrizione fisica	1 online resource (eReference.)
Disciplina	658.403403
Soggetti	Operations research Decision making Production management Calculus of variations Mathematical models Operations Research/Decision Theory Operations Management Calculus of Variations and Optimal Control; Optimization Mathematical Modeling and Industrial Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Sommario/riassunto	The goal of the Encyclopedia of Operations Research and Management Science is to provide decision makers and problem solvers in business, industry, government and academia with a comprehensive overview of the wide range of ideas, methodologies, and synergistic forces that combine to form the pre-eminent decision-aiding fields of operations research and management science (OR/MS). The Second Edition is a further extension of this goal - which through addressing and solving a wide range of problems - OR/MS methodologies continue to flourish and grow. This is a field that is used extensively throughout the applied sciences, and, because of this, the new edition has added topics in the following areas: Analytic Network Process; Call Centers; Certainty Equivalence; Comb. Optimization by Simulated CE; Computational Organization; Constraint Programming; Data Mining; Degeneracy

Graphs; Economic Order Q Extensions; Educational Issues in B-Schools; Electronic Commerce; Financial Markets; Global Climate Change; Hidden Markov Models; History of Early British OR; Implementation for Public Sector; Info Tech Benefits; Interactive Multi-Objective Math. Programming; Knapsacks with Nonlinearities; Little's Law in Distribution Form; Military Ops Other than War; Multivariate Quality Control; Perturbation Analysis; Simulation Metamodeling; Simulation Optimization; Supply Chain Management; Theory of Constraints; Timetabling. The intended audience of the Encyclopedia of Operations Research and Management Science is technically diverse and wide; it includes anyone concerned with the science, techniques, and ideas of how one makes decisions. As this audience encompasses many professions, educational backgrounds and skills, we were attentive to the form, format and scope of the articles. Thus, the articles are designed to serve as initial sources of information for all such readers, with special emphasis on the needs of students. Each article provides a background or history of the topic, describes relevant applications, overviews present and future trends, and lists seminal and current references. To allow for variety in exposition, the authors were instructed to present their material from both research and applied perspectives. The Encyclopedia has been organized into specific topics that collectively encompass the foundations, applications, and emerging elements of this ever-changing field. We also wanted to establish the close associations that OR/MS has maintained with other scientific endeavors, with special emphasis on its symbiotic relationships to computer science, information processing, and mathematics. Based on our broad view of OR/MS, we commissioned 228 major expository articles and complemented them by numerous entries: descriptions, discussions, definitions, and abbreviations. The connections between topics are highlighted by an entry's final `See' statement, as appropriate. Each topical article provides a background or history of the topic, describes relevant applications, overviews present and future trends, and lists seminal and current references. Of significant importance is that each contributed topic has been authored by a leading authoritative researcher on that particular topic.