1. Record Nr. UNISA996426335803316 Autore Meerschaert Mark M. <1955-> Titolo Mathematical modeling / / Mark M. Meerschaert [[electronic resource]] Waltham, MA,: Academic Press/Elsevier, 2013 Pubbl/distr/stampa Edizione [4th ed.] Descrizione fisica 1 online resource (xii, 365 p.): ill Disciplina 511/.8 Soggetti Mathematical models Civil & Environmental Engineering **Engineering & Applied Sciences** Operations Research Electronic books Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index Nota di contenuto Optimization models. One-Variable Optimization; Multivariable Optimization; Computational Methods for Optimization. -- Dynamic models. Introduction to Dynamic Models; Analysis of Dynamic Models; Simulation of Dynamic Models. -- Probability models. Introduction to Probability Models; Stochastic Models; Simulation of Probability Models Sommario/riassunto "Meerschaert's new edition strengthens his position as the survey text of choice for mathematical modeling courses, adding ample instructor support and leveraging on-line delivery for solutions manuals and software ancillaries. From genetic engineering to hurricane prediction, mathematical models guide much of the decision-making in our society, and if the assumptions and methods underlying the modeling are flawed, the outcome can be disastrously poor, as recent events have proved. Since mathematical modeling is a rapidly growing

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disciplines, there is a need for mathematically rigorous treatments of the subject, and particularly for texts that expose students to a range