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Soggetti	Programming languages (Electronic computers) Programming Languages, Compilers, Interpreters
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Nota di contenuto	Ready to Start Modeling? -- Text and Simulation Enhancements -- Connecting Things with Links -- SysML: Use Case, Block, and State Machine Diagrams -- Refinement through In-Zooming -- The Dynamic Aspect of Systems -- Controlling the System's Behavior -- Abstracting and Refining -- Conceptual Modeling: Purpose and Context -- Things: Objects and Processes -- Object-Process Language: The Text -- SysML: Foundations and Diagrams -- The Dynamic System Aspect -- The Structural System Aspect -- Participation Constraints and Forks -- Fundamental Structural Relations -- Aggregation-Participation -- Exhibition-Characterization -- States and Values -- Generalization and Instantiation -- Complexity Management: Refinement and Abstraction -- OPM Operational Semantics and Control Links -- Logical Operators and Probabilities -- Overview of ISO 19450.
Sommario/riassunto	Model-Based Systems Engineering (MBSE), which tackles architecting and design of complex systems through the use of formal models, is emerging as the most critical component of systems engineering. This textbook specifies the two leading conceptual modeling languages, OPM—the new ISO 19450, composed primarily by the author of this book, and OMG SysML. It provides essential insights into a domain-independent,discipline-crossing methodology of developing or researching complex systems of any conceivable kind and size. Combining theory with a host of industrial, biological, and daily life examples, the book explains principles and provides guidelines for

architecting complex, multidisciplinary systems, making it an indispensable resource for systems architects and designers, engineers of any discipline, executives at all levels, project managers, IT professionals, systems scientists, and engineering students. Professor Dov Dori is Harry Lebensfeld Chair in Industrial Engineering and Head of the Enterprise System Modeling Laboratory at the Faculty of Industrial Engineering and Management, Technion, Israel Institute of Technology. Since 2000 he has been intermittently Visiting Professor at MIT's Engineering Systems Division, where he is currently Lecturer. He received his PhD in Computer Science in 1988 from Weizmann Institute of Science, MSc in Operations Research from Tel Aviv University in 1981, and BSc in Industrial Engineering and Management from Technion in 1975. Professor Dov Dori invented and developed Object-Process Methodology (OPM), recently adopted as ISO 19450. He has authored over 300 publications, including journal and conference papers, books, and book chapters. Prof. Dori has mentored over 50 graduate students. He chaired or was co-chair of nine international conferences and workshops. Among his many editorial duties, Prof. Dori was Associate Editor of IEEE Transaction on Pattern Analysis and Machine Intelligence, and currently he is Associate Editor of Systems Engineering. He is Fellow of INCOSE – International Council on Systems Engineering, Fellow of IAPR – International Association for Pattern Recognition, Member of Omega Alpha Association – International Honor Society for Systems Engineering, and Senior Member of IEEE and of ACM. His research interests include model-based systems engineering, conceptual modeling of complex systems, systems architecture and design, software and systems engineering, and systems biology.