Record Nr. UNINA9910145953903321 Autore Buede Dennis M Titolo The engineering design of systems [[electronic resource]]: models and methods / / Dennis M. Buede Hoboken, N.J., : John Wiley & Sons, c2009 Pubbl/distr/stampa **ISBN** 1-118-21037-9 1-282-13705-0 9786612137051 0-470-41379-4 0-470-41378-6 Edizione [2nd ed.] Descrizione fisica 1 online resource (532 p.) Wiley series in systems engineering and management Collana Disciplina 620.001/171 620.001171 620.0042 Soggetti Systems engineering Engineering design System design Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (p. 487-501) and index. Nota di contenuto THE ENGINEERING DESIGN OF SYSTEMS; Contents; Preface; Part 1 Introduction, Overview, and Basic Knowledge; Chapter 1 Introduction to Systems Engineering; Chapter 2 Overview of the Systems Engineering Design Process; Chapter 3 Modeling and SysML Modeling; Chapter 4 Discrete Mathematics: Sets, Relations, and Functions; Chapter 5 Graphs and Directed Graphs (Digraphs); Part 2 Design and Integration; Chapter 6 Requirements and Defining the Design Problem; Chapter 7 Functional Architecture Development: Chapter 8 Physical Architecture Development: Chapter 9 Allocated Architecture Development Chapter 10 Interface DesignChapter 11 Integration and Qualification;

Part 3 Supplemental Topics: Chapter 12 Graphical Modeling

Techniques; Chapter 13 Decision Analysis for Design Trades; Appendix A: Outline of Systems Engineering Documents; Appendix B: IDEF0 Model of the Engineering of a System; Glossary; References; Historical

References; Index

Sommario/riassunto

The ideal introduction to the engineering design of systems-now in a new edition The Engineering Design of Systems, Second Edition compiles a wealth of information from diverse sources to provide a unique, one-stop reference to current methods for systems engineering. It takes a model-based approach to key systems engineering design activities and introduces methods and models used in the real world. Features new to this edition include: The addition of Systems Modeling Language (SysML) to several of the chapters, as well as the introduction of new terminology A