1. Record Nr. UNINA9910792476903321 Autore Chang Kuang-Hua <1960-> Titolo Design theory and methods using CAD/CAE / / Kuang-Hua Chang Pubbl/distr/stampa London:,: Academic Press,, 2015 0-12-398516-1 **ISBN** Edizione [1st edition] Descrizione fisica 1 online resource (517 p.) The computer aided engineering design series Collana 668.109235 Disciplina Soggetti Computer-aided design Computer-aided engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front cover: Design Theory and Methods using CAD/CAE: Copyright: Acknowledgment; Contents; Dedications; About the Author; About the Cover Page; 1.2 THE E-DESIGN PARADIGM; 1.3 VIRTUAL PROTOTYPING; 1.4 PHYSICAL PROTOTYPING; 1.5 EXAMPLE: SIMPLE AIRPLANE ENGINE; 1.6 EXAMPLE: HIGH-MOBILITY MULTIPURPOSE WHEELED VEHICLE; 1.7 SUMMARY; QUESTIONS AND EXERCISES; CHAPTER 2 - DECISIONS IN ENGINEERING DESIGN: CHAPTER 3 - DESIGN OPTIMIZATION: 3.1 INTRODUCTION; 5.1 INTRODUCTION; Preface; CHAPTER 4 -STRUCTURAL DESIGN SENSITIVITY ANALYSIS; QUESTIONS AND **EXERCISES** CHAPTER 5 - MULTIOBJECTIVE OPTIMIZATION AND ADVANCED TOPICSPROJECT S5 - DESIGN WITH SOLIDWORKS; PROJECT P5 - DESIGN WITH PRO/ENGINEER; P5.1 INTRODUCTION TO DESIGN OPTIMIZATION IN PRO/ENGINEER; Index Sommario/riassunto The fourth book of a four-part series, Design Theory and Methods using CAD/CAE integrates discussion of modern engineering design principles, advanced design tools, and industrial design practices throughout the design process. This is the first book to integrate discussion of computer design tools throughout the design process. Through this book series, the reader will: Understand basic design principles and all digital modern engineering design paradigmsUnderstand CAD/CAE/CAM tools available for various design related tasksUnderstand how to put an integrated system together to

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