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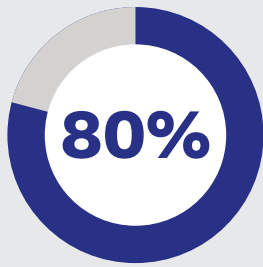
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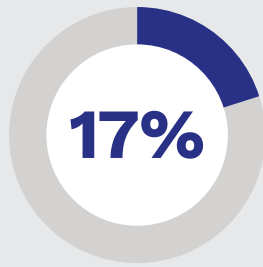
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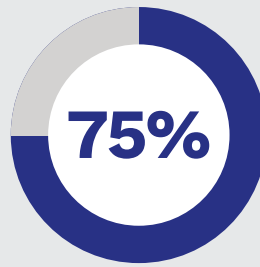
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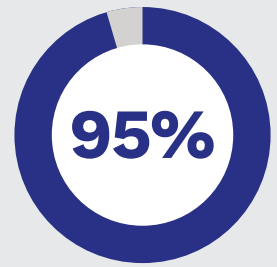
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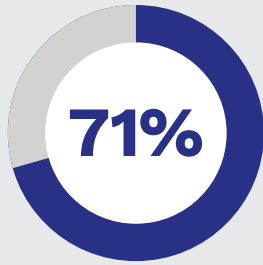


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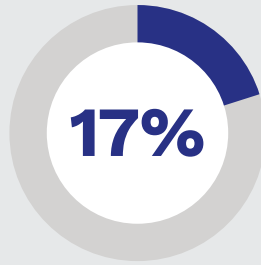


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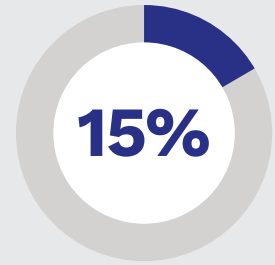
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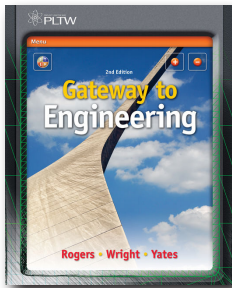
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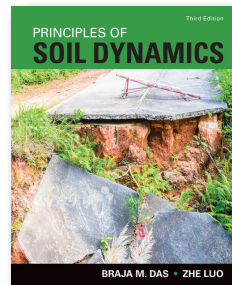
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### PRINCIPLES OF SOIL DYNAMICS, 3E

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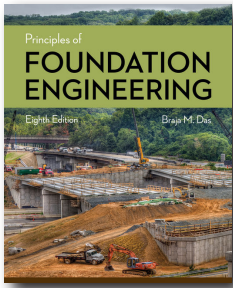


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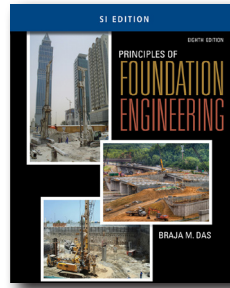
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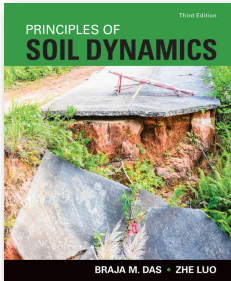
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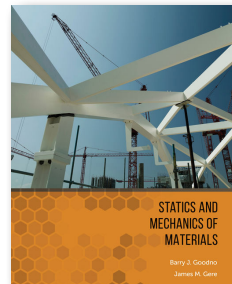
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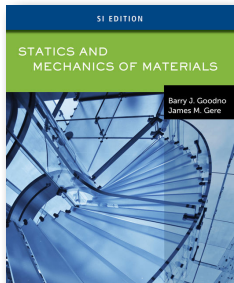
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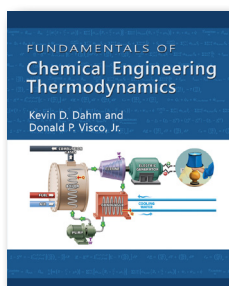
### CHEMICAL ENGINEERING

## FUNDAMENTALS OF CHEMICAL ENGINEERING THERMODYNAMICS

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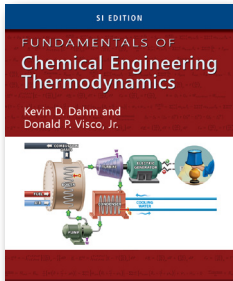


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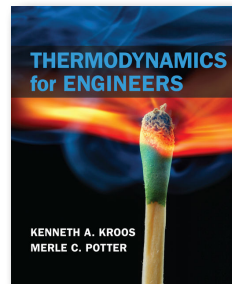
problem-solving inductive (from specific to general) learning approach, written in a conversational and approachable manner. Suitable for either a one-semester course or two-semester sequence in the subject, this book covers thermodynamics in a complete and mathematically rigorous manner, with an emphasis on solving practical engineering problems. The approach taken stresses problem-solving, and draws from “best practice” engineering teaching strategies. FUNDAMENTALS OF CHEMICAL ENGINEERING THERMODYNAMICS uses examples to frame the importance of the material. Each topic begins with a motivational example that is investigated in context to that topic. This framing of the material is helpful to all readers, particularly to global learners who require “big picture” insights, and hands-on learners who struggle with abstractions. Each worked example is fully annotated with sketches and comments on the thought process behind the solved problems. Common errors are presented and explained. Extensive margin notes add to the book accessibility as well as presenting opportunities for investigation.

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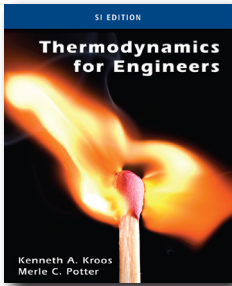
relevant places in the text, followed by a summary at the end of each chapter. Authors Kenneth Kroos and Merle Potter bring decades of teaching experience to a clear writing style that describes key concepts without straying from the course. The language of thermodynamics is explained in careful detail so that students can quickly understand the concepts presented and the analysis techniques used. Extensive use of practical examples demonstrates the proper set-up and solution of problems. These skills are then further developed using a wide variety of homework problems. Some homework problems are presented with an increased degree of complexity to allow the instructor to challenge the more accomplished. THERMODYNAMICS FOR ENGINEERS focuses on clearly outlining the role of thermodynamics in “real” engineering. It takes students through clear explanations of concepts, followed by mathematical techniques of analysis and applications of these in solving engineering problems.

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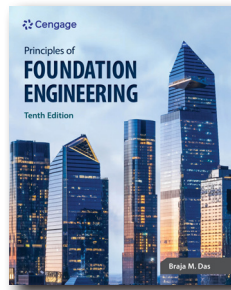
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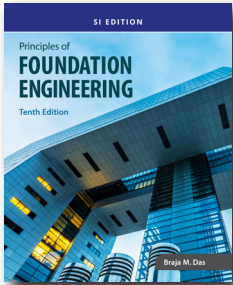
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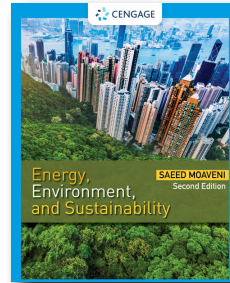
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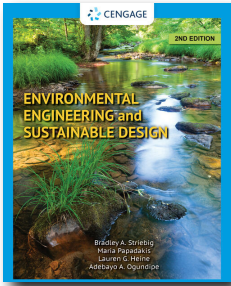
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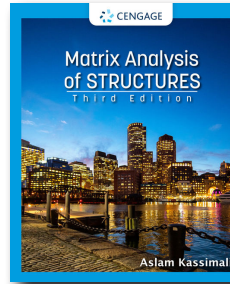
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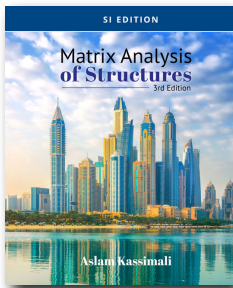
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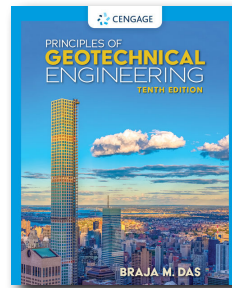
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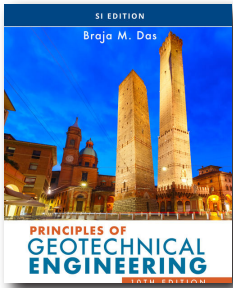
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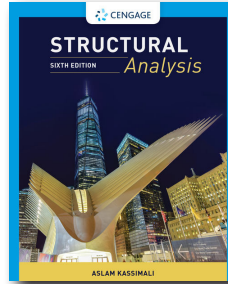
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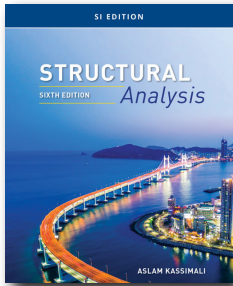
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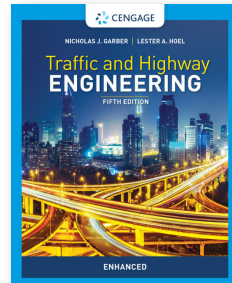
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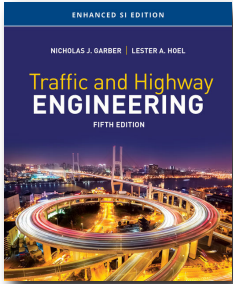


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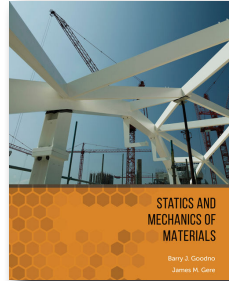
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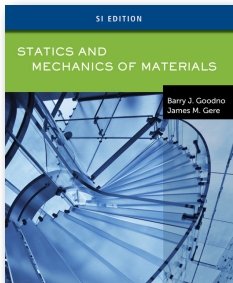
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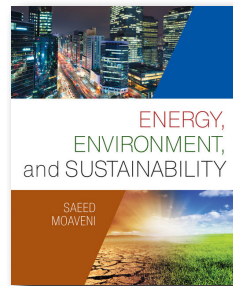
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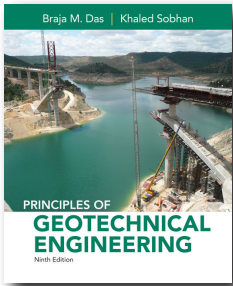
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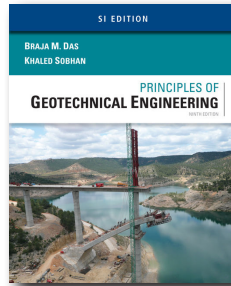
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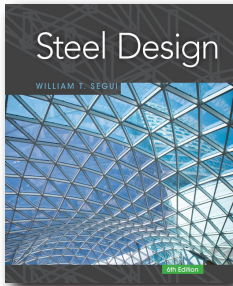
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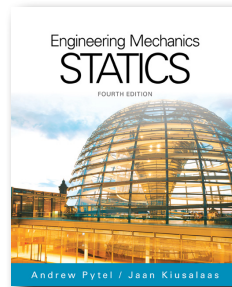
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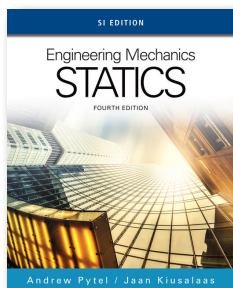
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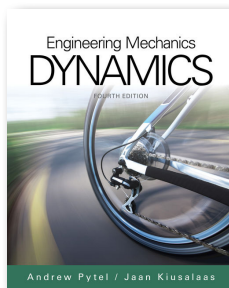
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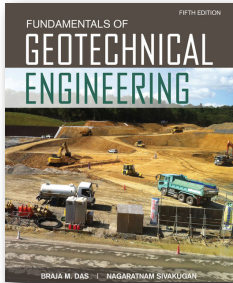


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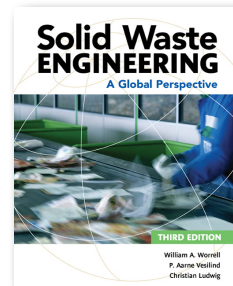
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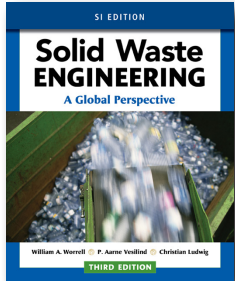
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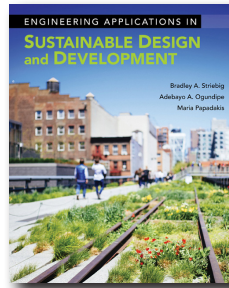
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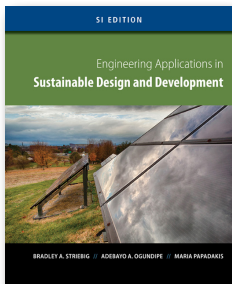
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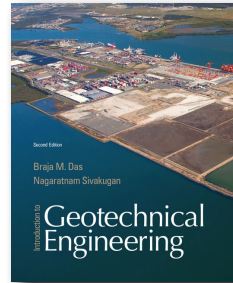
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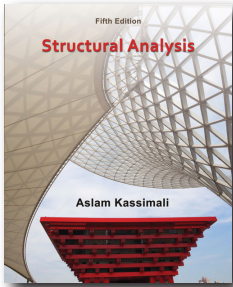
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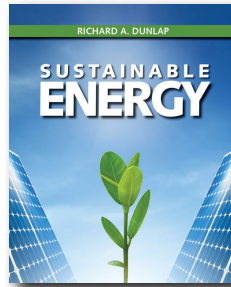
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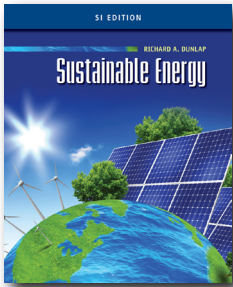
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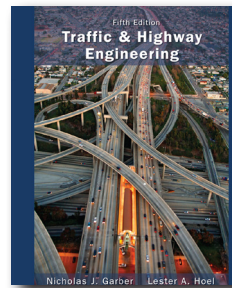
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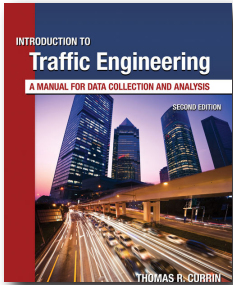
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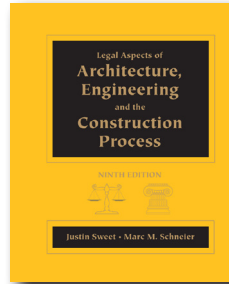
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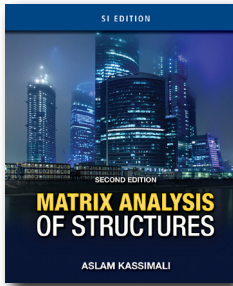
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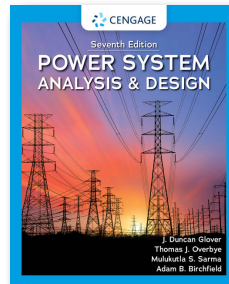
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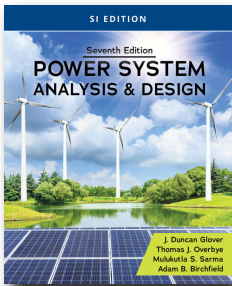
## NEW EDITION

# POWER SYSTEM ANALYSIS AND DESIGN, SI EDITION, 7E

*J. Duncan Glover, Failure Electrical LLC; Mulukutla S. Sarma, Northeastern University (Emeritus); Thomas Overbye, Texas A&M University*

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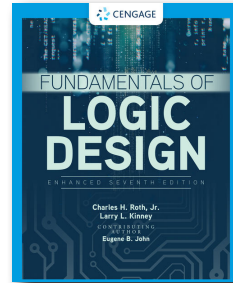
new edition reflect the most recent trends in the field as the authors highlight key physical concepts with clear explanations of important mathematical techniques. New co-author Adam Birchfield joins this prominent author team with fresh insights into the latest technological advancements. The authors develop theory and modeling from simple beginnings, clearly demonstrating how you can apply the principles you learn to new, more complex situations. New learning objectives and helpful case study summaries help focus your learning, while the updated PowerWorld® Simulation works seamlessly with this edition's content to provide hands-on design experience. WebAssign for Glover/Overbye/Sarma's Power System Analysis and Design, SI, 7th Edition, helps you prepare for class with confidence. Its online learning platform for your math, statistics, science and engineering courses helps you practice and absorb what you learn.

# FUNDAMENTALS OF LOGIC DESIGN, ENHANCED EDITION, 7E

*Charles H. Roth, Jr., University of Texas, Austin; Larry L. Kinney, University of Minnesota; Eugene B. John, University of Texas, Austin*

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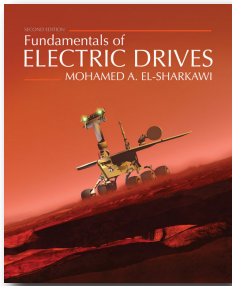
The authors have carefully developed a clear presentation that introduces the fundamental concepts of logic design without overwhelming you with the mathematics of switching theory. Twenty engaging, easy-to-follow study units present basic concepts, such as Boolean algebra, logic gate design, flip-flops and state machines. You learn to design counters, adders, sequence detectors and simple digital systems. After mastering the basics, you progress to modern design techniques using programmable logic devices as well as VHDL hardware description language.

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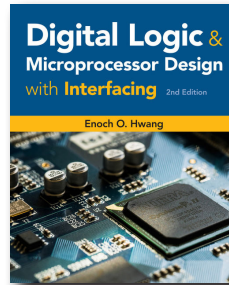
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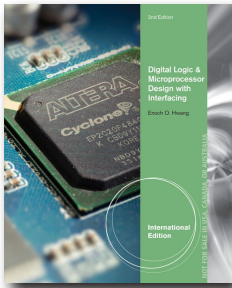


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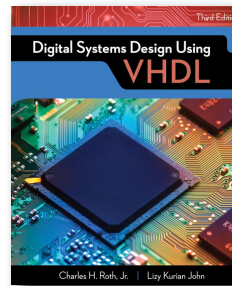
circuits together to form both dedicated and general-purpose microprocessors. This book's unique approach combines the use of logic principles with the building of individual components to create data paths and control units. With this book you are able to design simple microprocessors, implement them in real hardware, and interface them to real-world devices. Watch the exciting process as your own microprocessor comes to life in real hardware using the knowledge and skills you gain from DIGITAL LOGIC AND MICROPROCESSOR DESIGN WITH INTERFACING, 2E.

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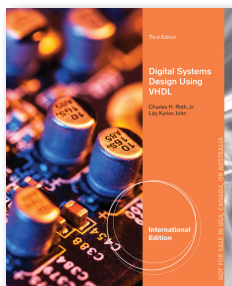
concepts before introducing the fundamentals of VHDL. The book concludes with detailed coverage of advanced VHDL topics.

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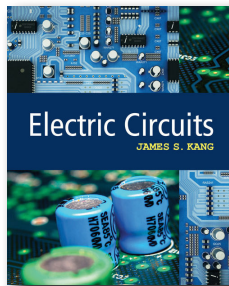
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Dr. James S. Kang, California State Polytechnic University, Pomona

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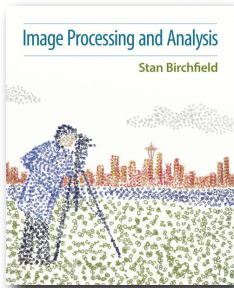
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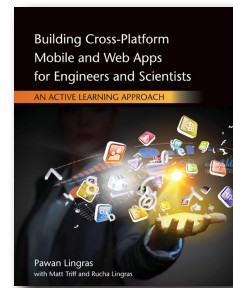
## BUILDING CROSS-PLATFORM MOBILE AND WEB APPS FOR ENGINEERS AND SCIENTISTS

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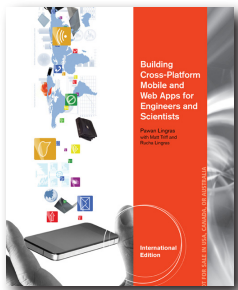
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*Pawan Lingras, Saint Mary's University, Halifax; Matt Triff; Rucha Lingras*

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A Problem Solving Companion, International Edition

*Vinay K. Ingle, Northeastern University; John G. Proakis, Northeastern University*

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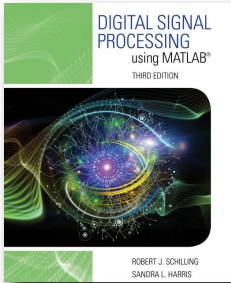
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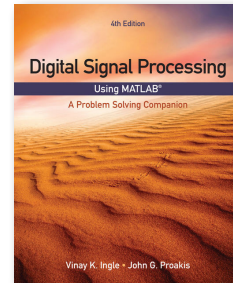
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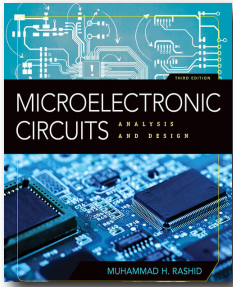
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Muhammad H. Rashid, *University of West Florida*

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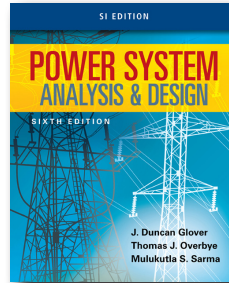
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## POWER SYSTEM ANALYSIS AND DESIGN, SI EDITION, 6E

J. Duncan Glover, *Failure Electrical LLC*; Thomas Overbye, *Texas A&M University*; Mulukutla S. Sarma, *Northeastern University (Emeritus)*

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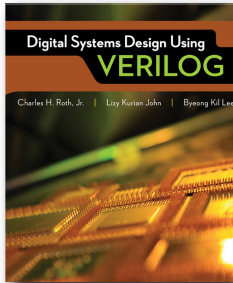
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## DIGITAL SYSTEMS DESIGN USING VERILOG

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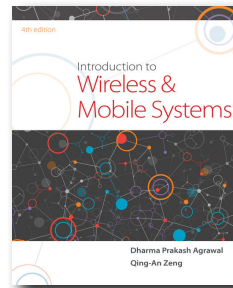
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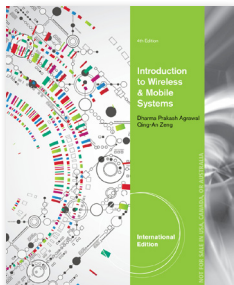
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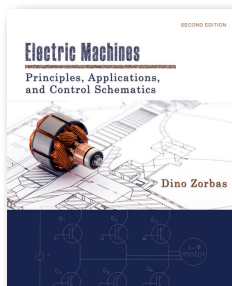
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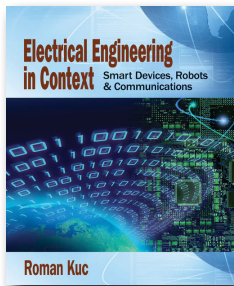
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Smart Devices, Robots & Communications

Roman Kuc, Yale University

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ELECTRICAL ENGINEERING IN CONTEXT: SMART DEVICES, ROBOTS & COMMUNICATIONS by bestselling author Roman Kuc describes the basic components and technologies that make today's computer-assisted

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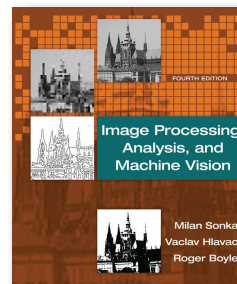
are also included for users comfortable with computer programming.

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Milan Sonka, University of Iowa; Vaclav Hlavac, Czech Technical University of Prague; Roger Boyle, University of Leeds, United Kingdom

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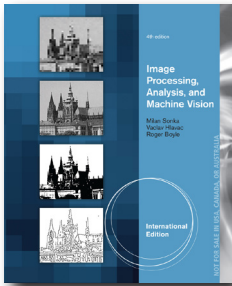
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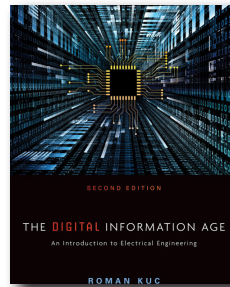
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Roman Kuc, *Yale University*

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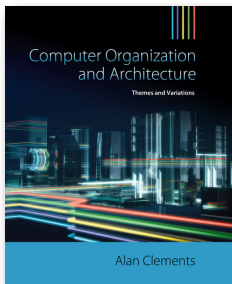
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Themes and Variations

Alan Clements, *University of Teesside, United Kingdom*

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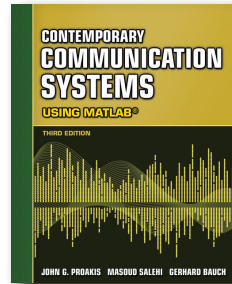
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## CONTEMPORARY COMMUNICATION SYSTEMS USING MATLAB®, 3E

John G. Proakis, *Northeastern University*; Masoud Salehi, *Northeastern University*; Gerhard Bauch, *University of Munich*

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Featuring a variety of applications that motivate students, this book serves as a companion or supplement to any of the comprehensive textbooks in communication systems. The book provides a variety of exercises that may be solved on the computer

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S. Graham Kelly, University of Akron

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As engineering systems become more increasingly interdisciplinary, knowledge of both mechanical and electrical systems has become an asset within the field of engineering. All engineers should have general facility with modeling of dynamic

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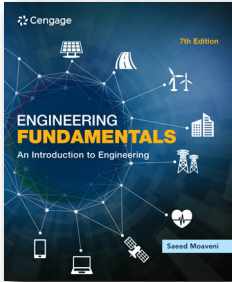
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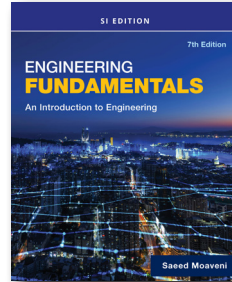
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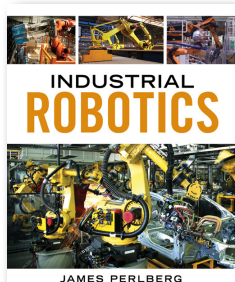
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Keith Dinwiddie, Ozarks Technical Community College

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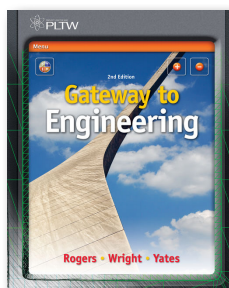
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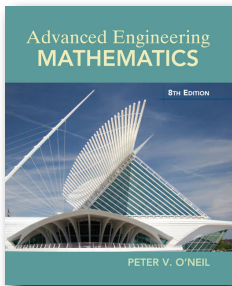
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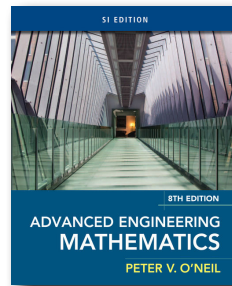
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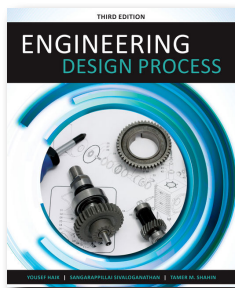


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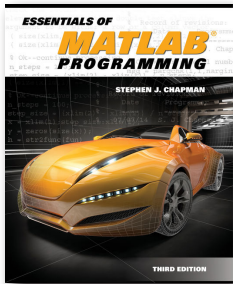
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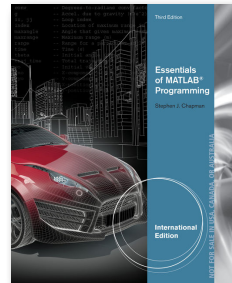
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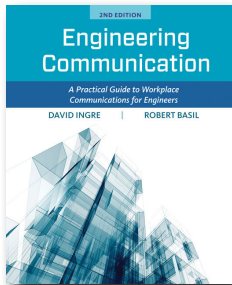
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David Ingre; Robert Basil, Kwantlen Polytechnic University

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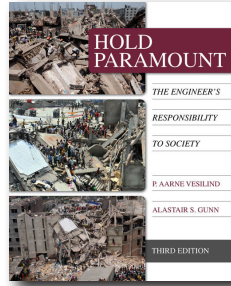
## HOLD PARAMOUNT, 3E

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P. Aarne Vesilind, Bucknell University; Alastair S. Gunn, University of Waikato

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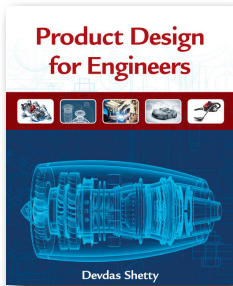
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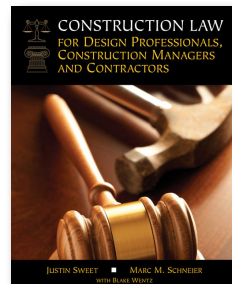
entrepreneurship, and design and introduces you to the creative problem-solving method for product success. Case studies in every chapter explore issues of design for assembly, disassembly, reliability, maintainability, and sustainability. The book's interdisciplinary approach, step-by-step coverage, and helpful illustrations and charts give you everything you need to design cost-effective, innovative products.

## CONSTRUCTION LAW FOR DESIGN PROFESSIONALS, CONSTRUCTION MANAGERS AND CONTRACTORS

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**CONSTRUCTION LAW FOR DESIGN PROFESSIONALS, CONSTRUCTIONS MANAGERS AND CONTRACTORS** is a condensed -- and completely revamped -- version of the bestselling authority on engineering

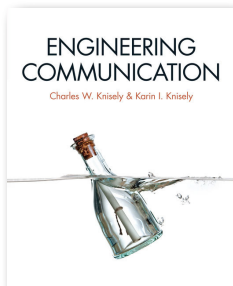
law, **LEGALASPECTS OF ARCHITECTURE, ENGINEERING AND THE CONSTRUCTION PROCESS** (now in its 9th edition) by Justin Sweet, Marc M. Schneier and Blake Wentz. For this new book, the authors have directed the text at engineering, architecture and construction management students. Given the authors' long and deep understanding of the intersection between the law and the construction industry, professors and students can trust this text is unparalleled. The addition of Blake Wentz to the author team emphasizes the commitment to the field. A new 2017 Update includes the latest changes regarding relevant industry associations, regulations, and codes of ethics. The supplement includes hard copies of AIA A101-2017; A101-2017, Exhibit A; A201-2017; A401-2017; and B101-2017, as well as the most recent code of ethics of: the American Institute of Architects (AIA); the American Institute of Constructors (AIC); the Design-Build Institute of America (DBIA); and the Construction Management Association of America (CMAA). The book's website has the updated EJCDC C-520, C-700, and E-500 documents.

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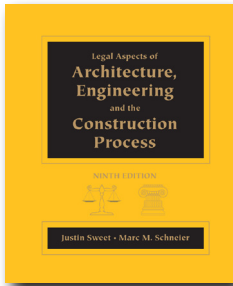


## LEGAL ASPECTS OF ARCHITECTURE, ENGINEERING AND THE CONSTRUCTION PROCESS, 9E

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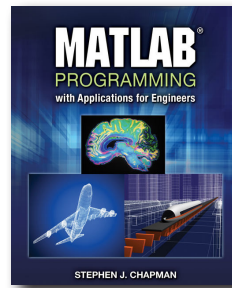
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## INDUSTRIAL ENGINEERING

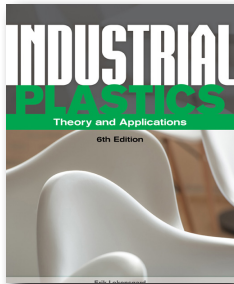
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## MATERIAL SCIENCE

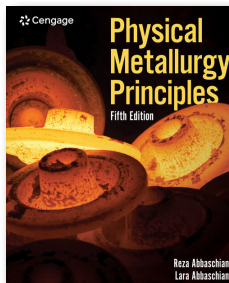
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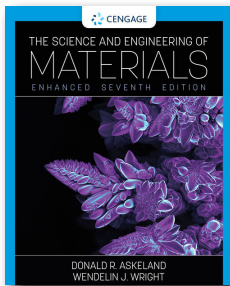
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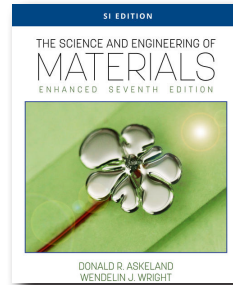
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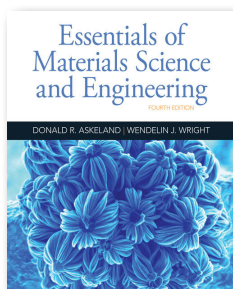
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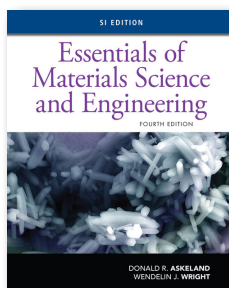
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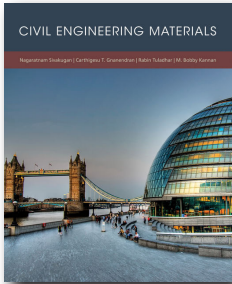
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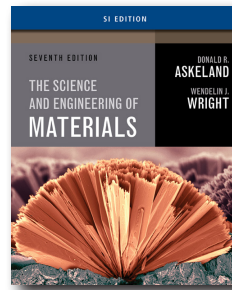
and soils, but you also explore important non-traditional materials, such as synthetics and industrial-by products. The authors use a wealth of practical examples and straight-forward explanations to ensure you gain a full understanding of the characteristics and behavior of various materials, how they interact, and how to best utilize and combine traditional and non-traditional materials. While emphasizing the effective use of civil engineering materials, the authors carefully consider sustainability to give you a broader context of how materials are current used in contemporary applications.

## SCIENCE AND ENGINEERING OF MATERIALS, SI EDITION, 7E

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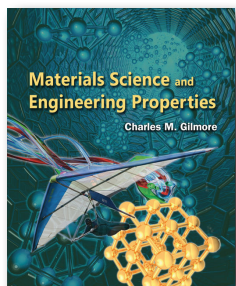
a one-semester course, you will also have a useful reference for subsequent courses in manufacturing, materials, design, or materials selection. The Askeland text emphasizes a science-based approach to materials engineering that highlights how the structure of materials at various length scales gives rise to materials properties. This connection between structure and properties is key to innovating with materials, both in the synthesis of new materials and enabling new applications with existing materials. The science-based approach highlights how materials change with time and due to loading and environment - a key concept that is often overlooked when using charts and databases to select materials.

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MATERIALS SCIENCE AND ENGINEERING PROPERTIES is primarily aimed at mechanical and aerospace engineering students, building on actual science fundamentals before building them into engineering applications.

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focuses on mechanical properties of materials, it also includes a chapter on materials selection, making it extremely useful to civil engineers as well. The purpose of this textbook is to provide students with a materials science and engineering text that offers a sufficient scientific basis that engineering properties of materials can be understood by students. In addition to the introductory chapters on materials science, there are chapters on mechanical properties, how to make strong solids, mechanical properties of engineering materials, the effects of temperature and time on mechanical properties, electrochemical effects on materials including corrosion, electroprocessing, batteries, and fuel cells, fracture and fatigue, composite materials, material selection, and experimental methods in material science. In addition, there are appendices on the web site that contain the derivations of equations and advanced subjects related to the written textbook, and chapters on electrical, magnetic, and photonic properties of materials.

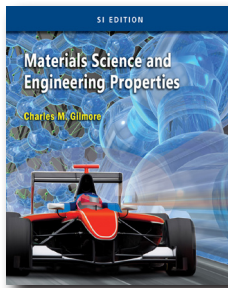
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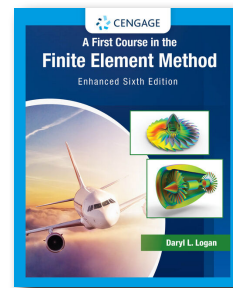
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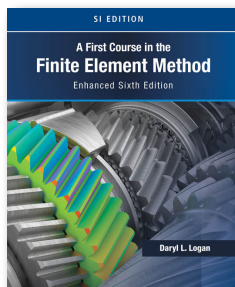
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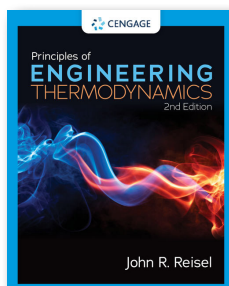
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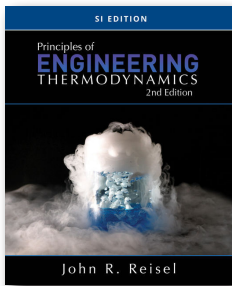
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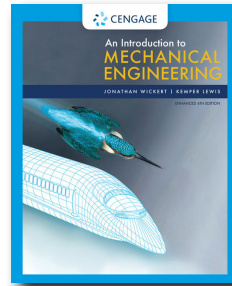
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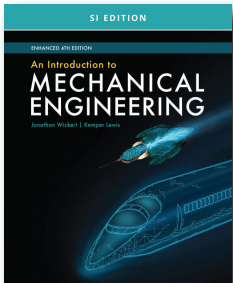
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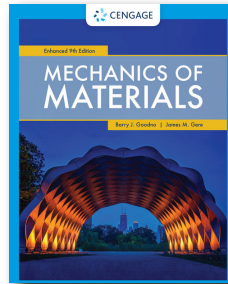
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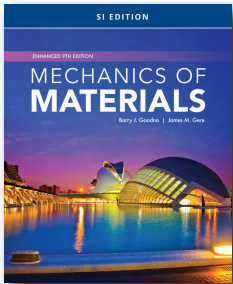
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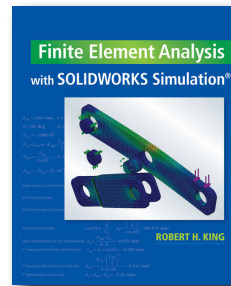
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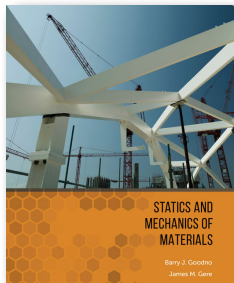
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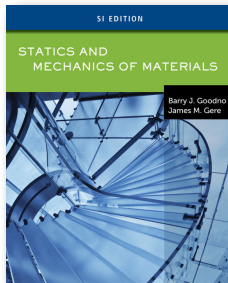
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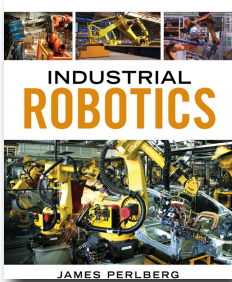


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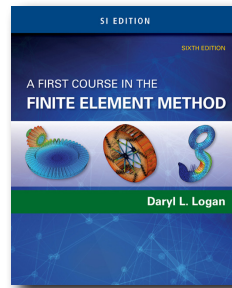
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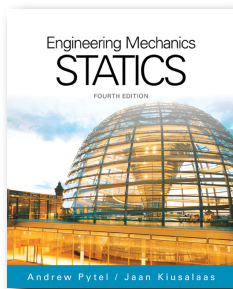
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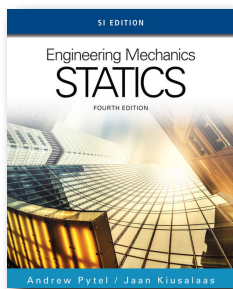
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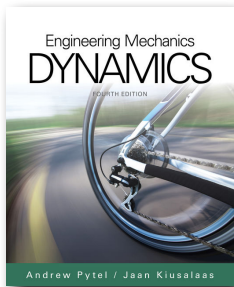
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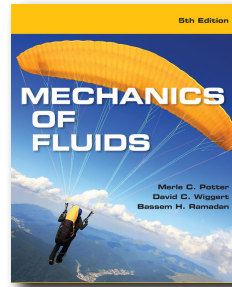
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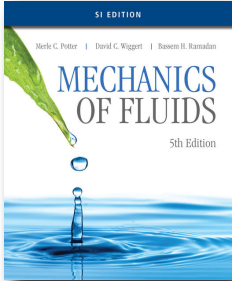
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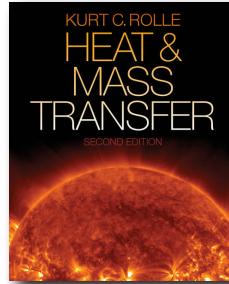
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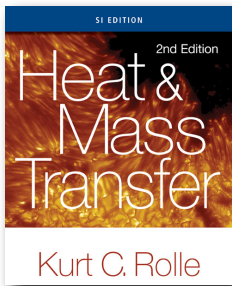
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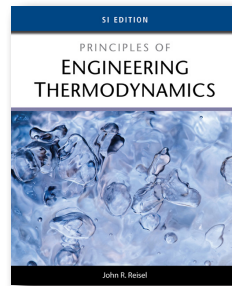
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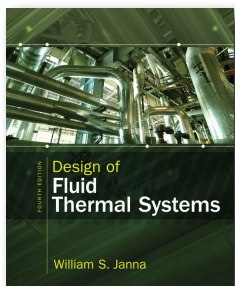
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This book is designed to serve senior-level engineering students taking a capstone design course in fluid and thermal systems design. It is built from the ground up with the needs and interests of practicing engineers in mind; the emphasis is on practical

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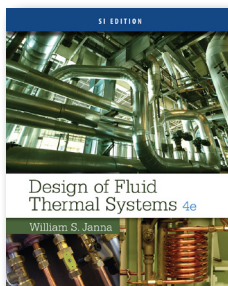
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This book is designed to serve senior-level engineering students taking a capstone design course in fluid and thermal systems design. It is built from the ground up with the needs and interests of practicing engineers in mind; the emphasis is on practical

applications. The book begins with a discussion of design methodology, including the process of bidding to obtain a project, and project management techniques. The text continues with an introductory overview of fluid thermal systems (a pump and pumping system, a household air conditioner, a baseboard heater, a water slide, and a vacuum cleaner are among the examples given), and a review of the properties of fluids and the equations of fluid mechanics. The text then offers an in-depth discussion of piping systems, including the economics of pipe size selection. Janna examines pumps (including net positive suction head considerations) and piping systems. He provides the reader with the ability to design an entire system for moving fluids that is efficient and cost-effective. Next, the book provides a review of basic heat transfer principles, and the analysis of heat exchangers, including double pipe, shell and tube, plate and frame cross flow heat exchangers. Design considerations for these exchangers are also discussed. The text concludes with a chapter of term projects that may be undertaken by teams of students.

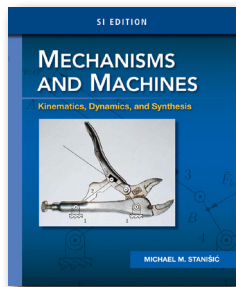
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**MECHANISMS AND MACHINES**  
Kinematics, Dynamics, and Synthesis, SI Edition  
*Michael M. Stanisic, University of Notre Dame*

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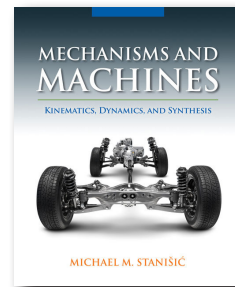
**MECHANISMS AND MACHINES: KINEMATICS, DYNAMICS, AND SYNTHESIS** has been designed to serve as a core textbook for the mechanisms and machines course, targeting junior level mechanical engineering students. The book is

written with the aim of providing a complete, yet concise, text that can be covered in a single-semester course. The primary goal of the text is to introduce students to the synthesis and analysis of planar mechanisms and machines, using a method well suited to computer programming, known as the Vector Loop Method. Author Michael Stanisic's approach of teaching synthesis first, and then going into analysis, will enable students to actually grasp the mathematics behind mechanism design. The book uses the vector loop method and kinematic coefficients throughout the text, and exhibits a seamless continuity in presentation that is a rare find in engineering texts. The multitude of examples in the book cover a large variety of problems and delineate an excellent problem solving methodology.

**MECHANISMS AND MACHINES**  
Kinematics, Dynamics, and Synthesis  
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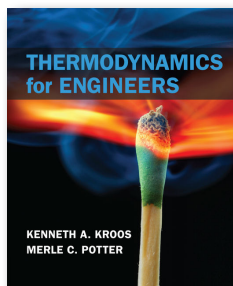
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## THERMODYNAMICS FOR ENGINEERS

*Kenneth A. Kroos, Villanova University; Merle C. Potter, Professor Emeritus, Michigan State University*

© 2015, 624pp, Hardback, 9781133112860

MindTap eBook



THERMODYNAMICS FOR ENGINEERS focuses on outcome-based learning, which has been identified by ABET as an essential aspect of engineering curricula. Learning outcomes are listed at the start of each chapter and identified as completed at

relevant places in the text, followed by a summary at the end of each chapter. Authors Kenneth Kroos and Merle Potter bring decades of teaching experience to a clear writing style that describes key concepts without straying from the course. The language of thermodynamics is explained in careful detail so that students can quickly understand the concepts presented and the analysis techniques used. Extensive use of practical examples demonstrates the proper set-up and solution of problems. These skills are then further developed using a wide variety of homework problems. Some homework problems are presented with an increased degree of complexity to allow the instructor to challenge the more accomplished. THERMODYNAMICS FOR ENGINEERS focuses on clearly outlining the role of thermodynamics in “real” engineering. It takes students through clear explanations of concepts, followed by mathematical techniques of analysis and applications of these in solving engineering problems.

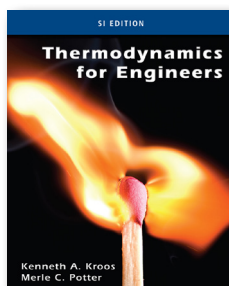
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## THERMODYNAMICS FOR ENGINEERS, SI EDITION

*Kenneth A. Kroos, Villanova University; Merle C. Potter, Professor Emeritus, Michigan State University*

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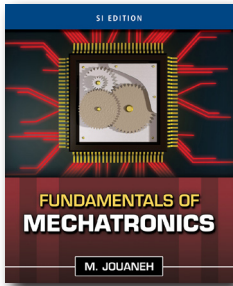
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## FUNDAMENTALS OF MECHATRONICS, SI EDITION

Musa Jouaneh, *University of Rhode Island*

© 2013, 399pp, Paperback, 9781111569020

### eBook



The objective of FUNDAMENTALS OF MECHATRONICS is to cover both hardware and software aspects of mechatronics systems in a single text, giving a complete treatment to the subject matter. The text focuses on application

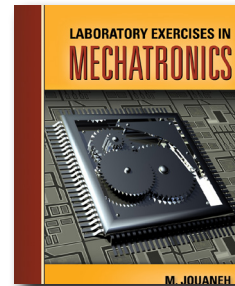
considerations and relevant practical issues that arise in the selection and design of mechatronics components and systems. The text uses several programming languages to illustrate the key topics. Different programming platforms are presented to give instructors the choice to select the programming language most suited to their course objectives. A separate laboratory book, with additional exercises is provided to give guided hands-on experience with many of the topics covered in the text.

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## LABORATORY EXERCISES IN MECHATRONICS

Musa Jouaneh, *University of Rhode Island*

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This book contains mechatronics laboratory exercises designed to give the student hands-on experience with applications of the concepts covered in a mechatronics course. 14 laboratory exercises are included plus a section that has a list of suggested

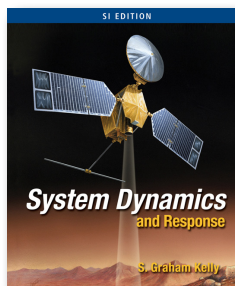
extended or final projects. The first six laboratory exercises are designed to illustrate basic measurements, electrical circuits and electronic concepts. Later exercises focus on microcontrollers, timing and state-transition diagrams, sensors, stepper motors, and feedback control.

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## SYSTEM DYNAMICS AND RESPONSE - SI VERSION

S. Graham Kelly, University of Akron

© 2009, 736pp, Paperback, 9780495438540



As engineering systems become more increasingly interdisciplinary, knowledge of both mechanical and electrical systems has become an asset within the field of engineering. All engineers should have general facility with modeling of dynamic

systems and determining their response and it is the objective of this book to provide a framework for that understanding. The study material is presented in four distinct parts; the mathematical modeling of dynamic systems, the mathematical solution of the differential equations and integro differential equations obtained during the modeling process, the response of dynamic systems, and an introduction to feedback control systems and their analysis. An Appendix is provided with a short introduction to MATLAB as it is frequently used within the text as a computational tool, a programming tool, and a graphical tool. SIMULINK, a MATLAB based simulation and modeling tool, is discussed in chapters where the development of models use either the transfer function approach or the state-space method.

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## INDUSTRIAL TECHNOLOGY

### MECHANICAL TECHNOLOGY

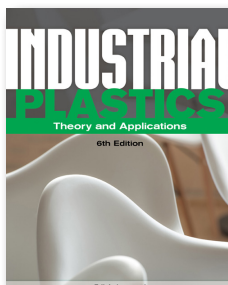
#### INDUSTRIAL PLASTICS, 6E

Theory and Applications

Erik Lokensgard, Eastern Michigan University, Ypsilanti, MI

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#### eBook



Now in its 6th edition, Industrial Plastics: Theory and Applications is back, with the extensive, detailed graphics and practical lab exercises that made previous editions so popular. In this latest edition, these trademark features accompany

updated coverage of the plastics industry, offering the very latest information on state-of-the-art equipment, with a special emphasis on processing techniques. Coverage includes plastics recycling, ISO and ASTM testing specifications, current health and safety standards, as well as examinations of current environmental issues like recycling, pollution, and incineration. With such broad coverage alongside hands-on activities to provide a clear link between theory and practice, Industrial Plastics continues to be an invaluable resource for students and professionals alike.

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# Notes



**Cengage Learning Asia Pte Ltd**

30A Kallang Place, #12-06

Singapore 339213

T (65) 6410 1200

F (65) 6410 1208

E [asia.info@cengage.com](mailto:asia.info@cengage.com)

URL [www.cengageasia.com](http://www.cengageasia.com)