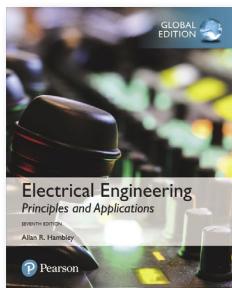


# Engineering

## Electrical Engineering



### Electrical Engineering: Principles and Applications, 7e

Allan R. Hambley

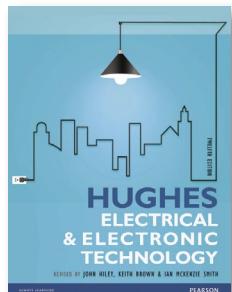
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*Electrical Engineering: Principles and Applications* helps students learn electrical-engineering fundamentals with minimal frustration. Its goals are to present basic concepts in a general setting, to show students how the principles of electrical engineering apply to specific problems in their own fields and to enhance the overall learning process. Circuit analysis, digital systems, electronics and electromechanics are covered. This edition has been updated with many new practice tests and end-of-chapter problems.



### Hughes Electrical and Electronic Technology, 12e

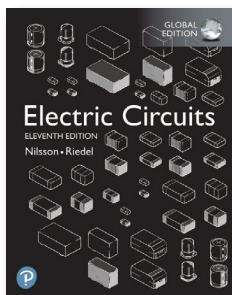
Edward Hughes, John Hiley,  
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### Electric Circuits, 11e

James Nilsson & Susan Riedel

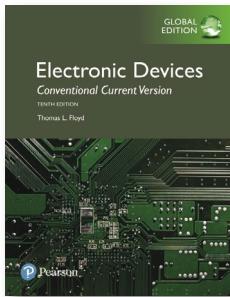
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The fundamental goals of the best-selling *Electric Circuits* remain unchanged. The 11th Edition continues to motivate students to build new ideas based on concepts previously presented, to develop problem-solving skills that rely on a solid conceptual foundation and to introduce realistic engineering experiences that challenge students to develop the insights of a practicing engineer. This edition represents the most extensive revision since the Fifth Edition with every sentence, paragraph, subsection and chapter examined and often rewritten to improve clarity, readability and pedagogy – without sacrificing the breadth and depth of coverage that *Electric Circuits* is known for. Dr. Susan Riedel draws on her classroom experience to introduce the Analysis Methods feature, which gives students a step-by-step problem-solving approach.



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Thomas L. Floyd

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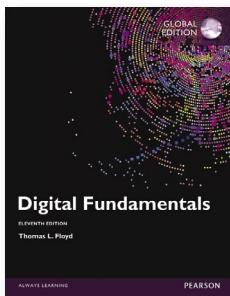
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### Course: Circuit Analysis

*Electronic Devices* provides a solid foundation in basic analog electronics and a thorough introduction to analog integrated circuits and programmable devices. The text identifies the circuits and components within a system, helping students see how the circuit relates to the overall system function. Full-color photos and illustrations and easy-to-follow worked examples support the text's strong emphasis on real-world application and troubleshooting. Updated throughout, the Tenth Edition features selected circuits keyed to Multisim V14 and LT Spice files so that students learn how to simulate, analyze and troubleshoot using the latest circuit simulation software.

**Electron Flow version also available**



## Digital Fundamentals, 11e

Thomas L. Floyd

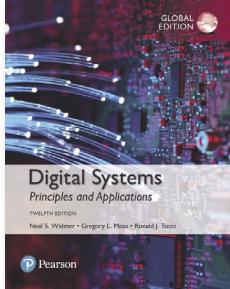
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### Course: Digital Electronics

*Digital Fundamentals, Eleventh Edition*, continues its long and respected tradition of offering students a strong foundation in the core fundamentals of digital technology, providing basic concepts reinforced by plentiful illustrations, examples, exercises and applications. The text's teaching and learning resources include an Instructor's Manual, PowerPoint lecture slides and Test Bank, as well as study resources for students.



## Digital Systems, 12e

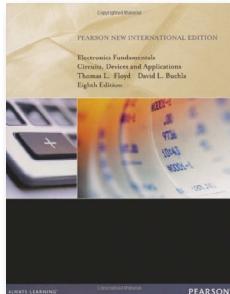
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### Course: Digital Electronics

Written for all courses in digital electronics – from introductory to advanced, from high school to two and four-year college programs – this Twelfth Edition of *Digital Systems* thoroughly prepares students for the study of digital systems and computer and microcontroller hardware. The text begins with the basics of digital systems, including the AHDL hardware description language, then gradually progresses to increasingly challenging topics, including the more complex VHDL.



## Electronics Fundamentals: Circuits, Devices & Applications, 8e

Thomas L. Floyd & David Buchla

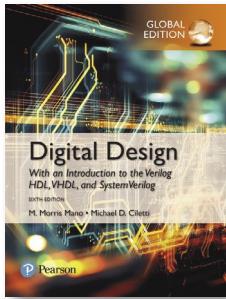
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This renowned text offers a comprehensive yet practical exploration of basic electrical and electronic concepts, hands-on applications and troubleshooting. Written in a clear and accessible narrative, the Seventh Edition focuses on fundamental principles and their applications to solving real circuit analysis problems and devotes six chapters to examining electronic devices.

# ENGINEERING

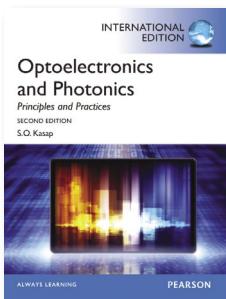


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A modern update to a classic, authoritative text, *Digital Design, Sixth Edition* teaches the fundamental concepts of digital design in a clear, accessible manner. It presents the basic tools for the design of digital circuits and provides procedures suitable for a variety of digital applications. It supports a multimodal approach to learning, with a focus on digital design, regardless of language. Recognizing that three public-domain languages – Verilog, VHDL and SystemVerilog – all play a role in design flows for today's digital devices, the text now offers parallel tracks of presentation of multiple languages, but allows concentration on a single, chosen language.



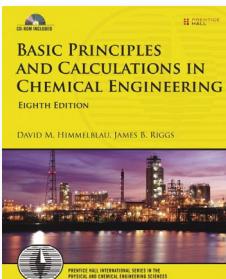
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## Chemical Engineering

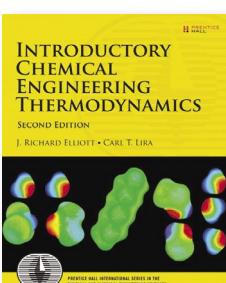


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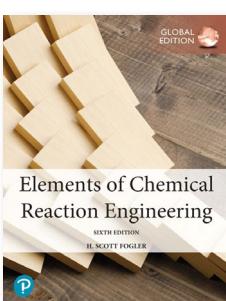


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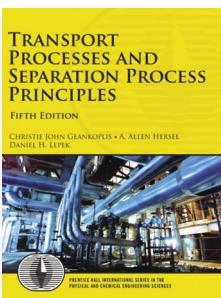


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H. Scott Fogler  
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### Course: Chemical Reaction Engineering

Writing for today's students, Fogler provides instant access to information, avoids extraneous details, and presents novel problems linking theory to practice. The book thoroughly prepares undergraduates to apply chemical reaction kinetics and physics to the design of chemical reactors, and four advanced chapters address graduate-level topics. Plus, each chapter now ends with a practical safety lesson.



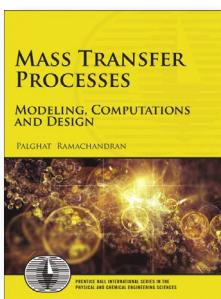
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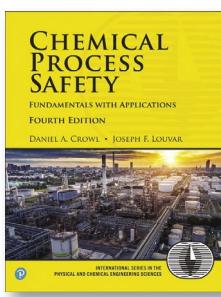
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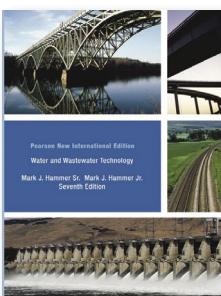
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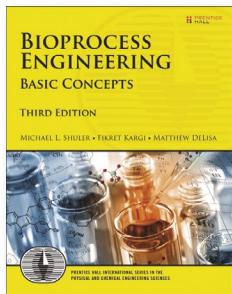
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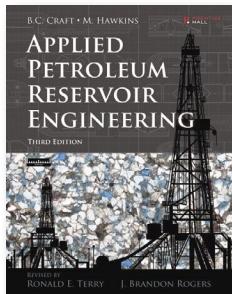
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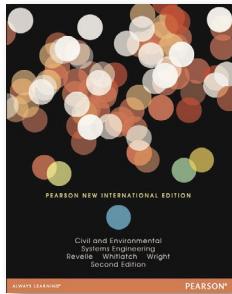
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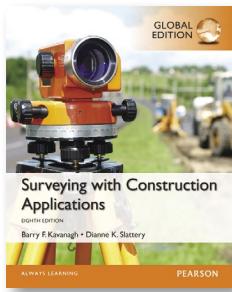


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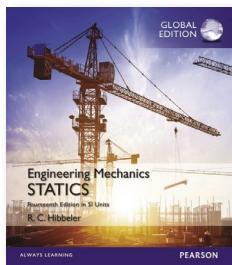
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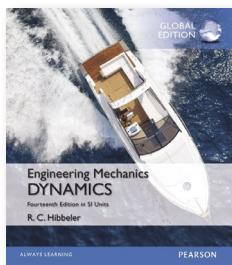
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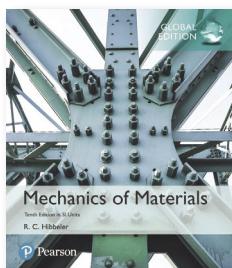
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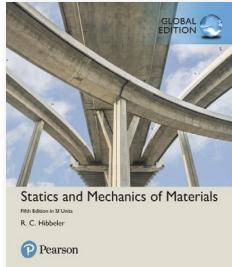
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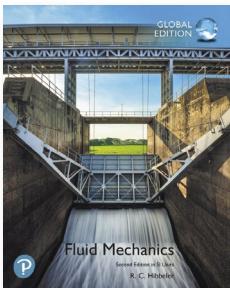
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# ENGINEERING



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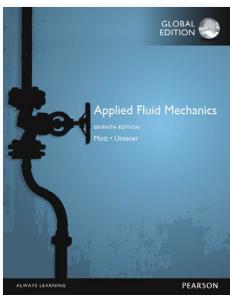
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## Applied Fluid Mechanics, 7e

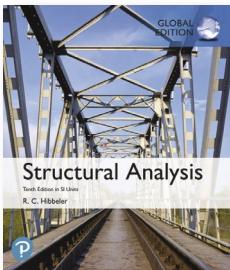
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Now in full color with an engaging new design, *Applied Fluid Mechanics, Seventh Edition*, is the fully updated edition of the most popular applications-oriented approach to engineering fluid mechanics. It offers a clear and practical presentation of all basic principles of fluid mechanics (both statics and dynamics), tying theory directly to real devices and systems used in mechanical, chemical, civil and environmental engineering.

## Structural Engineering



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Russell C. Hibbeler

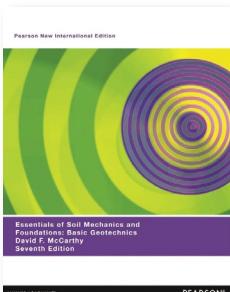
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## Essentials of Soil Mechanics and Foundations: Basic Geotechnics, 7e

David F. McCarthy

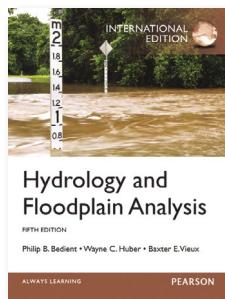
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### Course: Soil Mechanics

*Essentials of Soil Mechanics and Foundations: Basic Geotechnics* provides a clear, detailed presentation of soil mechanics: the background and basics, the engineering properties and behavior of soil deposits and the application of soil mechanics theories. Appropriate for soil mechanics courses in engineering, architectural and construction-related programs, this edition features a separate chapter on earthquakes, a more logical organization and new material relating to pile foundations design and construction and soil permeability.

## Environmental Engineering



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Philip B. Bedient, Wayne C. Huber & Baxter E. Vieux

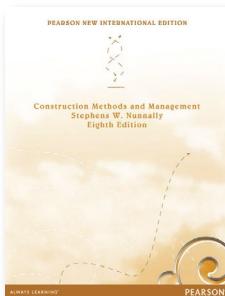
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This text offers a clear and up-to-date presentation of fundamental concepts and design methods required to understand hydrology and floodplain analysis. It addresses the computational emphasis of modern hydrology and provides a balanced approach to important applications in watershed analysis, floodplain computation, flood control, urban hydrology, stormwater design and computer modeling.

## Construction Engineering



### Construction Methods and Management, 8e

Stephens W. Nunnally

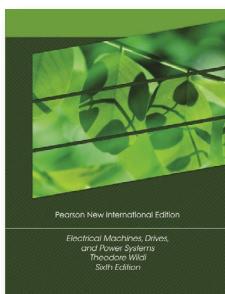
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#### **Course:** Construction Management

*Construction Methods and Management* is designed to guide construction engineers and managers in planning, estimating and directing construction operations safely and effectively. Comprehensive and up-to-date, the text integrates major construction management topics with an explanation of the methods of heavy/highway and building construction. It incorporates both customary U.S. units and metric (SI) units and is the only text to present concrete formwork design equations and procedures using both measurement systems. This edition features information on the latest developments in soil excavation, asphalt paving and earthmoving equipment.

## Power and Machines



### Electrical Machines, Drives and Power Systems, 6e

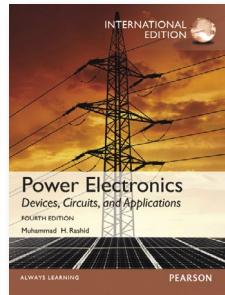
Theodore Wildi

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#### **Course:** Electric Machines

This best-selling text employs a theoretical, practical, multidisciplinary approach to provide introductory students with a broad understanding of modern electric power. The scope of the book reflects the rapid changes that have occurred in power technology over the past few years – allowing the entrance of power electronics into every facet of industrial drives and expanding the field to open more career opportunities.



### Power Electronics: Devices, Circuits and Applications, 4e

Muhammad H. Rashid

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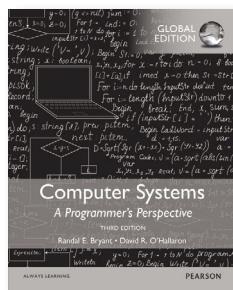
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#### **Course:** Power Electronics

This text covers the basics of emerging areas in power electronics and a broad range of topics such as power switching devices, conversion methods, analysis and techniques and applications. Its unique approach covers the characteristics of semiconductor devices first, then discusses the applications of these devices for power conversions. Four main applications are included: flexible ac transmissions (FACTs), static switches, power supplies, dc drives and ac drives.

# ENGINEERING

## Computer Engineering



### Computer Systems: A Programmer's Perspective, 3e

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& David R. O'Hallaron

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#### **Course:** Computer Architecture

*Computer systems: A Programmer's Perspective* explains the underlying elements common among all computer systems and how they affect general application performance. Written from the programmer's perspective, this book strives to teach students how understanding basic elements of computer systems and executing real practice can lead them to create better programs. Spanning across computer science themes such as hardware architecture, the operating system and systems software, the Third Edition serves as a comprehensive introduction to programming.



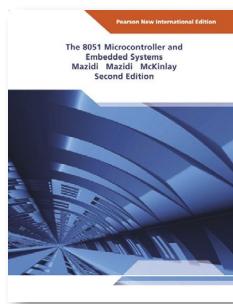
### Parallel Algorithms CP

Pranay Chaudhuri

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#### **Course:** Parallel Processing

This book covers a wealth of important material on parallel algorithms in depth for the solution of problems in a variety of application areas highlighting the importance of parallel graph algorithms. It covers all existing material and research on parallel graph algorithms as well as other important topics relating to parallel algorithms such as: parallel matrix and boolean matrix multiplication algorithms.



### 8051 Microcontroller and Embedded Systems, 2e

Muhammad Ali Mazidi, Janice G. Mazidi & Rolin D. McKinlay

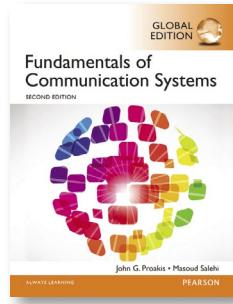
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#### **Course:** Embedded Systems

Mazidi's 8051 Microcontroller text emphasizes the programming and interfacing of the 8051. A systematic, step-by-step approach is used to cover various aspects of 8051. C and Assembly language programming and interfacing. Many examples and sample programs are given to clarify the concepts and provide students with an opportunity to learn by doing.

## Networking and Communication



### Fundamentals of Communication Systems, 2e

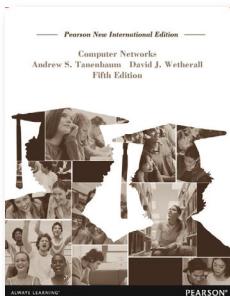
John G. Proakis & Masoud Salehi

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#### **Course:** Communication Systems

This text introduces the basic techniques used in modern communication systems and provides fundamental tools and methodologies used in the analysis and design of these systems. The authors emphasize digital communication systems, including new generations of wireless communication systems, satellite communications and data transmission networks. A background in calculus, linear algebra, basic electronic circuits, linear system theory and probability and random variables is assumed.



## Computer Networks, 5e

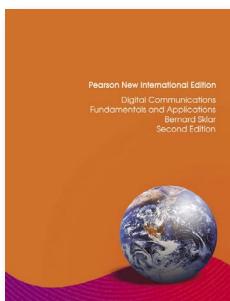
Andrew S. Tanenbaum  
& David J. Wetherall

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### Course: Computer Networks

Tanenbaum takes a structured approach to explaining how networks work from the inside out. He starts with an explanation of the physical layer of networking, computer hardware and transmission systems; then works his way up to network applications. Tanenbaum's in-depth application coverage includes email; the domain name system; the World Wide Web (both client- and server-side); and multimedia (including voice over IP, Internet radio video on demand, video conferencing and streaming media).



## Digital Communications: Fundamentals and Applications, 2e

Bernard Sklar

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### Course: Digital Communication

Exceptionally accessible, this book presents the often difficult concepts of digital communications in an easy-to-understand manner – without diluting the mathematical precision. Using a student-friendly approach, it develops the important techniques in the context of a unified structure – providing organization and structure to a field that has and continues, to grow rapidly and ensuring that students gain an awareness of the big picture even while delving into the details. It traces signals and key processing steps from the information source through the transmitter, channel, receiver and ultimately to the information sink.



## Advanced Electronic Communications Systems, 6e

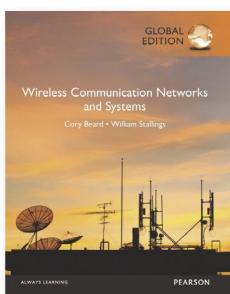
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### Course: Telecommunications

Comprehensive in scope and contemporary in coverage, this text explores modern digital and data communications systems, microwave radio communications systems, satellite communications systems and optical fiber communications systems.



## Wireless Communication Networks and Systems

Cory Beard & William Stallings

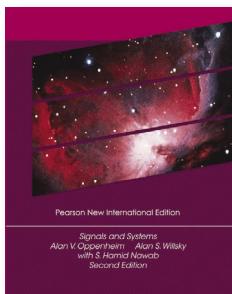
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*Wireless Communication Networks and Systems* covers all types of wireless communications, from satellite and cellular to local and personal area networks. Organized into four easily comprehensible, reader-friendly parts, it presents a clear and comprehensive overview of the field of wireless communications. For those who are new to the topic, the book explains basic principles and fundamental topics concerning the technology and architecture of the field.

## Signals and Systems



### Signals and Systems, 2e

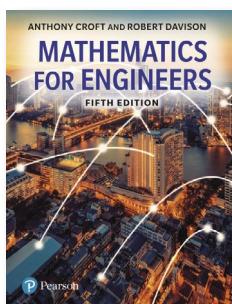
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#### Course: Signals and Systems

This comprehensive exploration of signals and systems develops continuous-time and discrete-time concepts/methods in parallel – highlighting the similarities and differences. It features introductory treatments of the applications of these basic methods in such areas as filtering, communication, sampling, discrete-time processing of continuous-time signals and feedback. Relatively self-contained, the text assumes no prior experience with system analysis, convolution, Fourier analysis, or Laplace and z-transforms.

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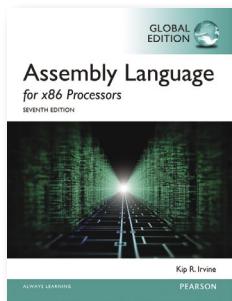
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*Mathematics for Engineers* introduces Engineering students to Maths, building up right from the basics. Examples and questions throughout help students to learn through practice and applications sections labelled by engineering stream encourage an applied and fuller understanding. Understanding key mathematical concepts and applying them successfully to solve problems are vital skills that all engineering students must acquire. *Mathematics for Engineers* teaches, develops and nurtures those skills. Practical, informal and accessible, it begins with the foundations and gradually builds upon this knowledge as it introduces more complex concepts to cover all requirements for a first year engineering maths course, together with introductory material for even more advanced topics.

## Microcomputers, Microprocessors and Chips



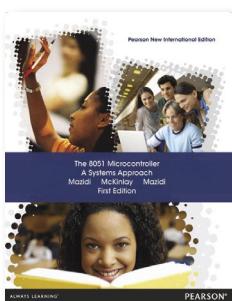
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Kip R. Irvine

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### The 8051 Microcontroller: A Systems Approach

Muhammad A. Mazidi, Rolin D. McKinlay & Janice G. Mazidi

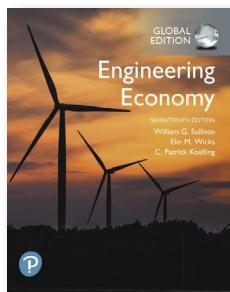
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#### Course: Microcontrollers

*The 8051 Microprocessor: A Systems Approach* emphasizes the programming and interfacing of the 8051. Using a systematic, step-by-step approach, the text covers various aspects of 8051, including C and Assembly language programming and interfacing. Throughout each chapter, examples, sample programs and sectional reviews clarify the concepts and offer students an opportunity to learn by doing.

## Engineering Economy and Management



### Engineering Economy, 16e

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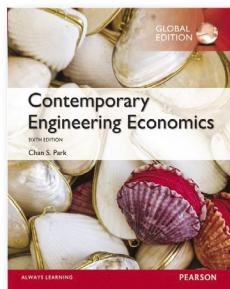
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Chan S. Park

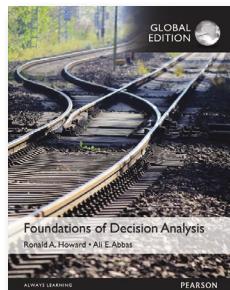
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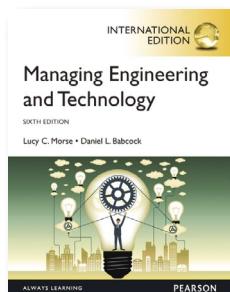
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Lucy C. Morse & Daniel L. Babcock

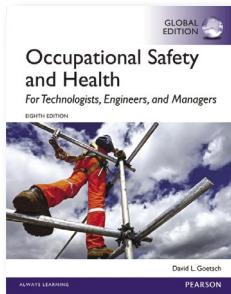
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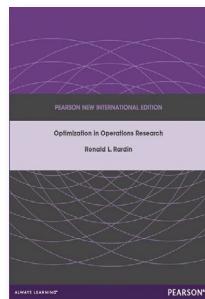
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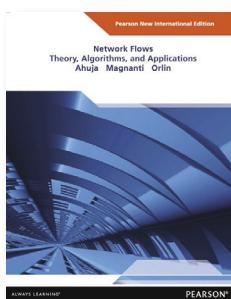
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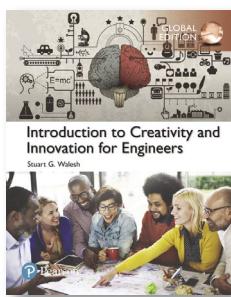
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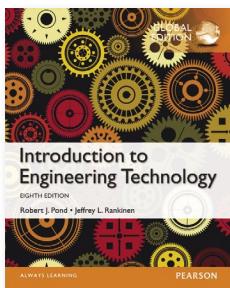
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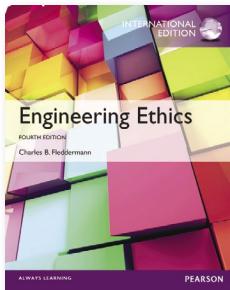
This first edition of *Introduction to Creativity and Innovation for Engineers* was primarily designed for engineering students interested in acquiring knowledge, skills and attitudes that will help them be more creative and innovative. While intended primarily for engineering students, the widely applicable principles, ideas, tools and methods introduced will also be useful for practicing engineers and as well as members of other disciplines.



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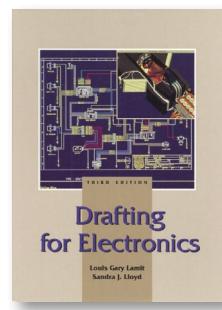
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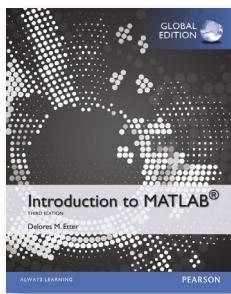
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# ENGINEERING



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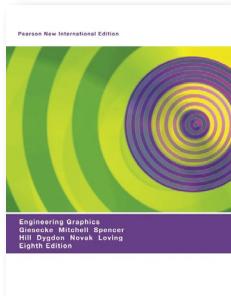
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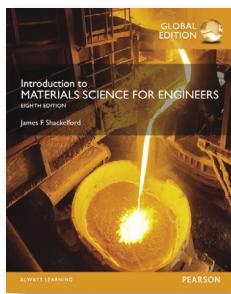
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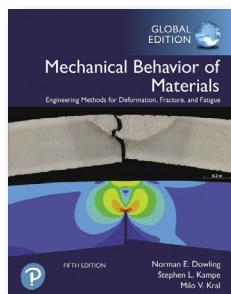
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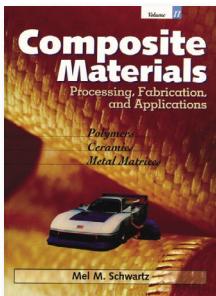
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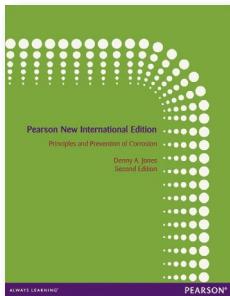
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## Engineering Design



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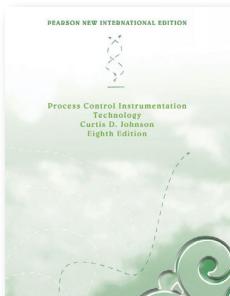
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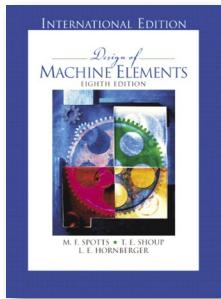
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# ENGINEERING



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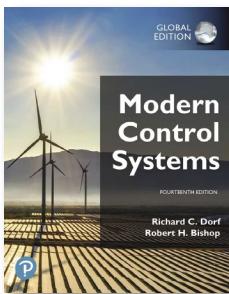
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## Control

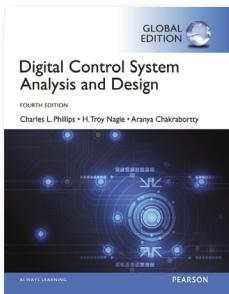


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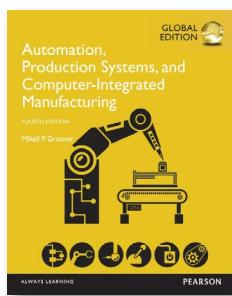


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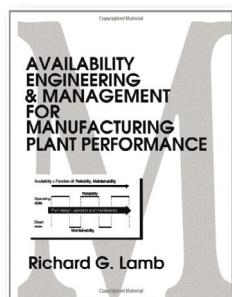
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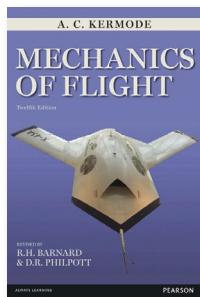
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