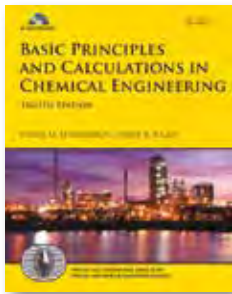




Engineering

Chemical Engineering



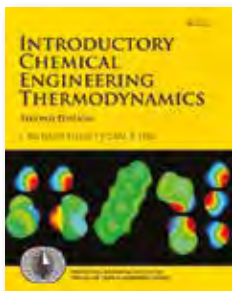
Basic Principles and Calculations in Chemical Engineering, 8e

David M. Himmelblau
& James B. Riggs

9780132346603 • ©2012
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Course: Introduction to Chemical Engineering

Basic Principles and Calculations in Chemical Engineering, Eighth Edition goes far beyond traditional introductory chemical engineering topics, presenting applications that reflect the full scope of contemporary chemical, petroleum, and environmental engineering. Celebrating its fiftieth Anniversary as the field's leading practical introduction, it has been extensively updated and reorganized to cover today's principles and calculations more efficiently, and to present far more coverage of bioengineering, nanoengineering, and green engineering.



Introductory Chemical Engineering Thermodynamics, 2e

J. Richard Elliott & Carl T. Lira

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912pp • Hardback • £111.99

Course: Thermodynamics

In this book, two leading experts and long-time instructors thoroughly explain thermodynamics, taking the molecular perspective that working engineers require (and competitive books often avoid). This edition contains extensive coverage of today's fast-growing biochemical engineering applications, notably biomass conversion to fuels and chemicals.



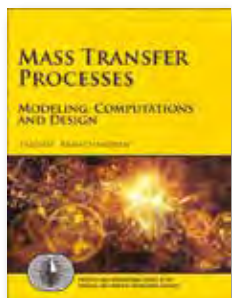
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Course: Chemical Fluid Mechanics

Appropriate for one-year transport phenomena (also called transport processes) and separation processes course. First semester covers fluid mechanics, heat and mass transfer; second semester covers separation process principles (includes unit operations).



Mass Transfer Processes: Modeling, Computations, and Design

P. A. Ramachandran

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1056pp • Paperback • £118.99

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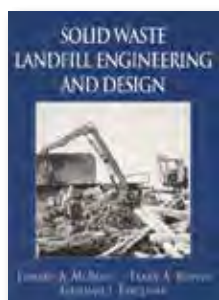
Chemical Process Safety: Fundamentals with Applications, 3e

Daniel A. Crowl & Joseph F. Louvar

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As chemical processes have grown more complex, so have the safety systems required to prevent accidents. *Chemical Process Safety, Third Edition*, offers students a more fundamental and engineering science based understanding of safety and the application required to safely design and manage today's sophisticated processes.



Solid Waste Landfill Engineering and Design

Edward A. McBean, Frank A. Rovers
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544pp • Paperback • £83.99

Course: Hazardous Waste Management

Solid waste disposal – especially after the Love Canal incident – has become the focus of public awareness and concern for pollution. This book provides a synthesis of existing knowledge on solid waste landfilling – with a focus on solving problems with landfill gas, managing leachate, and implementing environmentally secure operating procedures. It explores the fundamentals of solid waste decomposition, and considers how these influence landfill design, operational features, and improvements in overall site performance.



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Mark J. Hammer, Sr.
& Mark J. Hammer

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Bioprocess Engineering: Basic Concepts, 2e

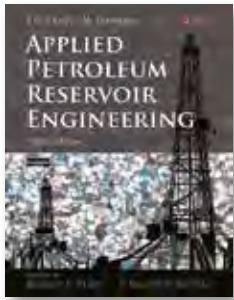
Michael L. Shuler & Fikret Kargi

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Course: Biochemical Engineering

This concise yet comprehensive text introduces the essential concepts of bioprocessing – internal structure and functions of different types of microorganisms, major metabolic pathways, enzymes, microbial genetics, kinetics and stoichiometry of growth and product information – to traditional chemical engineers and those in related disciplines. It explores the engineering principles necessary for bioprocess synthesis and design, and illustrates the application of these principles to modern biotechnology for production of pharmaceuticals and biologics, solution of environmental problems, production of commodities, and medical applications.

Petroleum Engineering



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Ronald E. Terry &
J. Brandon Rogers

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Civil Engineering



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For junior/senior-level courses in Systems Analysis or Systems Analysis and Economics as applied to civil engineering. This text is designed to enhance the student's learning experience by providing exposure to modeling ideas and concepts. Network flow problems are emphasized by highlighting their study separately from the general integer programming models that are considered. With a wider range of examples and exercises that conclude many chapters, this text offers students an extremely practical, accessible study on the most modern skills available for the design, operation and evaluation of civil and environmental engineering systems.



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Mechanics and Materials Engineering



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Mechanics of Materials in SI Units, 10e

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Statics and Mechanics of Materials in SI Units, 5e

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Course: Statics and Strength of Materials

Statics and Mechanics of Materials represents a combined abridged version of two of the author's books, namely *Engineering Mechanics: Statics, Fourteenth Edition* and *Mechanics of Materials, Tenth Edition*. It provides a clear and thorough presentation of both the theory and application of the important fundamental topics of these subjects, that are often used in many engineering disciplines. The development emphasizes the importance of satisfying equilibrium, compatibility of deformation, and material behavior requirements.



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Russell C. Hibbeler

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Structural Engineering



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

David F. McCarthy

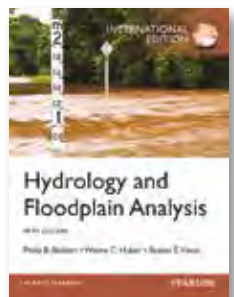
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eBook: 9781292054353 • £47.99

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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Construction Engineering



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Stephens W. Nunnally

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384pp • Paperback • £57.99

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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.



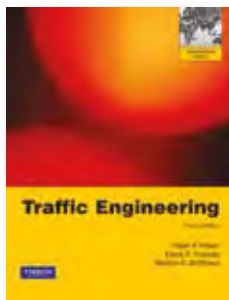
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Richard Wirtz

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Course: Refrigeration and Air Conditioning

Created as a HVAC/R technical reference guide for undergraduate courses dealing with electricity, air flow, controls, refrigeration cycle, heating, psychrometrics, boilers, heat pumps, motors heat transfer, load calculations and more. Useful for beginners in the field or as a reference for advanced students.



Traffic Engineering, 4e

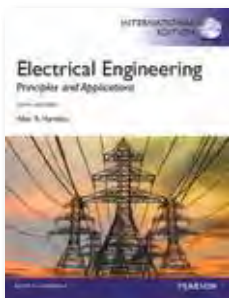
Roger P. Roess, Elena S. Prassas
& William R. McShane

9780132076524 • ©2010
744pp • Paperback • £146.99

Course: Transportation Engineering and Planning

This unique text focuses on the key engineering skills required to practice traffic engineering in a modern setting. It includes material on the latest standards and criteria of the Manual on Uniform Traffic Control Devices (2003 Edition and forthcoming 2010 Edition), the Policy on Geometric Design of Highways and Streets (2004 Edition), the Highway Capacity Manual (2000 Edition and forthcoming 2010 Edition), and other critical references. It also presents both fundamental theory and a broad range of applications to modern problems.

Electrical Engineering



Electrical Engineering: Principles and Applications, 6e

Allan R. Hambley

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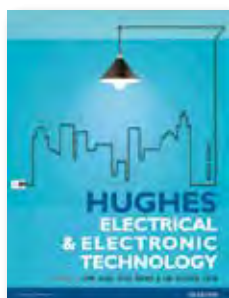
eBook: 9780273793458 • £52.00

Available with Mastering Engineering Package: 9781447961628 • £68.82

Course: Introduction to Electrical Engineering

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. A wide variety of pedagogical features stimulate student interest and engender awareness of the material's relevance to their chosen profession.

New edition coming in 2018



Hughes Electrical and Electronic Technology, 12e

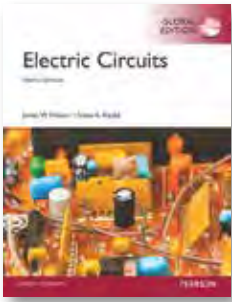
Edward Hughes, John Hiley,
Ian McKenzie-Smith & Keith Brown

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1008pp • Paperback • £58.99

eBook: 9781292093086 • £47.99

Course: Introduction to Electrical Engineering

All engineers need to understand the fundamental principles of electrical and electronic technology. This best-selling text provides a clear and accessible introduction to the area, with balanced coverage of electrical, electronic, and power engineering.



Electric Circuits, 10e

James Nilsson & Susan Riedel

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eBook: 9781292065472 • £55.99

Available with Mastering Engineering
Package: 9781292060897 • £87.96

Course: Circuit Analysis

Electric Circuits is the most widely used introductory circuits textbook of the past 25 years. As this book has evolved to meet the changing learning styles of students, the underlying teaching approaches and philosophies remain unchanged.



Electronic Devices (Conventional Current Version), 9e

Thomas L. Floyd

9781292025643 • ©2013
952pp • Paperback • £68.99

eBook: 9781292038070 • £55.99

Course: Circuit Analysis

Electronic Devices (Conventional Current Version) 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 Ninth Edition features new GreenTech Applications and a new chapter, Basic Programming Concepts for Automated Testing.

New edition coming in 2018
Electron Flow version also available



Digital Fundamentals, 11e

Thomas L. Floyd

9781292075983 • ©2015
912pp • Paperback • £62.99

eBook: 9781292075990 • £50.99

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

Ronald Tocci, Neal Widmer
& Greg Moss

9781292162003 • ©2017
1024pp • Paperback • £64.99

eBook: 9781292162010 • £52.00

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.



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Neil Weste & David Harris

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Course: Integrated Circuit Technology

The Fourth Edition of this authoritative, comprehensive textbook presents broad and in-depth coverage of the entire field of modern CMOS VLSI Design. The authors draw upon extensive industry and classroom experience to introduce today's most advanced and effective chip design practices. They present extensively updated coverage of every key element of VLSI design, and illuminate the latest design challenges with 65 nm process examples.



Electronics Fundamentals: Circuits, Devices & Applications, 8e

Thomas L. Floyd & David Buchla

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eBook: 9781292038117 • £55.99

Course: Introduction to Electronics

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.



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M. Morris Mano & Michael D. Ciletti

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eBook: 9780273775461 • £50.99

Course: Digital Design

Digital Design, Fifth Edition is a modern update of the classic authoritative text on digital design. This book teaches the basic concepts of digital design in a clear, accessible manner. The book presents the basic tools for the design of digital circuits and provides procedures suitable for a variety of digital applications.

New edition coming in 2018



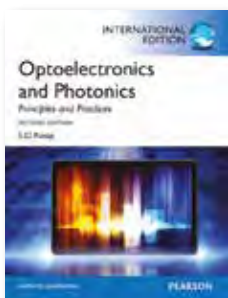
RF Microelectronics, 2e

Behzad Razavi

9780132839419 • ©2012
960pp • Paperback • £99.99

Course: Microwave Circuits and Devices

RF Microelectronics, Second Edition teaches RF analysis and design systematically, one step at a time, taking readers all the way from specification through practical solution. Behzad Razavi has thoroughly revised his classic text to incorporate the latest developments in RF architecture, circuits, and devices, and to cover all key topics in greater detail.



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Safa O. Kasap

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eBook: 9780273774181 • £47.99

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For one-semester, undergraduate-level courses in *Optoelectronics and Photonics*, in the departments of electrical engineering, engineering physics, and materials science and engineering. This text takes a fresh look at the enormous developments in electro-optic devices and associated materials – such as Pockels (Lithium Niobate) modulators.

Power and Machines



Electrical Machines, Drives and Power Systems, 6e

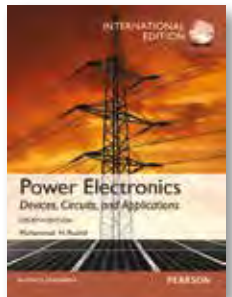
Theodore Wildi

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eBook: 9781292037325 • £47.99

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

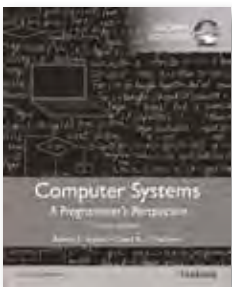
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1032 • Paperback • £59.99

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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.

Computer Engineering



Computer Systems: A Programmer's Perspective, 3e

Randal E. Bryant
& David R. O'Hallaron

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1120pp • Paperback • £57.99

Available with Mastering Engineering
Package: 9781292109428 • £68.02

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

9780133519822 • ©1992
300pp • Paperback • £29.99

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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640pp • Paperback • £58.99

eBook: 9781292038957 • £47.99

Course: Embedded Systems

Mazidi's 8051 Microcontroller text emphasises 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

9781292015682 • ©2014
928pp • Paperback • £59.99

eBook: 9781292015699 • £47.99

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

9781292024226 • ©2013
808pp • Paperback • £56.99

eBook: 9781292037189 • £46.00

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

9781292026060 • ©2013
1072pp • Paperback • £59.99

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.



Optical Fiber Communications: Principles and Practice, 3e

John Senior

9780130326812 • ©2008
1128pp • Paperback • £59.99

Course: Fiber Optic Communications

Senior is an established core text in a field that is growing fast, and in which technology is constantly evolving. The text succeeds in giving a practical introduction to the fundamentals, problems and techniques of design and utilisation of optical fiber systems. It is respected as the most comprehensive and practical book in the market.



Advanced Electronic Communications Systems, 6e

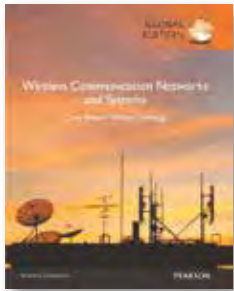
Wayne Tomasi

9781292027357 • ©2013
620pp • Paperback • £66.99

eBook: 9781292056265 • £53.99

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

9781292108711 • ©2015
608pp • Paperback • £54.99

eBook: 9781292108728 • £43.99

Course: Wireless Communications

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

Alan V. Oppenheim, Alan S. Willsky
& S. Hamid

9781292025902 • ©2013
948pp • Paperback • £59.99

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 – and 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.

Biomedical Engineering



Nanotechnology: Science, Innovation, and Opportunity

Lynn E. Foster

9780137025756 • ©2009
336pp • Paperback • £31.99

Course: Biomedical Instrumentation

The focus of this book is how the Nanotechnology industry will unfold and impact different industries throughout the world, and who and what will be the drivers of its development. Discussion of Nanotechnology is moving from theories and definitions of Nanotechnology to the practical issues of implementation and adoption in all types of organizations and industries.

Numerical Methods



Mathematics for Engineers, 4e

Tony Croft & Robert Davison

9781292065939 • ©2015
1216pp • Paperback • £45.99

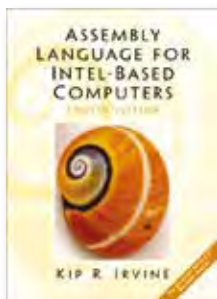
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Kip R. Irvine

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Chan S. Park

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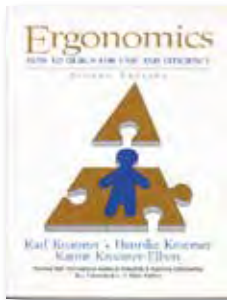
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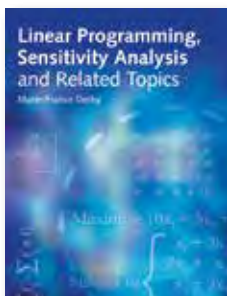
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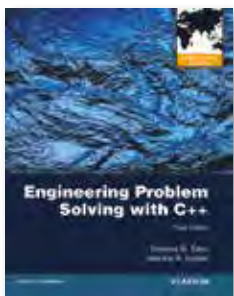
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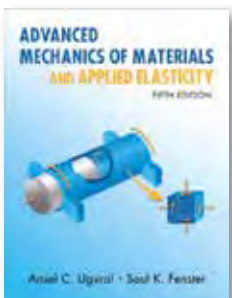
Norman E. Dowling

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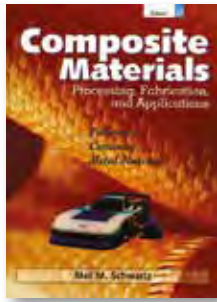
Advanced Mechanics of Materials and Applied Elasticity, 5e

Ansel C. Ugural & Saul K. Fenster

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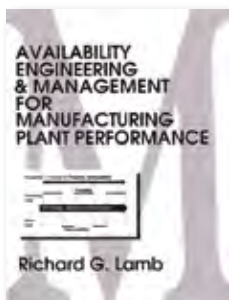
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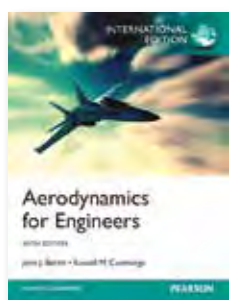
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