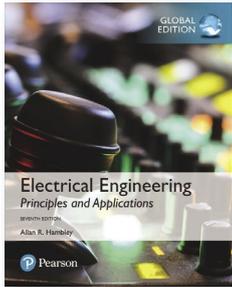


Engineering

Electrical Engineering



Electrical Engineering: Principles and Applications, 7e

Allan R. Hambley

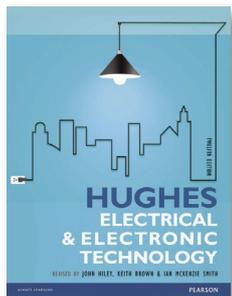
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Course: Introduction to Electrical Engineering

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. This edition has been updated with many new practice tests and end-of-chapter problems.



Hughes Electrical and Electronic Technology, 12e

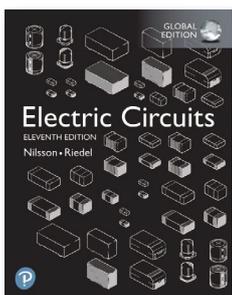
Edward Hughes, John Hiley,
Ian McKenzie-Smith & Keith Brown

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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, 11e

James Nilsson & Susan Riedel

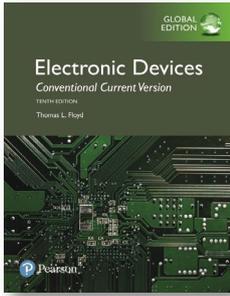
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The fundamental goals of the best-selling *Electric Circuits* remain unchanged. The 11th Edition continues to motivate students to build new ideas based on concepts previously presented, to develop problem-solving skills that rely on a solid conceptual 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.



Electronic Devices (Conventional Current Version), 10e

Thomas L. Floyd

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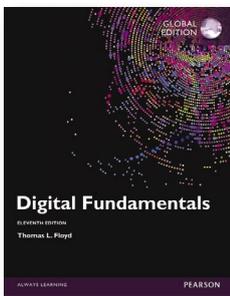
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Pearson Horizon available

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

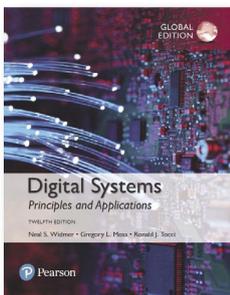
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Course: Digital Electronics

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

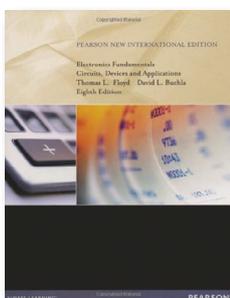
Ronald Tocci, Neal Widmer
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Course: Digital Electronics

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

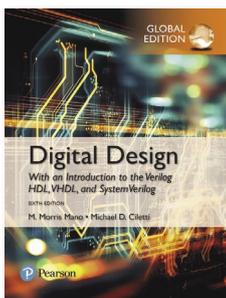
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Course: Introduction to Electronics

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.



Digital Design, 6e

M. Morris Mano & Michael D. Ciletti

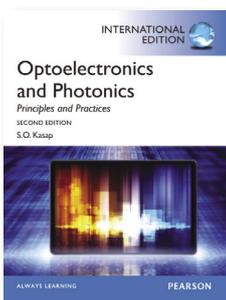
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Course: Digital Design

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.



Optoelectronics & Photonics: Principles & Practices, 2e

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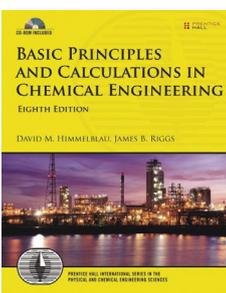
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For one-semester, undergraduate-level courses in *Optoelectronics and Photonics*, in the departments of electrical engineering, engineering physics and materials science and engineering. This text takes a fresh look at the enormous developments in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

Chemical Engineering



Basic Principles and Calculations in Chemical Engineering, 8e

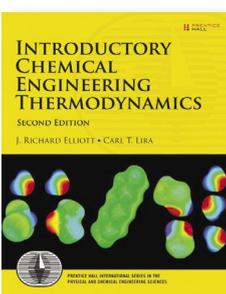
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Introductory Chemical Engineering Thermodynamics, 2e

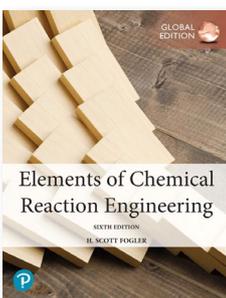
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Course: Thermodynamics

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.



Elements of Chemical Reaction Engineering, 6e

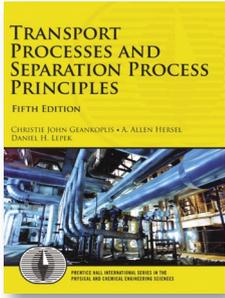
H. Scott Fogler

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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.



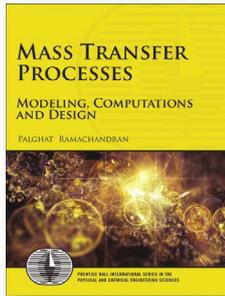
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Today, chemical engineering students need a thorough understanding of momentum, heat, mass transfer and separation processes. *Transport Processes and Separation Process Principles, Fifth Edition* offers a unified and up-to-date treatment of all these topics. Thoroughly updated to reflect the field's latest methods and software technologies, it covers both fundamental principles and practical applications.



Mass Transfer Processes: Modeling, Computations and Design

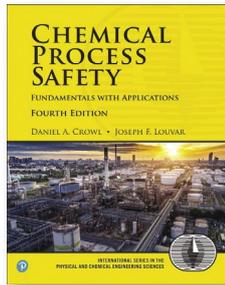
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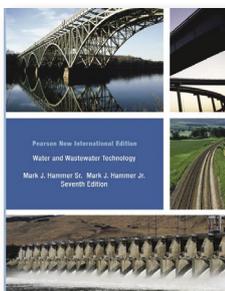
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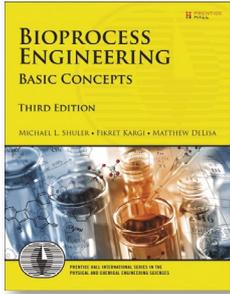
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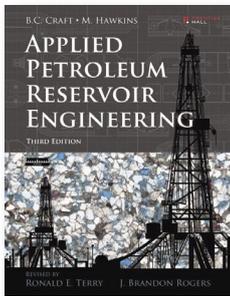
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Petroleum Engineering



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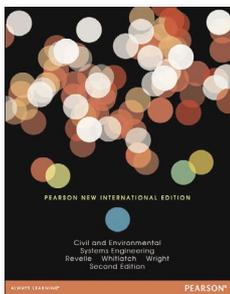
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Introduction to Civil Engineering



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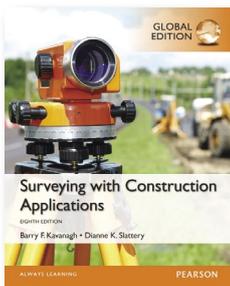
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For junior/senior-level courses in Systems Analysis or Systems Analysis and Economics as applied to civil engineering. This text is designed to enhance the student's learning experience by providing exposure to modeling ideas and concepts. Network 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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Barry Kavanagh & Tom Mastin

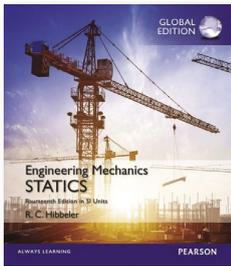
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Mechanics and Materials Engineering



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Russell C. Hibbeler

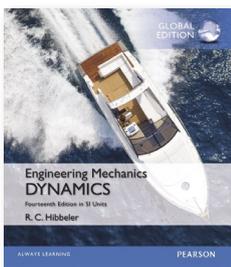
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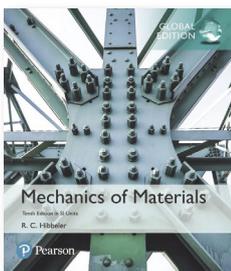
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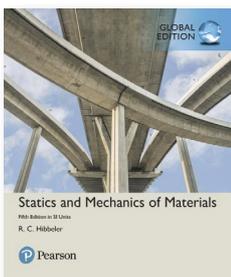
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Statics and Mechanics of Materials in SI Units, 5e

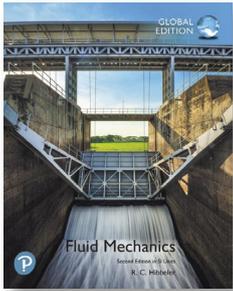
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Statics and Mechanics of Materials represents a combined abridged version of two of the author's books, namely *Engineering Mechanics: Statics, Fourteenth Edition* and *Mechanics of Materials, Tenth Edition*. It provides a clear and thorough presentation 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.



Fluid Mechanics in SI Units, 2e

Russell C. Hibbeler

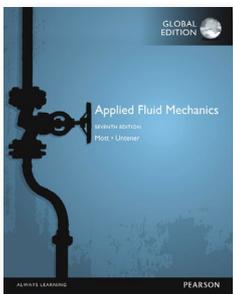
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Applied Fluid Mechanics, 7e

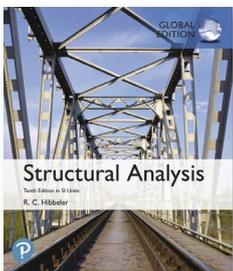
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Now in full color with an engaging new design, *Applied Fluid Mechanics, Seventh Edition*, is the fully updated edition of the most popular applications-oriented approach to engineering fluid mechanics. It offers a clear and practical presentation 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.

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

David F. McCarthy

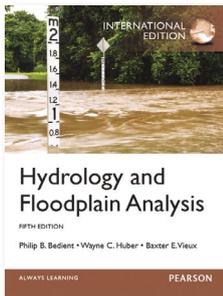
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Course: Soil Mechanics

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

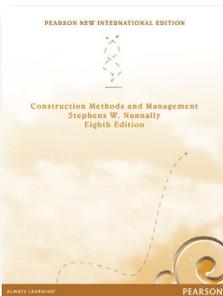
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Construction Engineering



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Stephens W. Nunnally

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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

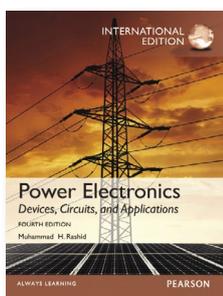
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Course: Electric Machines

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

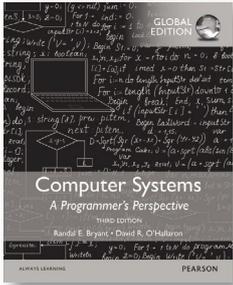
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Course: Power Electronics

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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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.



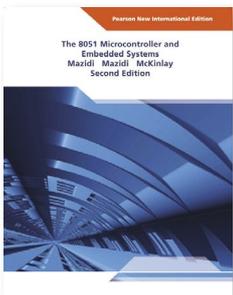
Parallel Algorithms CP

Pranay Chaudhuri

9780133519822 • ©1992
300pp • Paperback

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

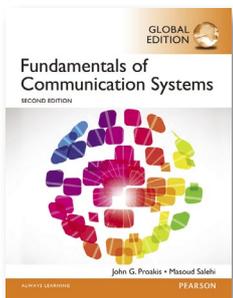
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Course: Embedded Systems

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

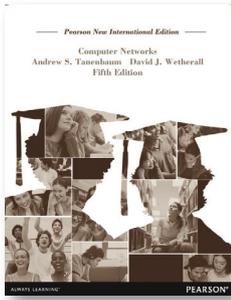
John G. Proakis & Masoud Salehi

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928pp • Paperback

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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

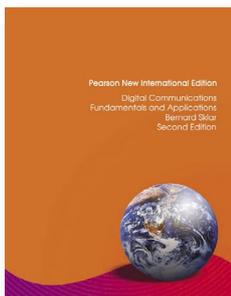
Andrew S. Tanenbaum
& David J. Wetherall

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808pp • Paperback

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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

9781292026060 • ©2013
1072pp • Paperback

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

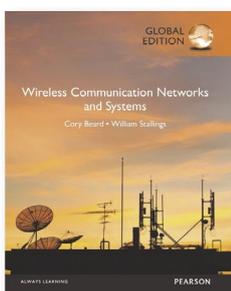
Wayne Tomasi

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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

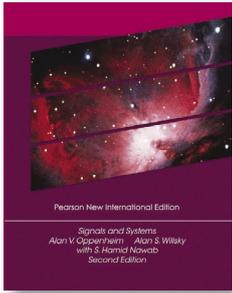
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Course: Wireless Communications

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

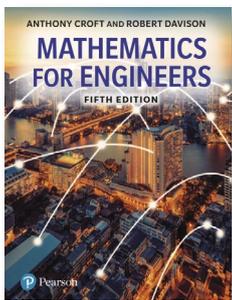
Alan V. Oppenheim, Alan S. Willsky & S. Hamid

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948pp • Paperback

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.

Numerical Methods



Mathematics for Engineers, 5e

Tony Croft & Robert Davison

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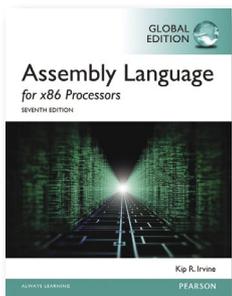
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Available with MyLab Math

Course: Engineering Mathematics

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



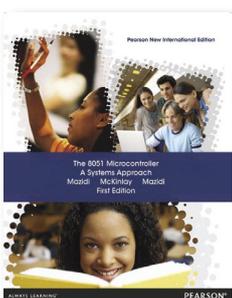
Assembly Language for x86 Processors, 7e

Kip R. Irvine

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Course: Assembly Language Programming – IBM PC

Written specifically for 32- and 64-bit Intel/Windows platform, this complete and fully updated study of assembly language teaches students to write and debug programs at the machine level. This text simplifies and demystifies concepts that students need to grasp before they can go on to more advanced computer architecture and operating systems courses. Students put theory into practice through writing software at the machine level, creating a memorable experience that gives them the confidence to work in any OS/machine-oriented environment.



The 8051 Microcontroller: A Systems Approach

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

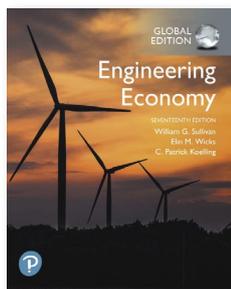
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Course: Microcontrollers

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

William G. Sullivan, Elin M. Wicks
& C. Patrick Koelling

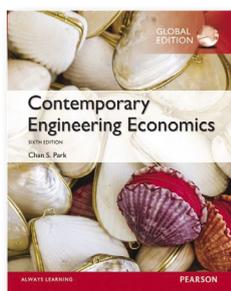
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Course: Engineering Economy

Used by engineering students worldwide, this bestselling text provides a sound understanding of the principles, basic concepts and methodology of engineering economy. Explanations and examples that are student-centered and practical in real-life situations help students develop proficiency in the methods and processes for making rational decisions. Built upon the rich and time-tested teaching materials of earlier editions, the text is extensively revised and updated to reflect current trends and issues. The new edition captures the spirit of environmental sustainability with more than 160 “green” problems, as well as new end-of-chapter problems and group exercises and includes updates to the new 2017 Federal Tax code revisions.



Contemporary Engineering Economics, 6e

Chan S. Park

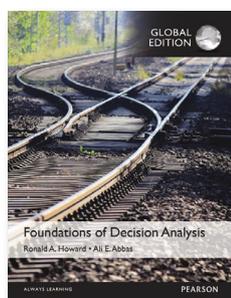
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Course: Engineering Economy

Contemporary Engineering Economics teaches engineers how to make smart financial decisions in an effort to create economical products. As design and manufacturing become an integral part of engineers' work, they are required to make more and more decisions regarding money. The Sixth Edition helps students think like the 21st century engineer who is able to incorporate elements of science, engineering, design and economics into his or her products.



Foundations of Decision Analysis

Ali E. Abbas & Ronald A. Howard

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832pp • Paperback

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Course: Engineering Economics (Advanced)

Foundations of Decision Analysis is a groundbreaking text that explores the art of decision making, both in life and in professional settings. By exploring themes such as dealing with uncertainty and understanding the distinction between a decision and its outcome, the First Edition teaches students to achieve clarity of action in any situation.



Managing Engineering and Technology, 6e

Lucy C. Morse & Daniel L. Babcock

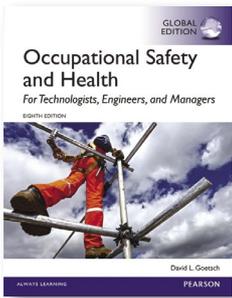
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Course: Engineering Management

Managing Engineering and Technology is designed to teach engineers, scientists and other technologists the basic management skills they will need to be effective throughout their careers.

Human Factors Engineering



Occupational Safety and Health for Technologists, Engineers and Managers, 8e

David L. Goetsch
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Course: Industrial Safety

This comprehensive, extensively updated text covers all aspects of occupational safety and health in today's global workplace. This edition presents new and revised regulations, emerging approaches and trends, updated statistics and other new material of significant importance to students and practitioners in the field. Among the dozens of new topics covered: ROI for safety/health investments; Heinrich's theory; Worker's Compensation lawsuits; fall protection; hard hat ratings; PPE for cold work environments; indoor air quality investigations; fungal growth assessment; nanoscale materials; and noise reduction ratings.

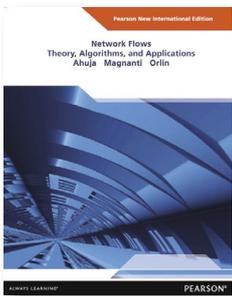


Optimization in Operations Research

Ronald L. Rardin
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Covers a broad range of optimization techniques, including linear programming, network flows, integer/combinational optimization and nonlinear programming. Emphasizes the importance of modeling and problem formulation, this text teaches students how to apply algorithms to real-world problems to arrive at optimal solutions.



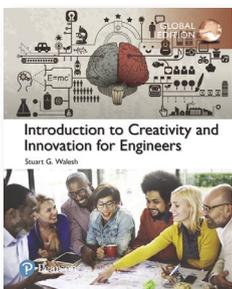
Network Flows: Theory, Algorithms and Applications

Ravindra K. Ahuja,
Thomas L. Magnanti
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Course: Network Programming

A comprehensive introduction to network flows that brings together the classic and the contemporary aspects of the field and provides an integrative view of theory, algorithms and applications.

Introductory Engineering

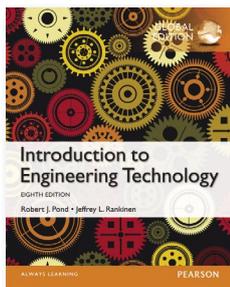


Introduction to Creativity and Innovation for Engineers

Stuart G. Walesh
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368pp • Paperback

Course: ESource/Toolkit/Intro Engineering and Computing Series

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.



Introduction to Engineering Technology, 8e

Robert J. Pond & Jeffrey L. Rankinen

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384pp • Paperback

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Course: Introduction to Engineering Technology

Introduction to Engineering Technology explains the responsibilities of technicians and technologists in the dynamic world of engineering. The basic tools of engineering technology, including problem solving, calculator skills, conversion of units, geometry, computer skills and technical reporting, are explained. Mathematical concepts are presented in a moderately-paced manner, including practical, worked-out examples for the engineering calculator.



Engineering Ethics, 4e

Charles B. Fleddermann

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192pp • Paperback

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Course: Ethics in Engineering

Engineering Ethics serves as both a textbook and a resource for the study of engineering ethics. It is written to help future engineers be prepared for confronting and resolving ethical dilemmas that they might encounter during their professional careers.

Engineering Graphics / Software



Technical Drawing with Engineering Graphics

Frederick E. Giesecke, Ivan Leroy Hill, Henry C. Spencer, Alva Mitchell, John T. Dygdon, James E. Novak, Shawna D. Lockhart & Marla Goodman

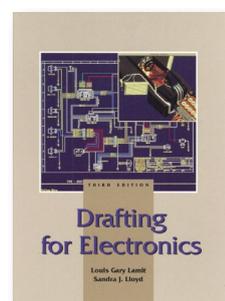
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Course: Computer-Aided Drawing – AutoCAD

Technical Drawing and Engineering Graphics provides a clear, comprehensive introduction and detailed, easy-to-use reference to creating 2D documentation drawings and engineering graphics by hand or using CAD. It offers excellent technical detail, up-to-date standards, motivating real-world examples and clearly explained theory and technique in a colorful, highly visual, concisely written format. Designed as an efficient tool for busy, visually oriented learners, this edition expands on well-tested material, bringing its content up-to-date with the latest standards, materials, industries and production processes.



Drafting for Electronics, 3e

G. Louis Lamit & J. Sandra Lloyd

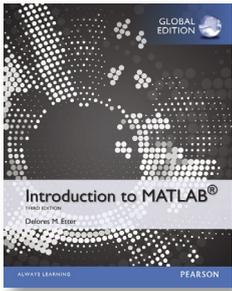
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Course: Drafting for Electronics

Ideal as both a text and reference, this comprehensive introduction to electronic drafting and design is designed to meet the needs of 1) those with drafting skills who need to apply drafting to electronics, 2) those with electronics skills who need introduction to drafting principles and 3) those who need exposure to both electronics applications and drafting fundamentals.

Title available on demand



Introduction to MATLAB, 3e

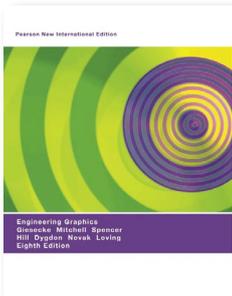
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Course: MATLAB

Best-selling author Delores Etter provides an up-to-date introduction to MATLAB. Using a consistent five-step problem-solving methodology, Etter describes the computational and visualization capabilities of MATLAB and illustrates the problem solving process through a variety of engineering examples and applications.



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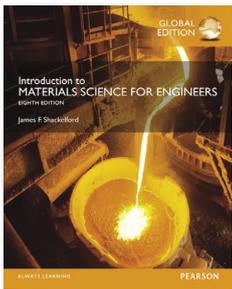
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Course: Engineering Graphics

This authoritative text dominates the market by offering the best coverage of basic graphics principles and an unmatched set of fully machineable working drawings. Its practical, well illustrated, step-by-step explanations of procedures have successfully trained students for 60 years and continue to appeal to today's visually oriented students.

Materials Engineering



Introduction to Materials Science for Engineers, 8e

James F. Shackelford

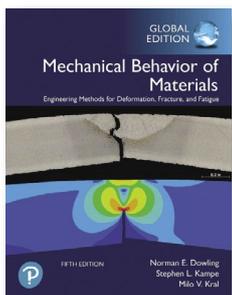
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Course: Materials Science

Introduction to Materials Science for Engineers provides balanced, current treatment of the full spectrum of engineering materials, covering all the physical properties, applications and relevant properties associated with engineering materials. It explores all of the major categories of materials while also offering detailed examinations of a wide range of new materials with high-tech applications.



Mechanical Behavior of Materials, 5e

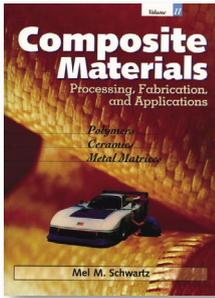
Norman E. Dowling

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Course: Mechanical Behavior of Materials

Mechanical Behavior of Materials, 5th Edition introduces the spectrum of mechanical behavior of materials and covers the topics of deformation, fracture and fatigue. The text emphasizes practical engineering methods for testing structural materials to obtain their properties, predicting their strength and life and avoiding structural failure when used for machines, vehicles and structures. With its logical treatment and ready-to-use format, the text is ideal for upper-level undergraduate students who have completed an elementary mechanics of materials course. The 5th Edition features many improvements and updates throughout including new or revised problems and questions and a new chapter on Environmentally Assisted Cracking.



Composite Materials, Vol. II: Processing, Fabrication and Applications

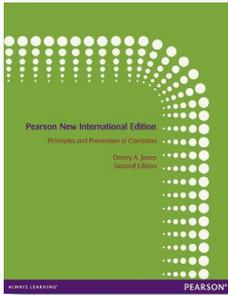
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Course: Composite Materials

This second volume on composite material fabrication, processing and future reinforced composite material systems seeks to cover the vast field of materials and engineering. Postprocessing and manufacturing of composite materials is described, covering joining, machining, forming, drilling, cutting and finishing.

Title available on demand



Principles and Prevention of Corrosion, 2e

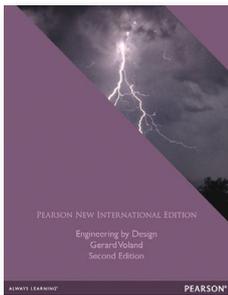
Denny A. Jones

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Course: Corrosion

Comprehensive in approach, this text explores the scientific principles and methods that underlie the cause, detection, measurement and prevention of many metal corrosion problems in engineering practice. Most chapters progress from qualitative, descriptive sections (including methods of prevention and testing), to more quantitative sections (involving metallurgy and electrochemistry) and finally to sections on current research developments in the chapter topic.

Engineering Design



Engineering by Design, 2e

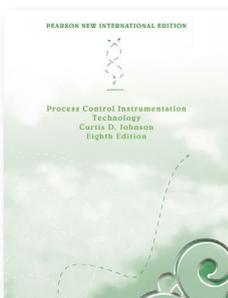
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Course: Design (Introductory)

Engineering by Design introduces students to a broad range of important design topics. The engineering design process provides the skeletal structure for the text, around which is wrapped numerous cases that illustrate both successes and failures in engineering design. The text provides a balance of qualitative presentation of engineering practices that can be understood by students with little technical knowledge and a more quantitative approach in which substantive analytical techniques are used to develop and evaluate proposed engineering solutions. This flexibility means that the text can be used in a wide variety of courses.



Process Control Instrumentation Technology, 8e

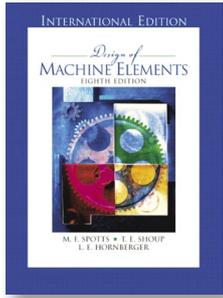
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Course: Measurement and Instrumentation

This text provides students with an understanding and appreciation of some of the essential concepts behind control system elements and operations, without the need of advanced math and theory. It also presents some of the practical details of how elements of a control system are designed and operated. This edition includes treatment of modern fieldbus approaches to networked and distributed control systems. This middle ground of knowledge enables students to design the elements of a control system from a practical, working perspective and comprehend how these elements affect overall system operation and tuning.



Design of Machine Elements, 8e

Merhyle F. Spotts, Terry E. Shoup & Lee E. Hornberger

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Course: Mechanical Design

Considered a classic in its field, this new edition of *Design of Machine Elements* represents over 80 years of combined classroom and industry experience of its three authors. The text presents a comprehensive survey of machine elements and analytical design methods and gives students the tools and techniques necessary to facilitate design calculations for the most frequently encountered mechanical elements.



Kinematics and Dynamics of Machinery, 3e

Charles E. Wilson & J. Peter Sadler

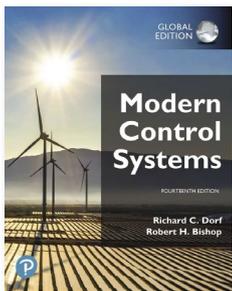
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Course: Mechanism Design

It is a tool for professors who wish to develop the ability of students to formulate and solve problems involving linkages, cams, gears, robotic manipulators and other mechanisms. There is an emphasis on understanding and utilizing the implications of computed results. Students are expected to explore questions like What do the results mean? and How can you improve the design?

Control



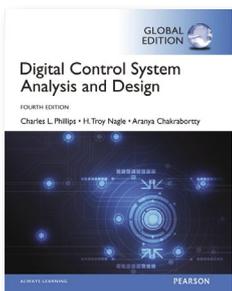
Modern Control Systems, 14e

Richard C. Dorf & Robert H. Bishop

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Course: Control Theory

Designed to progressively develop students' problem-solving skills through an integrated design and analysis approach to real-world engineering problems. *Modern Control Systems* presents the structure of feedback control theory and provides a sequence of exciting discoveries as students proceed through the text and problems. Emphasis is placed on real-world complex control systems and practical design applications as well as evolving design strategies like green engineering and human-centered design.



Digital Control System Analysis & Design, 4e

Charles L. Phillips, Troy Nagle, James Brickley & Aranya Chakraborty

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528pp • Paperback

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Course: Digital Controls

This revision of the best-selling text in digital controls is a significant update with the integration of MATLAB software and new coverage in several areas. This program presents a better teaching and learning experience – for you and your students.

Manufacturing Engineering



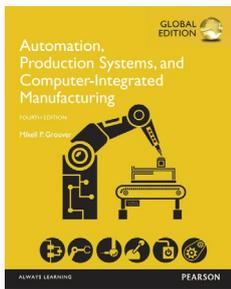
Manufacturing Engineering and Technology, SI Edition, 7e

Serope Kalpakjian & Stephen R. Schmid

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1224pp • Paperback

Course: Manufacturing Processes

Manufacturing Engineering and Technology presents a mostly qualitative description of the science, technology and practice of manufacturing. This includes detailed descriptions of manufacturing processes and the manufacturing enterprise that will help introduce students to important concepts. With a total of 120 examples and case studies and up-to-date and comprehensive coverage of all topics, this text provides a solid background for manufacturing students and serves as a valuable reference text for professionals.



Automation, Production Systems and Computer-Integrated Manufacturing, 4e

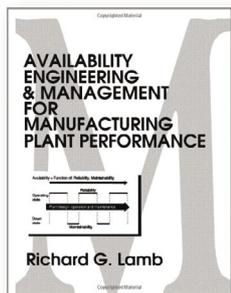
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Course: Automated Manufacturing

This exploration of the technical and engineering aspects of automated production systems provides the most advanced, comprehensive and balanced coverage of the subject of any text on the market. It covers all the major cutting-edge technologies of production automation and material handling and how these technologies are used to construct modern manufacturing systems.

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Availability Engineering and Management for Manufacturing Plant Performance

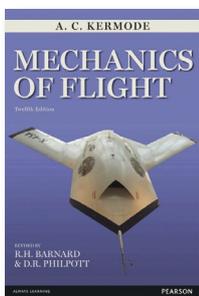
Richard G. Lamb

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Course: Reliability Engineering

In today's manufacturing environment, the integration of commercial, production, maintenance, and engineering functions is a common and crucial goal. In this text Richard G. Lamb presents a new standard within enterprise and plant design management. He shows readers how to advance the plant's role in enterprise business performance and leadership by most cost effectively achieving the mechanical availability necessary to perform in the face of current events, business cycles, and industry trends.

Aeronautical Engineering



Mechanics of Flight, 12e

A.C. Kermode, R.H. Barnard & D.R. Philpott

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512pp • Paperback

Course: Aircraft Design

Mechanics of Flight is an ideal introduction to the basic principles of flight for students embarking on courses in aerospace engineering, student pilots, apprentices in the industry and anyone who is simply interested in aircraft and space flight. Written in a straightforward and jargon-free style, this popular classic text makes the fascinating topic of aircraft flight engaging and easy to understand.