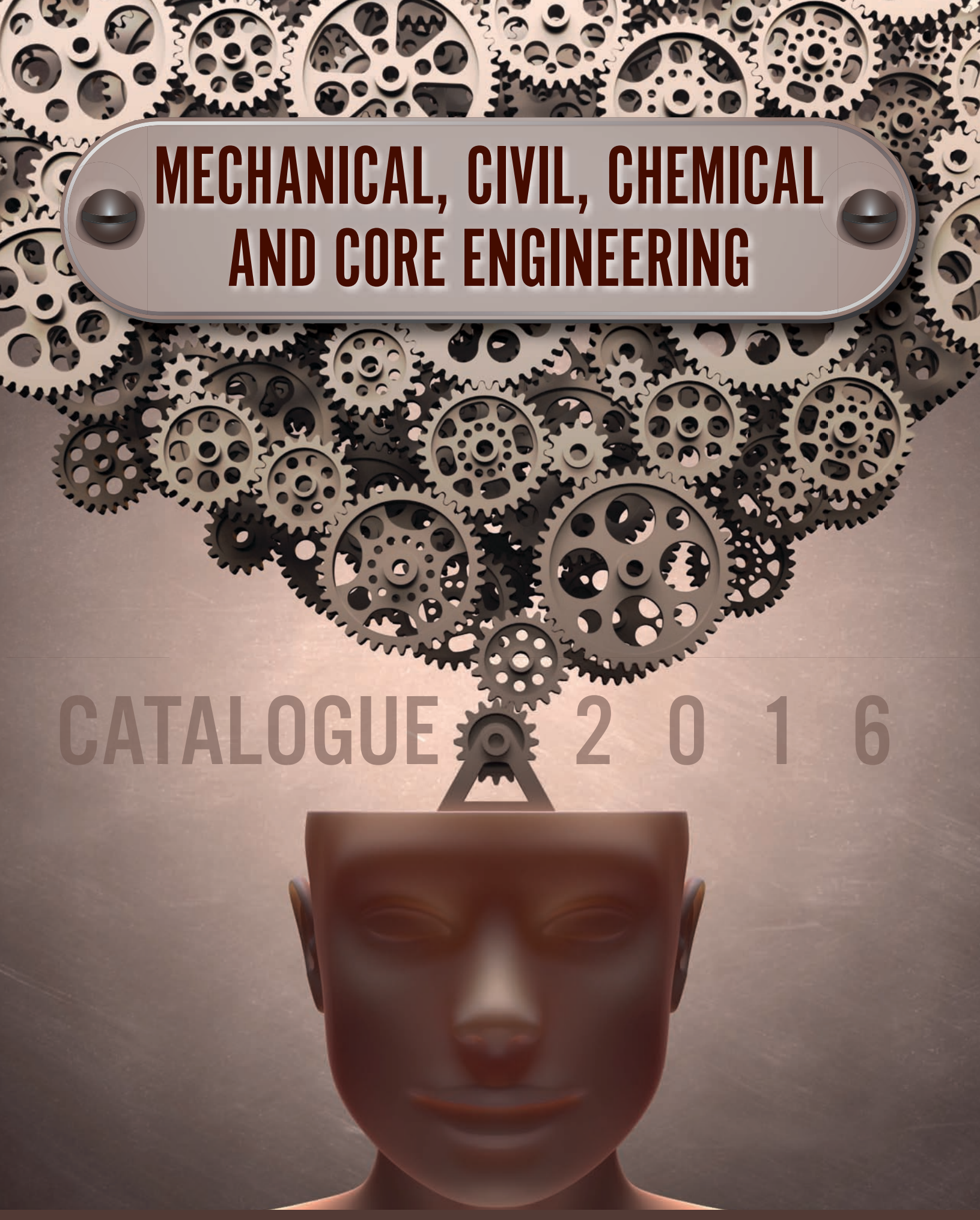
MECHANICAL, CIVIL, CHEMICAL AND CORE ENGINEERING

CATALOGUE 2016



ALWAYS LEARNING

PEARSON

Now available with Pearson

ISBN	Author	Title	Edition
9789332549814	Groover	Automation, Production Systems, and Computer-Integrated Manufacturing	3
9789332551824	Chandrupatla / Belegundu	Introduction to Finite Elements in Engineering	4
9789332549456	Johnson	Process Control Instrumentation Technology	8
9789332549760	Masters	Introduction to Environmental Engineering and Science	3
9789332550216	Popov	Engineering Mechanics of Solids	2
9789332549494	Pulkrabek	Engineering Fundamentals of the Internal Combustion Engine	2
9789332549616	Viessman, Jr. / Hammer / Perez / Chadik	Water Supply and Pollution Control	8
9789332555150	Papacostas	Transportation Engineering and Planning 3e	3
9789332551749	Henry / Heinke	Environmental Science and Engineering	2
9789332549906	Shames / Pitarresi	Introduction to Solid Mechanics	3
9789332550056	Hammer, Sr. / Hammer, Jr.	Water and Wastewater Technology	7
9789332549869	Schodek / Bechthold	Structures	7
9789332550148	Park	Contemporary Engineering Economics	5
9789332550032	Kibbe / White / Meyer / Curran / Stenerson	Machine Tool Practices	9
9789332549753	Blanchard	Logistics Engineering & Management	6
9789332550124	Morse / Babcock	Managing Engineering and Technology	5
9789332555204	Myszka	Machines & Mechanisms: Applied Kinematic Analysis 4e	4
9789332555297	Viessman	Introduction to Hydrology 5e	5
9789332549630	Sincero / Sincero	Environmental Engineering: A Design Approach (With CD)	1
9789332551787	Francis / Mcginnis / White	Facility Layout and Location: An Analytical Approach	2
9789332555143	Wurbs / James	Water Resources Engineering	1
9789332556973	Lindberg	Process and Materials of Manufacture	3
9789332551855	Summers	Quality Management	2
9789332556959	Graedel	Industrial Ecology and Sustainable Engineering	1
9789332549326	H. Scott Fogler	Elements of Chemical Reaction Engineering	4
9789332549432	Christie John Geankoplis	Transport Processes and Separation Process Principles (Includes Unit Operations)	4
9789332549463	George Stephanopoulos	Chemical Process Control: An Introduction to Theory and Practice	1
9789332549371	Michael L. Shuler / Fikret Kargi	Bioprocess Engineering: Basic Concepts	2
9789332549623	David M. Himmelblau / James B. Riggs	Basic Principles and Calculations in Chemical Engineering (With CD)	8
9789332550346	Turton / Bailie / Whiting / Shaeiwitz	Analysis, Synthesis and Design of Chemical Processes	4
9789332549982	Warren J. Luzadder / Jon M. Duff	Fundamentals of Engineering Drawing, The: With an Introduction to Interactive Computer Graphics for Design and Production	11
9789332555235	Schilling	Fundamentals of Robotics: Analysis and Control	1
9789332549340	James D. Bethune	Engineering Graphics with AutoCAD 2015	1
9789332549364	B. G. Kyle	Chemical and Process Thermodynamics	3

Contents

MECHANICAL ENGINEERING

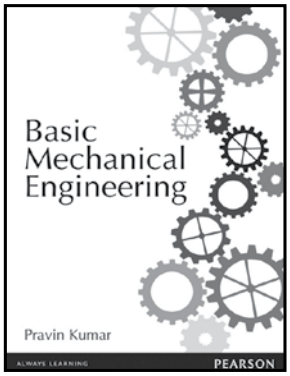
CIVIL ENGINEERING

CHEMICAL ENGINEERING

AERONAUTICAL ENGINEERING

CORE ENGINEERING

Mechanical Engineering



Pravin Kumar

ISBN: 9789332505759
Copyright: 2013
Pages: 732

Basic Mechanical Engineering

About the Book

The text covers the entire gamut of topics on the basic mechanical engineering concepts that are required to be learnt as a pre-requisite to any undergraduate engineering course. The book is divided into three parts - Thermal Engineering (Part I), Mechanics and Machines (Part II), and Manufacturing Science (Part III).
The book lays emphasis on explaining the logic and physics of critical problems to develop analytical skills in students.

Features

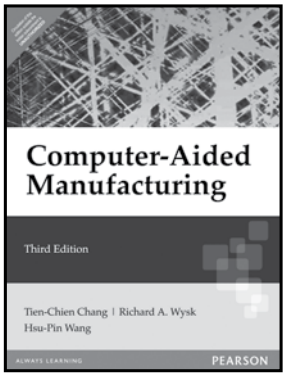
- Highly illustrated to facilitate easy and fast learning
- Coverage of important topics such as power plants, non-conventional energy resources, turbines, NC, CNC AND DNC machines and con-conventional machining processes
- 250+ Solved problems
- 460+ MCQs
- 120+ Practice problems
- 270+ Review Questions
- Important formulae summarized at the end of each chapter

Contents

PART-I: Thermal Engineering
PART-II: Mechanics and Machines
PART-III: Manufacturing Science

About the Author

Dr Pravin Kumar is Assistant Professor in Delhi Technological University (Erstwhile Delhi College of Engineering), Delhi. He has more than 10 years of teaching experience.



Tien-Chien Chang
Richard A. Wysk
Hsu-Pin Wang

ISBN: 9788131721643
Copyright: 2008
Pages: 684

Computer-Aided Manufacturing, 3/e

About the Book

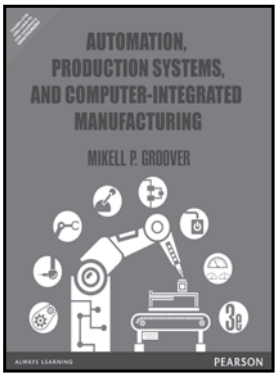
Using a strong science-based and analytical approach, this text provides a modern description of CAM from an engineering perspective to include design specification, process engineering, and production. It begins with discussions of part design and geometric modeling and then gives detailed coverage of individual technologies and building blocks to provide readers with a clear understanding of CAM technology.

Features

- Added material throughout-Includes discussions of CAD drafting, 3D CAD, surface modeling, solid modeling, feature- based modeling, variational and parametric modeling, tools for PLC logic design, kinematics of NC machines, and more to keep students informed of the latest developments in the field.
- 50% new problems; 20% revised-Gives students ample opportunity to practice the concepts learned.
- Focus on all engineering requirements of a product-Including design, process engineering, and automation.

Contents

1. Introduction to Manufacturing
2. Engineering Product Specification
3. Geometric Tolerancing
4. Computer-Aided Design
5. Geometric Modeling
6. Process Engineering
7. Tooling and Fixturing
8. Statistical-Based Process Engineering
9. Fundamentals of Industrial Control
10. Programmable Logic Controllers
11. Data Communications and LANs in Manufacturing
12. Fundamentals of Numerical Control
13. Numerical-Control Programming
14. Rapid Prototyping
15. Industrial Robotics



Mikell P. Groover

ISBN: 9789332549814
Copyright: 2016
Pages: 840

Automation, Production Systems, and Computer-Integrated Manufacturing, 3e

NEW

About the Book

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.

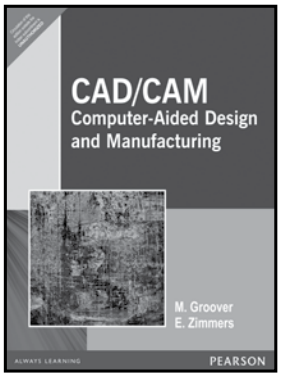
Features

- Quantitative approach – Provides numerous equations and example problems for instructors who want to include analytical and quantitative material in their courses.
- Follows mathematical derivations and engineering equations are statements indicating "What the Equations Tell Us," listing the practical meanings of the equations and what guidelines they provide regarding applications.
- End-of-chapter problems – Enables instructors to assign problems in class rather than design these problems themselves.
- Review questions at the end of every chapter.
- Application guidelines – Included in several of the descriptions of the technologies.
- Historical notes and vignettes – Describe the development and historical background of the automation technologies.
- Review questions and problem exercises for each chapter.
- Numerous example problems of problem types covered in the end-of-chapter exercises.
- Solutions manual – Contains answers to all review questions and solutions to all problems.
- Complete slide set – A complete set of PowerPoint® slides for each chapter with most of the figures in the text.

Contents

About the Authors

MIKELL P. GROOVER is Professor of Industrial and Manufacturing Systems Engineering at Lehigh University, where he also serves as Director of the Manufacturing Technology Laboratory. He holds the following degrees all from Lehigh: B.A. (1961) in Arts and Science, B.S. (1962) in Mechanical Engineering, M.S. (1966) and Ph.D. (1969) in Industrial Engineering. He is a Registered Professional Engineer in Pennsylvania (since 1972). His industrial experience includes full-time employment at Eastman Kodak Company as a Manufacturing Engineer. Since joining Lehigh, he has done consulting, research, and project work for a number of industrial companies including Ingersoll-Rand, Air Products & Chemicals, Bethlehem Steel, and Hershey Foods.



M. Groover
E. Zimmers

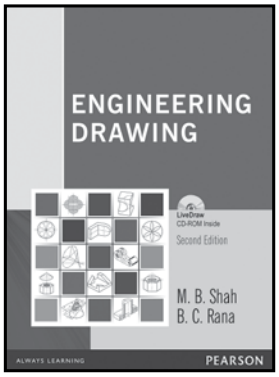
ISBN: 9788177584165
Copyright: 2003
Pages: 512

CAD/CAM: Computer-Aided Design and Manufacturing

About the Book

This is a comprehensive survey of the technical topics relating to CAD/CAM including interactive computer graphics, numerical control, computer process control, robotics, group technology, computer integrated production management, and flexible manufacturing systems.This successful book has been designed as a textbook for college course and industry continuing education course in CAD/CAM, as well as for engineers, computer specialists and others who wish to learn about the technology and applications of CAD/CAM.

Contents



M. B. Shah
B. C. Rana

ISBN: 9788131710562
Copyright: 2009
Pages: 580

CD-ROM
INCLUDED

Engineering Drawing, 2/e

About the Book

Engineering Drawing, 2e continues to cover all the fundamental topics of the field, while maintaining its unique focus on the logic behind each concept and method. Based on extensive market research and reviews of the first edition, this edition includes a new chapter on scales, the latest version of AutoCAD, and new pedagogy.

Features

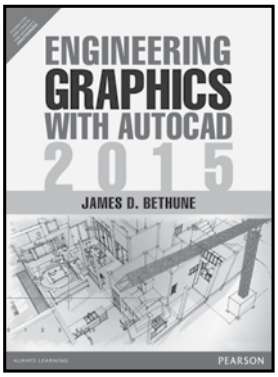
- Learning goals through Objectives
- Overview of the chapter through Introduction
- Recap of concepts through solved examples
- Comes with Live Draw CD

Contents

About the Authors

M. B. Shah is a professor of mechanical engineering and the principal of Shah and Anchor Kutchhi Engineering College, Mumbai.

B. C. Rana was an assistant professor at Veermata Jijabai Technological Institute.



James D. Bethune

ISBN: 9789332549340
Copyright: 2015
Pages: 840

Engineering Graphics with AutoCAD 2015

NEW

About the Book

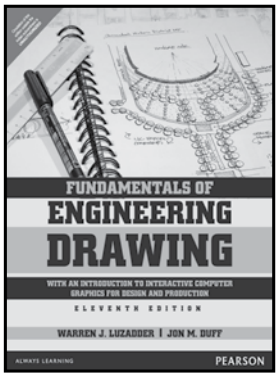
Engineering Graphics with AutoCAD 2015 teaches students technical drawing using AutoCAD 2015 as its drawing instrument, complying with ANSI standards. Taking a step-by-step approach, it encourages students to work at their own pace and uses sample problems and illustrations to guide them through the powerful features of this drawing program. Nearly 150 exercise problems provide instructors with a variety of assignment material and students with an opportunity to develop their creativity and problem-solving capabilities. This book includes the following features:

- **Step-by-step** format throughout the text allows students to work directly from the text to the screen and provides an excellent reference during and after the course.
- **Covers the latest** in dynamic blocks, user interface improvements, and productivity enhancements.
- Exercise, sample problems and projects appear in each chapter, providing examples of software capabilities and giving students an opportunity to apply their own knowledge to realistic design situations. Includes examples of how to create an animated assembly, apply dimension to a drawing, calculate shear and bending values, and more!
- **ANSI standards** are discussed when appropriate, introducing students to the appropriate techniques and national standards.
- **Illustrations and sample problems** provided in every chapter, supporting the step-by-step approach by illustrating how to use AutoCAD 2015 and its features to solve various design problems.

Features

- Uses an easy-to-follow, step-by-step system of teaching, with complete chapter coverage on such areas as:
- AutoCAD's Draw and Modify toolbars and other commands needed to set up and start drawings.
- Tolerancing—Drawing dimensions and tolerances; using geometric tolerances with an explanation of how AutoCAD 2002 can be used to create geometric tolerance symbols directly from dialog boxes and more.
- AutoCAD's 3D commands and coordinate system definitions.
- A solid modeling approach to Descriptive Geometry, with discussions on the true lengths of lines and shapes of planes, point and plane locations, and properties between lines and planes.
- Equips users with fundamental engineering graphics skills within the context of using AutoCAD, yielding students with solid skills into the workplace.

Contents



Warren J. Luzadder
Jon M. Duff

ISBN: 9789332549982
Copyright: 2015
Pages: 768

NEW

The Fundamentals of Engineering Drawing: With an Introduction to Interactive Computer Graphics for Design and Production, 11e

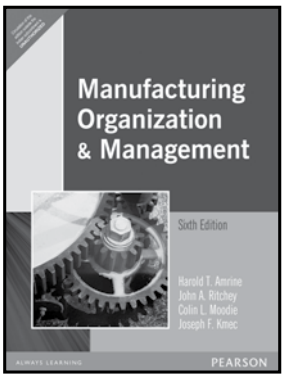
About the Book

- This volume presents a solid fundamental treatment of engineering graphics, geometry, and modeling suitable for engineers and technologists. It reflects the most modern drafting procedures--from the fundamentals (for the beginner), to techniques and practices of drawing in specialized fields. This revision enhances understanding of graphics fundamentals in the era of computer-aided design to better prepare students to use CADD software effectively.

Features

- The Eleventh Edition elaborates on integration of computer graphics through six additional chapters of basic fundamentals; provides two sets of problems to test and reinforce readers' understanding of material; stresses the ability to manipulate three-dimensional geometry-- whether on the surface of a drawing or as a solid computer model; and highlights popular CADD products and integrates CADD into each chapter as it naturally occurs.
- The authors cover all topics basic to the preparation of working drawings for both products and systems--e.g., multiview drawing and freehand sketching, spatial geometry, and design and dimensioning practices; and make extensive use of step-by-step illustrations.

Contents



Harold T Amrine
John A. Ritchey
Colin L. Moodie
Joseph F Kmec

ISBN:9788177582758
Copyright: 1993
Pages: 640

Manufacturing Organization and Management, 6/e

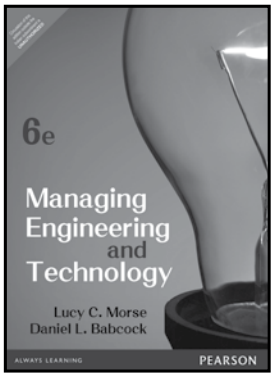
About the Book

Explores the principles, practices, functions, and challenges of manufacturing management -- using an approach that is accessible to those with little or no background in any of the areas of manufacturing organization and management.

Features

- Incorporates the latest developments in technology, methodology, and practice.
- Contains short case study applications.
- Sixth Edition adds chapters on Engineering Quality Assurance and Sales.

Contents



Lucy C. Morse
Daniel L. Babcock

ISBN: 9789332550124
Copyright: 2015
Pages: 500

Managing Engineering and Technology, 5/e

About the Book

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.

Features

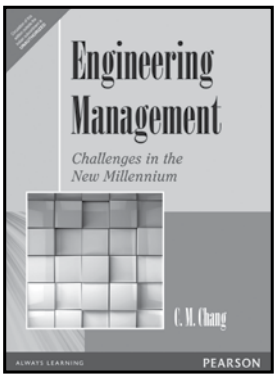
- Introduction to engineering and technology management – Traces the historical development of management and describes the functions--from planning and decision making to organizing, leading, motivating, and controlling.
- Nature and application of management principles throughout the technology product/project life cycles – Including research, design, production, marketing, technical sales and service, and project organization and management.
- Tailored to the needs of the technical professional –Discusses the transition from technical performer to technical management, the importance of professional ethics and conduct, the position of women and minorities in engineering management, effective time management, and the global community.
- Explores traditional management functions of planning, organizing, motivating, and controlling with an emphasis on the management of technology.
- Management methods and tools – Describes concurrent engineering, strategic management of technology, activity-based costing, and total productive maintenance.
- Discussion questions and problems – Addresses current dimensions in engineering and technology management, and asks students to apply material to their own professional experience.

Contents

About the Author

Dr. Lucy C. Morse is an Associate Professor Emerita at the University of Central Florida (UCF). Before retiring from teaching, she was both the Coordinator for the Bachelor of Science in Engineering Technology program, and Director of Engineering Technology at a Distance, a program focused on using advanced learning technologies to deliver engineering technology degrees to students on and off campus. She currently teaches engineering management as an adjunct for UCF. She was the first woman to obtain a doctorate in engineering at UCF, receiving a PhD from the Department of Industrial Engineering in 1987. In the early 90's she served as a Program Manager at the National Science Foundation in the Engineering Directorate.

Daniel L. Babcock began his career as a chemical engineer, earning a BS at Penn State and an SM at MIT. He then served three years as a USAF officer in development testing, three years as a chemist and technical writer for a silicone chemical manufacturer, and three years abstracting progress in solid propellant rocket development on a U.S. government contract. Next, he spent seven years with North American Rockwell Corporation coordinating development and integration of solid and small liquid propellant rocket motors into the Apollo Command and Service Modules, engine with a leave to complete a Ph.D. in Systems Engineering Management at UCLA in 1970.



C M Chang

ISBN: 9788131766385
Copyright: 2012
Pages: 544

Engineering Management: Challenges in the New Millennium

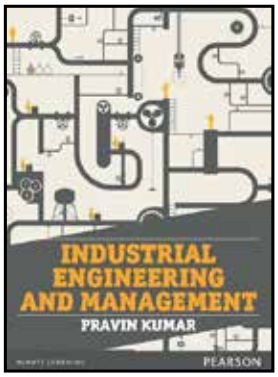
About the Book

This easy-to read-text covers a wide range of relevant topics affecting the future roles of engineering managers, contains over 80 examples and 120 chapter-end questions, articulates a forward-looking globally orientated perspective, and emphasizes a six-dimensional challenge for engineers in the new millennium.

Features

- Emphasis on six-dimensional challenges for future engineers and engineering managers in the new millennium
- Focus on providing value through innovations, leadership in technology projects, and the application of emerging technologies
- Discussion of using web-based tools

Contents



Pravin Kumar

ISBN: 9789332543560
Copyright: 2015
Pages: 672

Industrial Engineering and Management

NEW

About the Book

The book has been designed for undergraduate students studying Mechanical Engineering or Industrial Engineering. It discusses various concepts and provides practical knowledge related to the area of Industrial Engineering and Management. The book lucidly covers Project Management, Quality Management, Costing etc. in detail to develop the required skills among the students.

Features

- Exclusive coverage on quality systems including SQC, six-sigma and ISO 9000
- A separate chapter on Aggregate Planning and Inventory Control
- Detailed emphasis on Cost Accounting and Depreciation, Linear Programming and Transportation Problems
- Extensive Pedagogy
  - 350+ Figures and Illustrations
  - 100+ Solved Questions
  - 300+ Unsolved Questions
  - 350+ MCQs

Contents

PEARSON

Kenneth G. Budinski
Michael K. Budinski

ISBN: TBA

Pages: TBA

Engineering Materials: Properties and Selection, 9/e

COMING SOON

About the Book

For undergraduate courses in Metallurgy and Materials Science

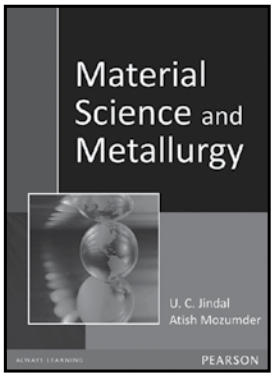
The father-son authoring duo of Kenneth G. Budinski and Michael K. Budinski brings nearly 70 years of combined industry experience to bear in this practical, reader-friendly introduction to engineering materials. This text covers theory and industry-standard selection practices, providing students with the working knowledge to make an informed selection of materials for engineering applications and to correctly specify materials on drawings and purchasing documents. Encompassing all significant material systems–metals, ceramics, plastics, and composites–this text incorporates the most up-to-date information on material usage and availability, addresses the increasingly global nature of the field, and reflects the suggestions of numerous adopters of previous editions.

Features

For undergraduate courses in Metallurgy and Materials Science

The father-son authoring duo of Kenneth G. Budinski and Michael K. Budinski brings nearly 70 years of combined industry experience to bear in this practical, reader-friendly introduction to engineering materials. This text covers theory and industry-standard selection practices, providing students with the working knowledge to make an informed selection of materials for engineering applications and to correctly specify materials on drawings and purchasing documents. Encompassing all significant material systems—metals, ceramics, plastics, and composites—this text incorporates the most up-to-date information on material usage and availability, addresses the increasingly global nature of the field, and reflects the suggestions of numerous adopters of previous editions.

Contents



U C Jindal

ISBN: 9788131759110
Copyright: 2012
Pages: 552

Material Science and Metallurgy

About the Book

The book is presented in 20 chapters. The language used is user friendly and diagrams are giving the clear view and concept. Solved problems, multiple choice questions and review questions are also integral part of the book.

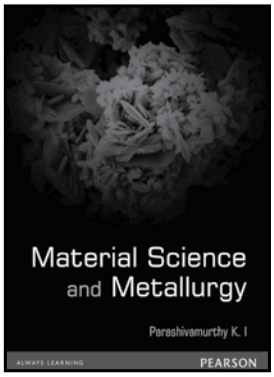
Features

- A separate chapter highlighting various concepts and applications related to thermal properties and wear of materials
- Exclusive coverage of different types of processes incorporated during heat treatment of steels

Contents

About the Author

Dr. U. C. Jindal is former Professor and Head of the Department of Mechanical Engineering, Delhi College of Engineering. For the last 45 years Dr Jindal has been involved in teaching, research and development activities in the mechanics group of subjects – engineering mechanics, strength of materials, machine design, theory of machines and materials science.



K I Parashivamurthy

ISBN: 9788131761625
Copyright: 2012
Pages: 284

Material Science and Metallurgy

About the Book

Material Science and Metallurgy is designed to cater to the needs of first-year undergraduate mechanical engineering students. This book covers theory extensively, including an extensive examination of powder metallurgy and ceramics, accompanied by useful diagrams and derivations.

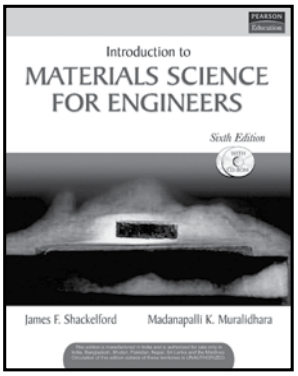
Features

- Solved problems in each chapter help the students relate to the core concepts easily
- Numerous review questions and the multiple choice questions provide students with a systematic learning approach
- Model question papers and their solutions have been included to equip the student with adequate practice material

Contents

About the Author

K. I. Parashivamurthy obtained his B.E. in Mechanical Engineering during 1990, his M.Tech.



James F. Shackelford
Madanapalli K. Muralidhara

ISBN: 9788131700907
Copyright: 2007
Pages: 800

CD-ROM INCLUDED

Introduction to Materials Science for Engineers, 6/e

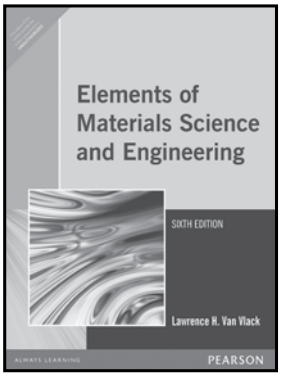
About the Book

This text provides a balanced and current treatment of the full spectrum of engineering materials, covering all the physical properties, applications and relevant properties associated with the subject. It explores all the major categories of materials while offering detailed examinations of a wide range of new materials with high-tech applications.

Features

- Numerous examples and homework problems
- Coverage of modern-materials science topics
- Interactive materials-science for engineers CD ROMS
- Robust supplement package for both instructors and students

Contents



Lawrence H. Van Vlack

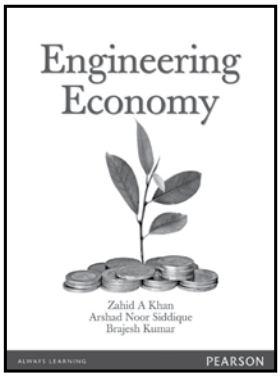
ISBN: 9788131706008
Copyright: 1959
Pages: 610

Elements of Material Science and Engineering, 6/e

About the Book

This classic textbook, Elements of Materials Science and Engineering, is the sixth in a series of texts that have pioneered in the educational approach to materials science engineering and have literally brought the evolving concept of the discipline to over one million students around the world.

Contents



Dr Zahid A Khan
Arshad Noor Siddique
Dr Brajesh Kumar

ISBN: 9788131763872
Copyright: 2012
Pages: 448

Engineering Economy

About the Book

The book, meant for an introductory course for undergraduate students, explains and demonstrates the principles and techniques of engineering economic analysis as applied in different fields of engineering.

Features

- Comprehensive coverage of engineering economy concepts and decision-making tools and techniques
- Fundamental economic laws and theories illustrated through examples

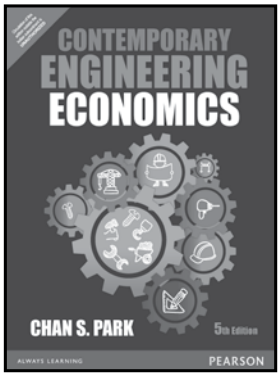
Contents

About the Authors

Dr Zahid A Khan is an Associate Professor, Mechanical Engineering Department, Jamia Milia Islamia University, New Delhi

Dr Arshad Noor Siddique is an Associate Professor, Mechanical Engineering Department, Jamia Milia Islamia University, New Delhi

Dr Brajesh Kumar is an Associate Professor, National Institute of Financial Management, Faridabad



Chan S. Park

ISBN: 9789332550148
Pages: 900

Contemporary Engineering Economics

NEW

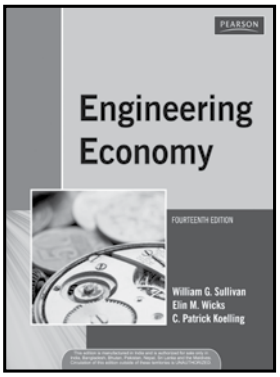
About the Book

Contemporary Engineering Economics is intended for undergraduate engineering students taking introductory engineering economics while appealing to the full range of engineering disciplines for which this course is often required: industrial, civil, mechanical, electrical, computer, aerospace, chemical, and manufacturing engineering, as well as engineering technology.
This edition has been thoroughly revised and updated while continuing to adopt a contemporary approach to the subject, and teaching, of engineering economics. This text aims not only to build a sound and comprehensive coverage of engineering economics, but also to address key educational challenges, such as student difficulty in developing the analytical skills required to make informed financial decisions.

Features

- A wide range of chapter openers, examples, homework problems, and case studies drawn from all Engineering disciplines.
- Chapter opening vignettes reflect the important segments of global economy in terms of variety and scope of business as well.
- Excel spreadsheet modeling techniques are incorporated into various economic decision problems to provide many "what-if" solutions to key decision problems.
- FE Review problems by chapter

Contents



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

ISBN: 9788131734421
Copyright: 2009
Pages: 696

Engineering Economy, 14/e

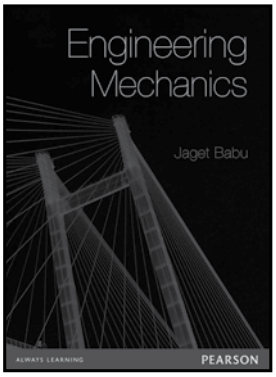
About the Book

Used by engineering students worldwide, this best-selling text provides a sound understanding of the principles, basic concepts, and methodology of engineering economy. Built upon the rich and time-tested teaching materials of earlier editions, it is extensively revised and updated to reflect current trends and issues, with an emphasis on the economics of engineering design throughout. It provides one of the most complete and up-to-date studies of this vitally important field.

Features

- Case studies with end-of-chapter questions encourage writing and critical thinking.
- Fundamentals of Engineering Exam multiple-choice questions appear at the end of each chapter.
- Spreadsheets are integrated throughout the text. In particular, many examples include handworked and computer solutions (with spreadsheets) so that students can see both techniques side by side
- Cost estimating is further emphasized in the text.
- An expanded treatment of the economic aspects of engineering design is featured.

Contents



Jaget Babu

ISBN: 9788131770504
Copyright: 2012
Pages: 948

Engineering Mechanics

About the Book

With a clear writing style, comprehensive coverage and a variety of solved problems, this book is a complete guide to students of engineering mechanics. The book uses both the scalar and vector approaches in explaining core concepts, which are preceded by a practical example. A large number of worked-out examples as well as numerous review questions and practice problems at the end of every chapter aid in the understanding and retention.

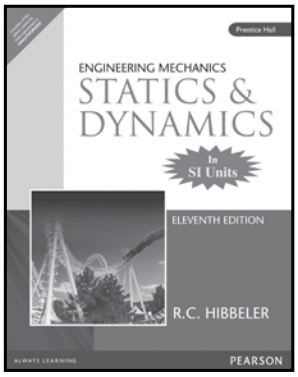
Features

- Comprehensive examination of the topic on energy
- A separate chapter on vector algebra

Contents

About the Author

Prof Jaget Babu is Assistant Professor, Department of Mechanical Engineering at College of Engineering at Trivandrum.



R. C. Hibbeler
Ashok Gupta

ISBN: 9788131726990
Copyright: 2009
Pages: 852

Engineering Mechanics: Statics and Dynamics, 11/e

About the Book

This book is designed as per the syllabus of the **Engineering Mechanics** course for undergraduate students of Engineering. It follows a vector approach and covers both Statics and Dynamics, and provides the students with a clear and thorough presentation of the theory as well as the applications.

Features

- All the problems are accuracy checked
- Well-defined marginalia and key terms at the end of the chapter

Contents

Part I: Statics

1. General Principles.
2. Force Vectors.
3. Equilibrium of a Particle.
4. Force System Resultants.
5. Equilibrium of a Rigid Body.
6. Structural Analysis.
7. Internal Forces.
8. Friction.
9. Center of Gravity and Centroid.
10. Moments of Inertia.
11. Virtual Work.

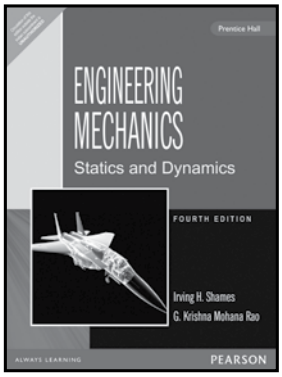
Part II: Dynamics

12. Kinematics of a Particle.
13. Kinetics of a Particle: Force and Acceleration.
14. Kinetics of a Particle: Work and Energy.
15. Kinetics of a Particle: Impulse and Momentum
16. Planar Kinematics of a Rigid Body.
17. Planar Kinetics of a Rigid Body: Force and Acceleration
18. Planar Kinetics of a Rigid Body: Work and Energy.
19. Planar Kinetics of a Rigid Body: Impulse and Momentum

About the Authors

Russ Hibbeler graduated from the University of Illinois-Urbana with a B.S. in Civil Engineering (major in structures) and an M.S.

Ashok Gupta is a Professor in the Department of Civil Engineering at Indian Institute of Technology, Delhi.



Irving H. Shames
Krishna Mohana Rao

ISBN: 9788177581232
Copyright: 2006
Pages: 864

Engineering Mechanics – Statics and Dynamics

About the Book

This book is designed to provide a mature, in-depth treatment of engineering mechanics at the undergraduate level and to offer continuity with, and a smooth transition to, upper-level courses. This text focuses on developing a solid understanding of basic principles rather than rote learning of specific methodologies.

Features

- Offers an approach that improves continuity and provides a smooth transition to upper-level courses in other engineering sciences.
- Provides in-depth coverage of Screw Jack and Compound Pendulum

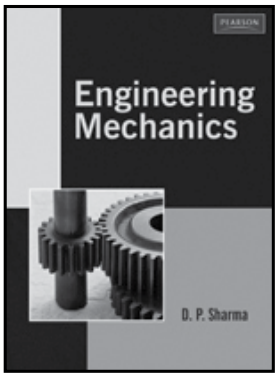
Contents

Part Opener I (Statics)

1. Fundamentals of Mechanics
2. Elements of Vector Algebra
3. Systems of forces
4. Equivalent Force Systems
5. Equations of Equilibrium
6. Friction Forces
7. Properties of Surfaces
8. Moments and Products of Inertia

Part Opener II (Dynamics)

9. Kinematics of a Particle-Simple Relative Motion
10. Particle Dynamics
11. Energy Methods for Particles
12. Methods of Momentum for Particles
13. Kinematics of Rigid Bodies: Relative Motion
14. Kinetics of Plane Motion of Rigid Bodies
15. Energy and Impulse-Momentum Methods for Rigid Bodies
16. Vibrations



D. P. Sharma

ISBN:9788131732229
Copyright: 2010
Pages: 624

Engineering Mechanics

About the Book

This book presents a practical understanding of the finite element method with a variety of engineering applications that will aid students, teachers, practicing engineers and researchers. It begins with an introduction to the mathematical modeling of engineering problems and approximate methods of analysis. It then introduces the different approaches in FEM such as direct approach, principle of virtual work, variational principle and method of weighted residual.

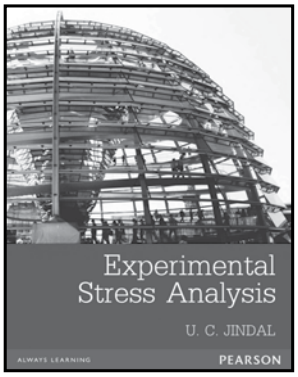
Features

- Easy and concise treatment of concepts
- Trusses & Frames discussed in a separate chapter
- Easy to tough gradation of unsolved problems
- More than 600 figures/diagrams, represented in 3D art

Contents

About the Author

D P Sharma is presently Assistant Professor in the Department of Mechanical Engineering, UCE, Rajasthan Technical University Kota. He did his post graduation in Thermal Engineering from MANIT, Bhopal in 1994. Since then he has been engaged in teaching and research.



U C Jindal

ISBN: 9788131759103
Copyright: 2012
Pages: 300

Experimental Stress Analysis

About the Book

The book is presented in 12 chapters. The language used is user friendly and diagrams are giving the clear view and concept. Solved problems, multiple choice questions and review questions are also integral part of the book. The contents of the book are designed taking into account the syllabi of various universities and technical institutions. The text has been class tested in Delhi College of Engineering and Amity University, Noida.

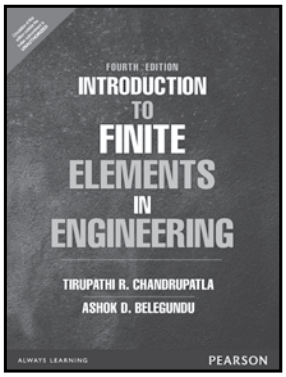
Features

- 89 solved examples
- 95 unsolved problems with answers
- 62 review questions
- 83 multiple-choice questions with answers

Contents

About the Author

Dr. U. C. Jindal is former Professor and Head of the Department of Mechanical Engineering, Delhi College of Engineering. For the last 45 years Dr Jindal has been involved in teaching, research and development activities in the mechanics group of subjects – engineering mechanics, strength of materials, machine design, theory of machines and materials science.



Tirupathi R. Chandrupatla
Ashok D. Belegundu

ISBN: 9789332551824
Copyright: 2016
Pages: 448

Introduction to Finite Elements in Engineering, 4/e

NEW

About the Book

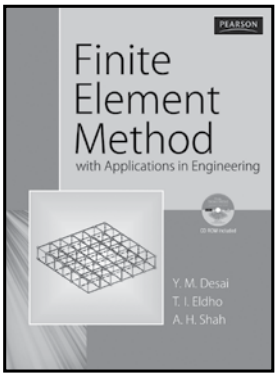
Introduction to Finite Engineering is ideal for senior undergraduate and first-year graduate students and also as a learning resource to practicing engineers.

This book provides an integrated approach to finite element methodologies. The development of finite element theory is combined with examples and exercises involving engineering applications. The steps used in the development of the theory are implemented in complete, self-contained computer programs. While the strategy and philosophy of the previous editions has been retained, the Fourth Edition has been updated and improved to include new material on additional topics.

Features

- Deep, comprehensive treatment of theory—Reveals several different aspects of finite elements analysis development.
- Provides the needed steps toward clear understanding, presentation, and computer implementation.
- Practical engineering situations—Presented as both examples and exercises.
- Brings the students more real-life situations and enables professors to discuss and assign real engineering problems.
- Integration of over 250 illustrations throughout the text—Provide visual representations of principles and practices discussed.
- Helps the student understand the presentation and helps the professors in their presentations.
- Emphasis on problem formulation and modeling in each chapter.
- Helps students develop a firm understanding of these critical skills.
- Theory and computer programs for preprocessing and postprocessing.
- Allows professors to assign large problems and students to prepare and display data efficiently

Contents



Y. M. Desai
T. I. Eldho
A. H. Shah

ISBN: 9788131724644
Copyright: 2011
Pages: 492

CD-ROM INCLUDED

Finite Element Method with Applications in Engineering

About the Book

This book presents a practical understanding of the finite element method with a variety of engineering applications that will aid students, teachers, practicing engineers and researchers. It begins with an introduction to the mathematical modeling of engineering problems and approximate methods of analysis. It then introduces the different approaches in FEM such as direct approach, principle of virtual work, variational principle and method of weighted residual.

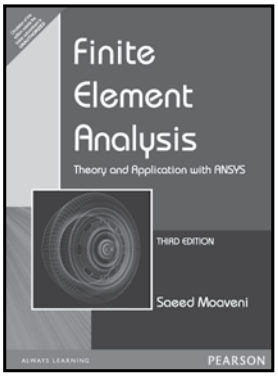
Features

- Separate chapters are devoted to basic mathematical modeling, approximate method of analysis, introduction and different approaches to FEM
- Comprehensive coverage of FEM interpolation functions
- Finite element analysis for various problems in 1D, 2D and 3D

Contents

About the Author

Y. M. Desai and **T. I. Eldho** are professors in department of civil engineering at Indian Institute of Technology Bombay and **A. H. Shah** is a professor in Department of Civil Engineering at the University of Manitoba, CANADA.



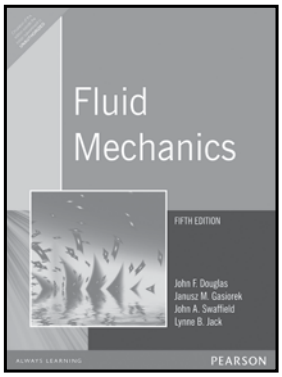
Saeed Moaveni

ISBN: 9788131760642
Copyright: 2008
Pages: 880

Finite Element Analysis Theory and Application with ANSYS, 3/e

About the Book

While many good textbooks cover the theory of finite element modeling, this is the only text available that incorporates ANSYS as an integral part of its content. Moaveni presents the theory of finite element analysis, explores its application as a design/modeling tool, and explains in detail how to use ANSYS intelligently and effectively.



John F. Douglas
J. M. Gasoriek
John Swaffield
Lynne Jack

ISBN: 9788131721407
Copyright: 2008
Pages: 992

Fluid Mechanics, 5/e

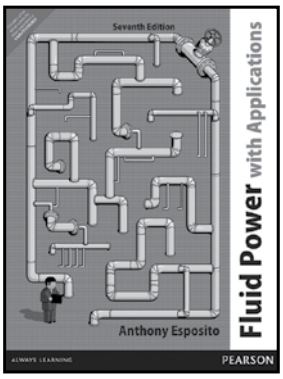
About the Book

Written for courses in **Fluid Mechanics** in Civil and Mechanical Engineering, this text covers the fundamental principles of fluid mechanics, as well as specialist topics in more depth. The fundamental material relates to all engineering disciplines that require fluid mechanics.

Features

- The most comprehensive student text available on the market.
- Suitable for all years of an undergraduate course in mechanical or civil engineering.
- Worked examples throughout.
- Start of chapter objectives and end of chapter summaries.
- Highlighted key equations - for easy reference.
- References to other books.
- List of symbols - for clarity and ease of use.
- Written entirely in SI (metric) units.

Contents



Anthony Esposito

ISBN: 9789332518544
Copyright: 2014
Pages: 672

Fluid Power with Applications, 7/e

About the Book

Fluid Power with Applications, Seventh Edition presents broad coverage of fluid power technology in a readable and understandable fashion. An extensive array of industrial applications is provided to motivate and stimulate students' interest in the field. Balancing theory and applications, this text is updated to reflect current technology it focuses on the design, analysis, operation, and maintenance of fluid power systems.

Features

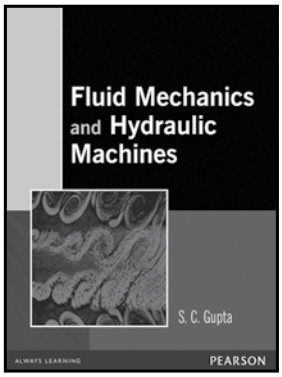
- Clear presentation. Presents broad coverage of material in a readable and understandable fashion. Enables instructors to rely on the text to provide much of the basic learning. Enables students to more effectively use their instructor's class time.
- Extensive use of industry-provided cutaway drawings and illustrations. Gives students a better understanding of the operation of fluid power components and systems in a real-world context.
- Ideal balance of theory and applications. Provides students with an excellent foundation for understanding the changes that take place in methodology in the field.
- Boolean Algebra with electric ladder diagrams. Combines both in presenting the material on electrical controls. Allows students to better understand how electrical currents control the operation of fluid power systems.

Contents

About the Authors

Anthony Esposito was born on October 4, 1934 in Schenectady, NY. His family moved to Saratoga Springs, NY in 1948. He graduated from Saratoga Springs High School in 1953. In 1957 he received a Bachelors Degree in Mechanical Engineering from Union College in Schenectady. He was employed at General Electric Company as a design engineer in Cincinnati from 1957 to 1961 and a control systems engineer in Schenectady from 1961 to 1965.

Upon receiving a Masters Degree in Mechanical Engineering from Union College in 1965, Anthony left General Electric to begin a teaching career at Miami University within the Manufacturing Engineering Department. In 1969 he received his Professional Engineer's License from the State of Ohio. He served as Chairman of the Manufacturing Engineering Department from 1976 to 1992. During his career at Miami University, he authored four engineering technology college textbooks, including "FLUID POWER WITH APPLICATIONS' published by Prentice Hall. His current title at Miami University is Professor Emeritus.



S. C. Gupta

ISBN: 9788177583649
Copyright: 2006
Pages: 596

Fluid Mechanics and Hydraulic Machines

About the Book

This text is designed for the course on fluid mechanics and hydraulic machines offered to the undergraduate students of mechanical and civil engineering. Written in a lucid style, the book lays emphasis on explaining the logic and physics of critical problems to develop analytical skills in the reader.

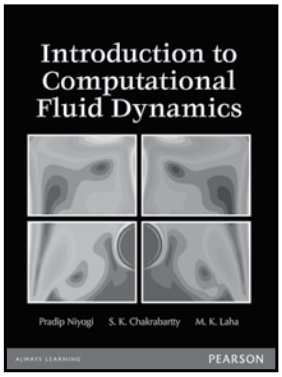
Features

- Over 200 solved problems and numerous practice problems that go beyond the simple formulae-substitution problems.
- Detailed treatment of fluid dynamics, boundary-layer flow, compressible and incompressible flows, and turbulent flows.
- Separate chapters on mathematical modelling of flow and non-dimensional analysis.

Contents

About the Authors

S. C. Gupta, former Professor and Head, Department of Mechanical Engineering, Engineering College, Kota, is currently teaching at the RKG Institute of Technology, Ghaziabad.



Pradip Niyogi
Sunil Kumar Chakrabartty
Manas Kumar Laha

ISBN: 9788177587647
Copyright: 2005
Pages: 600

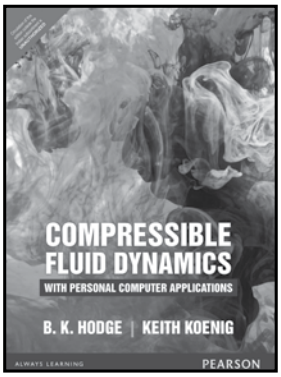
Introduction to Computational Fluid Dynamics

About the Book

Introduction to Computational Fluid Dynamics is a self-contained introduction to a new subject, arising through the amalgamation of classical fluid dynamics and numerical analysis supported by powerful computers. Written in the style of a text book for advanced level B.Tech, M.Tech and M.Sc. students of various science and engineering disciplines. It introduces the reader to finite-difference and finite-volume methods for studying and analyzing linear and non-linear problems of fluid flow governed by inviscid incompressible and compressible Euler equations as also incompressible and compressible viscous flows governed by boundary-layer and Navier-Stokes equations. Simple turbulence modeling have been presented.

Features

- It is a first course written with the specific background of Indian students in mind, that prepares the student with necessary prerequisites and mathematical foundation.
- It covers the basic concepts of the more important and useful finite-difference and finite-volume methods needed in the application areas of CFD.
- Illustrative computer programs have been provided.
- Illustrative Case Studies have been provided.



B.K. Hodge
Keith Koenig

ISBN: 9789332559455
Copyright: 2016
Pages: 648

Compressible Fluid Dynamics, 1e

NEW

About the Book

This text provides a different presentation to the usual topics covered in an introductory compressible flow book. The material is divided into five sections: Fundamental Principles, Waves in Compressible Flow, One-Dimensional Generalized and Simple Flows, Multi-Dimensional Flows, and High Temperature Gas Dynamics.

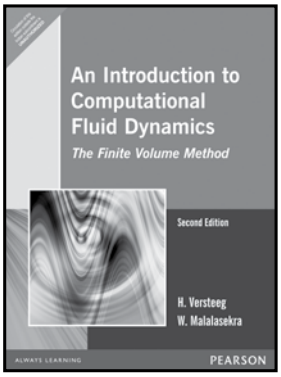
Features

- Builds from thermodynamic principles and conservation principles to compressible flow concepts.
- Covers wave processes early.
- Deals with traditional one-dimensional compressible flows.
- Contains a control volume analysis for generalized one-dimensional compressible flow that includes are change, friction, heat addition or rejection, and mass addition.
- Presents the derivations of the equations if inviscid multi-dimensional compressible flow and the development of the method of characteristics(MOC).
- Concludes the text with a chapter that introduces high temperature gas dynamics. Particular attention is payed to distinctions in the hierarchy of compressible flow descriptions beyond calorically perfect.
- A useful applications software element is provided for thermally perfect, but calorically imperfect gases. This software permits the routine assessment of the caloric imperfection assumption and can be utilized independently without development to assess the effects of caloric imperfection.

About the Authors

B.K. Hodge, Mississippi State University

Keith Koenig, Mississippi State University



H. Versteeg
W. Malalasekra

ISBN: 9788131720486
Copyright: 2008
Pages: 512

An Introduction to Computational Fluid Dynamics: The Finite Volume Method, 2/e

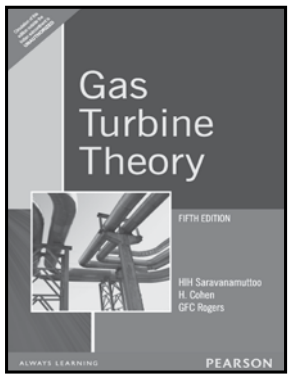
About the Book

This established, leading textbook, is suitable for courses in CFD. The new edition covers new techniques and methods, as well as considerable expansion of the advanced topics and applications (from one to four chapters).

Features

- Presents a broad introduction to fluid and turbulence physics and computational modelling techniques.
- Incorporates an advanced applications section.
- Uses easy-to-programme computer algorithms for the PC.

Contents



Herb Sarvanamuttoo
H. Cohen
GFC Rogers

ISBN: 9788177589023
Copyright: 2001
Pages: 512

Gas Turbine Theory, 5/e

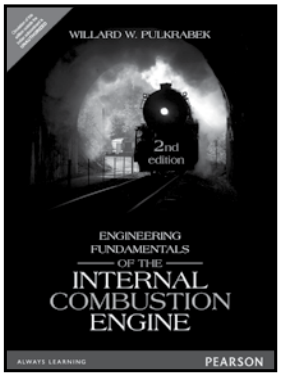
About the Book

Despite the rapid advances in both output and efficiency, the basic theory of the gas turbine has remained unchanged. The layout of this new edition is broadly similar to the original, but greatly expanded and updated comprising an outline of the basic theory, aerodynamic design of individual components, and the prediction of off-design performance.

Features

- Completely updated to cover industry requirements and applications.
- Coverage of both aircraft and industrial gas turbines
- Includes detailed treatment of off-design performance
- Incorporates in-depth examples throughout
- Based on the author's extensive teaching and professional experience.

Contents



Willard W. Pulkrabek
University of Wisconsin - Platteville

ISBN: 9789332549494
Pages: 504

Engineering Fundamentals of the Internal Combustion Engine, 2/e

NEW

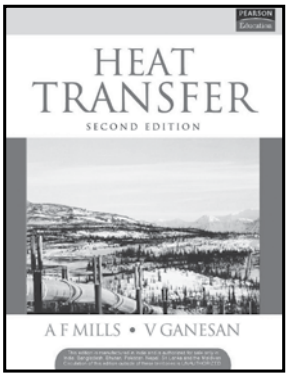
About the Book

This applied thermoscience text explores the basic principles and applications of various types of internal combustion engines, with a major emphasis on reciprocating engines. It covers both spark ignition and compression ignition engines—as well as those operating on four-stroke cycles and on two stroke cycles—ranging in size from small model airplane engines to the larger stationary engines.

Features

- NEW - Added and expanded topics—i.e., variable valve control; fuel injection; hydrogen fuel; fuel cells; and noise pollution.
- NEW - Real data from actual engines.
- NEW - Over 50 new worked example and review problems—Combine with open-ended design problems in each chapter.
- NEW - Added and improved figures throughout.
- NEW - Added historical notes.
- Use of both SI units and English units—With a conversion tables of SI and English units of common parameters used in engine work found in the Appendix.
- Photographs, line drawings, and cycle diagrams.

Contents



A F Mills
V Ganesan

ISBN: 9788131727133
Copyright: 2009
Pages: 900

Heat Transfer, 2/e

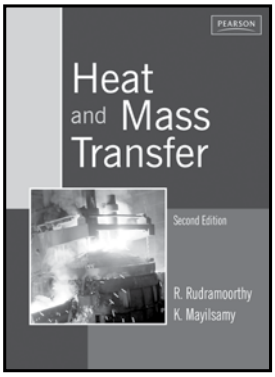
About the Book

Heat Transfer is a core paper for the undergraduate Mechanical Engineering students in their third year. This book first emphasizes the basic concepts of heat transfer and then gradually leads students to advanced topics. The book offers a right blend of design principles, basic mathematical concepts and current technologies.

Features

- Material arranged so that the simplest concepts are presented first.
- Current material on refrigerants and updated exercises and property tables with R-22 and R-134a
- Design principles are fully integrated including thermal hydraulic design of exchangers and economic considerations
- New chapter on Mass Transfer
- Over 350 exercises that reinforce fundamental concepts

Contents



R. Rudramoorthy
K. Mayilsamy

ISBN: 9788131733837
Copyright: 2010
Pages: 472

Heat and Mass Transfer, 2/e

About the Book

Designed for the core paper on Heat and Mass Transfer for the undergraduate students of mechanical engineering, this book offers theory in brief, detailed derivations, plenty of examples and numerous exercise problems. This unique approach helps students apply principles to applications.

Features

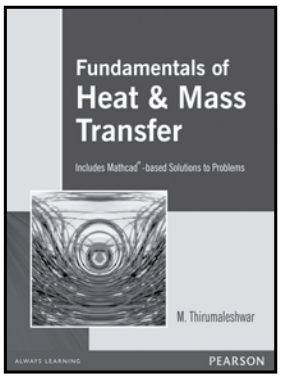
- Detailed coverage of Combined Heat Transfer and its application in real-life thermal system's design and analysis
- A separate chapter on Modeling and Analysis with emphasis on numerical methods
- A new chapter on Mass Transfer

Contents

About the Authors

R. Rudramoorthy is the Principal, PSG College of Technology, Coimbatore, India.

K. Mayilsamy is Asst. Professor in the Department of Mechnanical Engineering Institute of Road & Transport Technology, Erode, India.



M. Thirumaleshwar

ISBN: 97881775585193
Copyright: 2006
Pages: 800

Fundamentals of Heat and Mass Transfer

About the Book

This book is written as a Text Book for senior undergraduates in Engineering Colleges of Indian Universities, in the departments of Mechanical, Automobile, Production, Chemical, Nuclear and Aerospace Engineering.

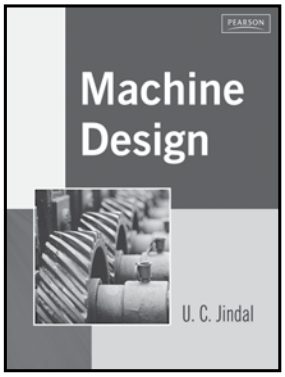
Features

- It is a product of experience gained over many years in teaching the subject, refined with feed back from the students.
- The material is class tested, as stated above

Contents

About the Author

M. Thirumaleshwar graduated in Mechanical Engineering from Karnataka Regional Engineering College, Surathkal in the year 1965. He obtained M.Sc (cryogenis) from University of Southampton, U.K. and Ph.D.(cryogenics) from Indian Institute of Science, Bangalore.



U. C. Jindal

ISBN: 9788131716595
Copyright: 2010
Pages: 892

Machine Design

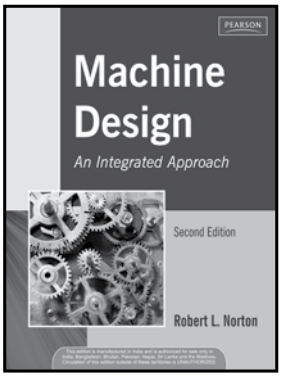
About the Book

Machine Design is a text on the design of machine elements for the engineering undergraduates of mechanical/production/industrial disciplines. The book provides a comprehensive survey of machine elements and their analytical design methods. Besides explaining the fundamentals of the tools and techniques necessary to facilitate design calculations, the text includes extensive data on various aspects of machine elements, manufacturing considerations and materials. The extensive pedagogical features make the text student friendly and provide pointers for fast recapitulation.

Features

- **Chapter Objectives** set the lesson plan for students and instructors by providing precise information on the chapter.
- An excellent selection of more than **300 solved problems** which go much beyond the simple formulae substitution examples.
- More than 600 detailed **line diagrams** of machine parts to enable visualization and elucidation of the concepts.

Contents



Robert L. Norton

ISBN: 9788131705339
Copyright: 2000
Pages: 875

Machine Design: An Integrated Approach, 2/e

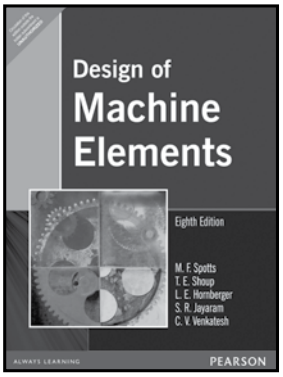
About the Book

A thorough and comprehensive textbook dealing with machine design that emphasizes both failure theory and analysis as well as emphasizing the synthesis and design aspects of machine elements. The book points out the commonality of the analytical approaches needed to design a wide variety of elements and emphasizes the use of computer-aided engineering as an approach to the design and analysis of these classes of problems.

Features

- The text has been made independent of any software package.
- All examples and case studies have been redone, and some expanded to make their presentations more detailed.
- The numbers of problems has been increased by roughly 25%.
- Some sections of the text have included augmented figures, discussion or explanation.

Contents



M F Spotts
C. V. Venkatesh
L. E. Hornberge
S. R. Jayaram
P. Sadhu
Terry E. Shoup

ISBN: 9788177584219
Copyright: 2007
Pages: 680

CD-ROM INCLUDED

Design of Machine Elements, 8/e

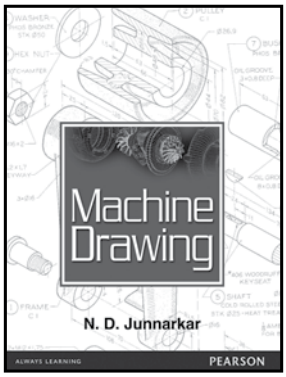
About the Book

Now in its eighth edition, this newly revised version of the classic machine-design text contains 12 self-contained chapters covering the fundamental principles of this important branch of mechanical engineering. The material is drawn from a variety of sources and makes extensive use of structured computational examples to illustrate design applications.

Features

- A chapter devoted to form-synthesis of machine parts to enable the reader to critique existing machine assemblages with a view toward creating improved designs.
- A CD-ROM containing 54 Microsoft Excel spreadsheet modules to assist with the implementation of complex design tasks. Most of these modules now feature drop-down menus, as well as dual-unit capabilities.
- A review of the fundamentals of the strength of materials.
- Independent chapters that can be studied in any order to accommodate a variety of learning modes

Contents



N. D. Junnarkar

ISBN: 9788131706787
Copyright: 2004
Pages: 552

Machine Drawing

About the Book

This book on Machine Drawing is divided into three parts.

Part I deals with the basic principles of technical drawing, dimensioning, limits, fits and tolerances.

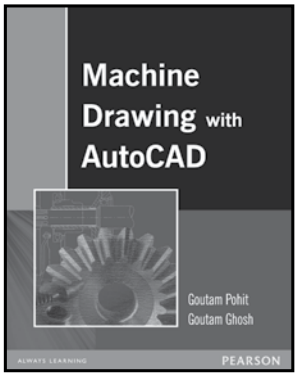
Part II provides details of how to draw and put machine components together for an assembly drawing.

Part III contains problems on assembly drawings taken from the diverse fields of mechanical, production, automobile and marine engineering.

Features

- Strictly in accordance with the latest code of practice issued by BIS, SP-46
- Chapters on Engineering Materials and Manufacturing Processes
- Discusses conventional representation of common machine components
- A chapter devoted on computer-aided approach to machine drawing
- Solved and 40 practice problems on assembly drawing with hints.

Contents



Goutam Pohit
Goutam Ghosh

ISBN: 9788131706770
Copyright: 2004
Pages: 496

Machine Drawing with AutoCAD

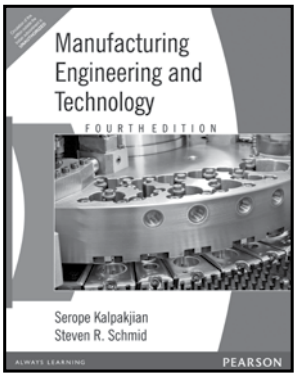
About the Book

AutoCAD is one of the most powerful and economical software for drafting and designing available in the market today. Keeping this software as the platform, the book **Machine Drawing with AutoCAD** provides a comprehensive and practical overview of machine drawing. It follows an approach that first uses the manual mode of drafting and then AutoCAD. Starting from 2D drawing, the book takes the reader to the world of solid modeling in a 3D environment.

Features

- Uses the basic commands/features of AutoCAD unchanged from release 2000 onwards, making the book version-independent
- Helps learn AutoCAD while drawing machine elements with no reference to any book/manual on AutoCAD
- Exposure to working in paper space and model space
- Drawings explained with 3-D solid models

Contents



Serope Kalpakjian
Steven R. Schmid

ISBN: 9788177581706
Copyright: 2001
Pages: 1148

Manufacturing Engineering and Technology, 4/e

About the Book

An indispensable text on the subject, the fourth edition of this book retains it emphasis on (a) the influence of materials and processing parameters in understanding manufacturing processes and operations; (b) design considerations, product quality, and manufacturing cost factors; and (c) the domestic and global competitive context of each manufacturing process and operation, highlighted with illustrative examples.

Features

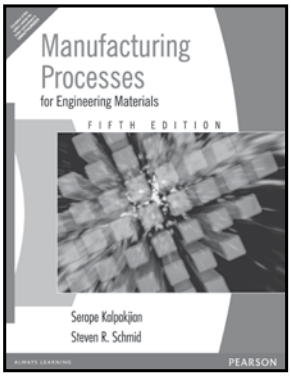
- Presentation of each topic within a larger context of manufacturing engineering and technology, using extensive schematic diagrams and flowcharts.
- Emphasis on the practical uses of the concepts and information presented.
- Analogies, discussions and problems designed to stimulate the students curiosity about consumer and industrial products and how they are manufactured

Contents

About the Authors

Professor Serope Kalpakjian has been teaching at the Illiois Institute of Technology since 1963.

Dr. Steven R. Schmid is an Associate Professor in the Department of Aerospace and Mechanical Engineering at the University of Notre Dame, where he teaches and conducts research and manufacturing, machine design, and Tribology.



Serope Kalpakjian
Steven R. Schmid

ISBN: 9788131705667
Copyright: 2009
Pages: 1040

Manufacturing Processes for Engineering Materials, 5/e

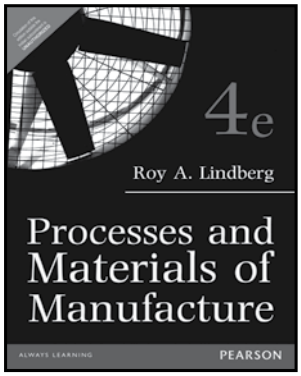
About the Book

This comprehensive, up-to-date text has balanced coverage of the fundamentals of materials and processes, its analytical approaches, and its applications in manufacturing engineering. Students using this text will be able to properly assess the capabilities, limitations, and potential of manufacturing processes and their competitive aspects.

Features

- Core Features to Manufacturing Processes for Engineering Materials
- Demonstrates to students the relevance of the material with real-world examples
- Allows students to easily grasp the often complex subject matter presented

Contents



Roy A. Lindberg

ISBN: 9789332556973
Copyright: 2016
Pages: 880

Processes and Materials of Manufacture, 4/e

NEW

About the Book

The objective of this book is to provide engineering and management personnel with a background knowledge of processes and materials of manufacture as used in modern industry. The fact that computers now permeate the entire gamut of manufacturing has made it mandatory that this topic be integrated into an early discussion of all manufacturing processes. As examples, the lathe and milling machine are introduced in the traditional manner, but then the text emphasizes the lathe as a turning center and the milling machine as a machine center. To understand how these and other machines are using computer control, terminology such as NC, CNC and DNC are introduced. This terminology is then used throughout the book. The automatic factory and flexible manufacturing systems are discussed thoroughly. Basic subjects such as tool geometry, tool life, cutting forces and metal forming theory have not been neglected. The text presumes no previous manufacturing knowledge, however, a course in materials would be helpful.

Contents

- The Manufacturing Engineer.
- Classification and Fabricating Characteristics of Metals and Composites.
- Numerical Control (NC) and Computer Steps to the Automated Factory.
- Metrology and Quality Control.
- Metal-Cutting Theory and Practice.
- Turning and Related Operations.
- Hole Making and Related Operations.
- Milling, Broaching and Sawing.
- Grinding and Related Abrasive-finishing Processes.
- Metal-Casting Processes, Plastics and Adhesives.
- Power Metallurgy.
- Metal Stamping and Forming.
- Bulk Deformation of Metals.
- Welding Principles and Arc Welding.
- Gas Welding, Brazing, Cutting Systems and Weld Testing.
- Resistance, Specialized and Solid-state Welding.
- Nontraditional Machining.
- Process Planning.
- Table A: Properties of Metals.
- Table B: Application of Carbides.
- Table C: Materials Machinable by Ceramic.
- Table D: Recommended Starting Parameters for Machining with Polycrystalline Tools.
- Table E: Speeds to HSS Twist Drills.
- Table F: Feeds for HSS Twist Drills in Mild Steel.
- Table G: Work Material Constants for Calculating Torque and Thrust.
- Table H: Solder Shear Strength (psi).
- Table I: Basic Welding Symbols and their Location Significance.

D. K. Singh

ISBN: 9788131722275
Copyright: 2008
Pages: 372

Manufacturing Technology, 2/e

About the Book

This new edition of Manufacturing Technology retains the flavor of the first edition by providing readers with comprehensive coverage of theory with a diverse array of exercises. Designed for extensive practice and self study, this book presents theory in an encapsulated format for quick reading.

Features

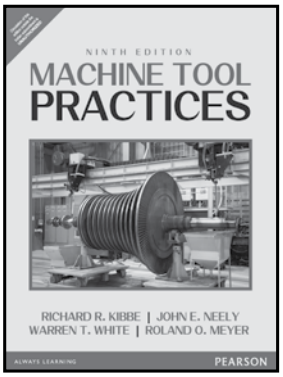
- Over 1,000 objective questions
- More than 300 short-answer questions
- Over 50 formulae for ready reference
- Short answer questions, MCQs, true/false statements, and review questions

Contents

1. Introduction to engineering materials
2. Properties of materials
3. Ferrous materials and their heat treatment
4. Non-ferrous materials and their heat treatment
5. Other important materials
6. Introduction to casting
7. Various casting processes
8. Joining processes
9. Defects and inspection in casting and welding
10. Metal cutting and machining processes
11. Non-traditional machining processes
12. Powder metallurgy
13. Forming processes
14. Metrology
15. Elements of modern manufacturing

About the Author

D. K. Singh is Assistant Professor in the division of Manufacturing Processes and Automation Engineering at the Netaji Subhas Institute of Technology, University of Delhi. He has been teaching manufacturing engineering for more than a decade.



Richard R. Kibbe
Roland O. Meyer
John E. Neely
Warren White

ISBN: 9789332550032
Pages: 816

Machine Tool Practices, 9/e

NEW

About the Book

This text was developed to provide a richly illustrated, intensely visual treatment of basic machine tool technology and related subjects, including measurement and tools, reading drawings, mechanical hardware, hand tools, metallurgy, and the essentials of CNC. Covering introductory through advanced topics, Machine Tool Practices is formatted so that it may be used in a traditional lab-lecture program or a self-paced program. The book is divided into major sections that contain many instructional units. Each unit contains listed objectives, self tests with answers, and boxed material covering shop tips, safety, and new technologies.

Features

- NEW TO THIS EDITION
- Heavily illustrated throughout including 80% new artwork in this edition!
  - 600 new photos!
  - 1,500 revised line drawings!
- Expanded/Updated CNC content
- Additional CAM coverage
- HALLMARK FEATURES
- Comprehensive approach presents the major core subject areas needed by today's machinists
- Includes hundreds of photos of actual machining operations
- Graphic explanations highlight important concepts and common errors and difficulties encountered by machinists
- Many units are designed around specific projects that provide performance experience for the student
- Self tests at the end of most units help students evaluate their own progress and understanding of the text material

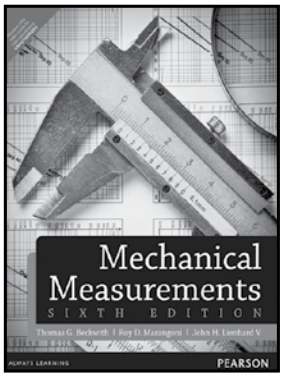
About the Author

Richard R. Kibbe served his apprenticeship in the shipbuilding industry and was graduated as a journeyman marine machinist. He holds an Associate in Arts degree in applied arts from Yuba Community College with an emphasis in machine tool technology. He also holds Bachelor's and Master's degrees from the California State University with an emphasis in machine tool manufacturing technology.

Roland O. Meyer spent the first 20 years of his career in the metal-working industry as a tool and die maker, machinist and worked in machine design and manufacturing. He completed his apprenticeship as a tool and die maker at Siemens in Germany and continued there as a journeyman building progressive punching dies.

John E. Neely grew up in the Pacific Northwest and entered the Army to serve in World War II. The life John E. Neely is characterized by hard work, a variety of successes, and mentoring many others who became a part of his life.

Warren White apprenticed as an Optical Instrument Maker with Land-Air, Inc. After military service with the Army Air Defense Board he obtained a graduate degree in Psychology at Clark University. His interest in both learning theory and machine tools led to employment at Foothill College in the Engineering Department.



Thomas G. Beckwith
John H. Lienhard V
Roy D. Marangoni

ISBN: 9789332518520
Copyright: 2007
Pages: 784

Mechanical Measurements, 6/e

About the Book

This much-anticipated revision to the definitive mechanical measurements text continues to set the standard. Emphasizing precision and clarity, the authors cover fundamental issues common to all areas of measurement in Part One, then present individual chapters on applied areas of measurement in Part Two. The text's modular format makes it accessible to undergraduate students of most engineering disciplines, particularly mechanical engineering, aerospace engineering, and engineering technology.

Features

- **Flexible presentation** – Fits several different course formats and accommodates a wide variety of skill levels
- **Separate areas of applied measurements** – Help students see the relevance of mechanical measurement to their own field of interest and offer motivation by addressing real-world measurement problems

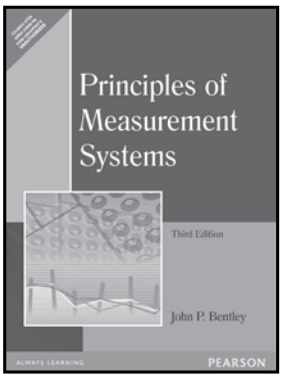
Contents

About the Author

Thomas G. Beckwith, University of Pittsburgh

Roy D. Marangoni, University of Pittsburgh

John H. Lienhard, **V**, Massachusetts Institute of Technology Mechanical Engineering



John P. Bentley

ISBN: 9788131701829
Copyright: 2000
Pages: 480

Principles of Measurement Systems, 3/e

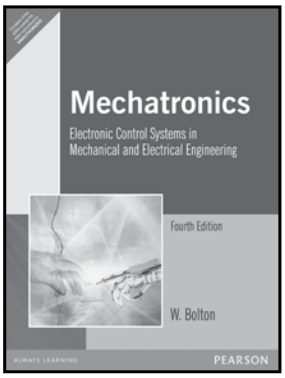
About the Book

The third edition of this highly popular and well-established textbook has been extensively updated and expanded to take account of recent developments in computing, solid-state electronics, optoelectronics and other areas of measurement technology.

Features

- Covers all the techniques, applications and theory required up to degree level
- Incorporates new material on two port networks, reliability, intelligent transmitters, digital signal processing, electronic intrinsically safe systems and communication protocols
- Includes start-of-chapter objectives and end-of-chapter summaries

Contents



W. Bolton

ISBN: 9788131732533
Copyright: 2008
Pages: 604

Mechatronics: Electronic Control Systems in Mechanical and Electrical Engineering, 4/e

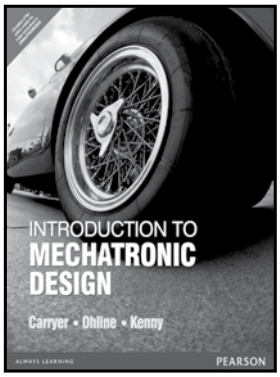
About the Book

This text gives a clear and comprehensive introduction to the area of Mechatronics. It is practical and applied, giving a solid understanding of the key skills and interdisciplinary approach required to successfully design Mechatronic systems. Plenty of case-studies, and use of models for mechatronic systems, help give a real-world context, whilst self-test questions and exercises help test understanding.

Features

- Comprehensive coverage
- Practical and applied approach
- End of chapter exercises help test understanding
- Numerous case-studies provide a 'real-world' context
- New chapter introduces Artificial Intelligence
- New four-part structure groups key themes with a consolidating and integrating final chapter
- Even more case studies to put the theory into context and boost your understanding
- Even more use of models for mechatronic systems
- End of chapter exercises to help test your learning

Contents



J. Edward Carryer
Matthew Ohline
Thomas Kenny

ISBN: 9788131788257
Copyright: 2012
Pages: 808

Introduction to Mechatronic Design

About the Book

Introduction to Mechatronic Design, 1e, takes a narrative approach, emphasizing the importance of building intuition and understanding before diving into the math. The authors believe that integration is the core of mechatronicsâ€"and students must have a command of each of the domains to create the balance necessary for successful mechatronic designâ€"and devote sections of the book to each area, including mechanical, electrical, and software disciplines, as well as a section on system design and engineering. A robust package of teaching and learning resources accompanies the book.

Features

- A focus on developing intuition
- Practical application information
- Balanced coverage of each engineering domain
- Software section of this text is devoted to software design
- A section devoted to Systems Design

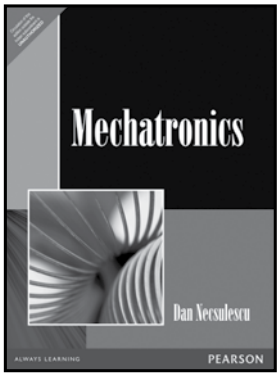
Contents

About the Author

Ed Carryer is the Director of the Smart Product Design Laboratory (SPDL) in the Design Division of Mechanical Engineering at Stanford University. He is currently a Consulting Professor in the Design Division of Mechanical Engineering.

Matt Ohline is an Associate Consulting Professor in the Design Division of Mechanical Engineering at Stanford University.

Thomas Kenny is a Professor in the Mechanical Engineering department at Stanford University. Dr. Kenny received his PhD in Physics from UC Berkeley.



Dan Necsulescu

ISBN: 9788177585407
Copyright: 2002
Pages: 320

Mechatronics

About the Book

This text provides a self-contained, modern treatment of the computer based mixed systems integration. The book covers fundamental topics starting with the physical properties, continuing with mathematical modeling and computer simulation and ending with applications illustrated by numerically and experimentally generated results.

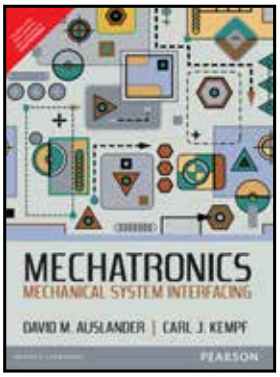
Features

- Thorough coverage of all important topics in mechatronics, not simply generic or descriptive aspects.
- Innovative organization and approach
- Detailed presentation of MATLAB, Simulink and LabVIEW examples.

Contents

About the Author

Dan Necsulescu is currently a Professor of Mechanical Engineering at the University of Ottawa. He received the B.S. degree in power engineering and the Ph.D. degree in engineering from University Politechnica, Bucharest, Romania and the Licentiate in Philosophy degree from the University of Bucharest.



David M. Auslander
Carl J. Kempf

ISBN: 9789332559554

Mechatronics: Mechanical System Interfacing, 1/e

NEW

About the Book

For senior/graduate courses in Mechatronics and Mechanical System Interfacing.
Using a practical engineering perspective and a hands-on approach, this text explores the critical interface technology necessary for the electronic control of mechanical systems. Written from the perspective of engineers expert in target mechanical systems, it provides concise coverage of signal and power level electronics as well as the instruments and actuators most successfully used in the interface between mechanical systems and control computers.

Features

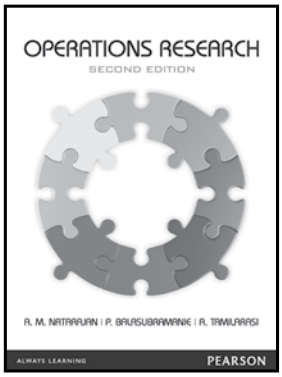
- Considers the mechanical interface from the perspective of the application.
- Covers digital electronics — both combinational (Boolean) and sequential — and analog electronics through operational amplifiers (op-amps).
- Explores the interface of analog-to-digital and digital-to-analog conversion, including sigma-delta technology — technologies that deal with information and signals.
- Discusses major mechanical instruments and actuators — DC and stepping motors and mechanical instrumentation — e.g., encoders, resolvers, Hall effect, and the sensor technologies.
- Prepares students for systems they will find in manufacturing and industrial applications.
- Shows how to control the flow of electrical power (in a chapter on power amplifiers).
- Contains open-ended exercises and problems that require lab work for their solution.

Contents

About the Author

David M. Auslander

Carl J. Kempf, both at the University of California, Berkely



A. M. Natarajan
P. Balasubramani
A. Tamilarasi

ISBN: 9789332526471
Copyright: 2014
Pages: 744

Operations Research, 2e

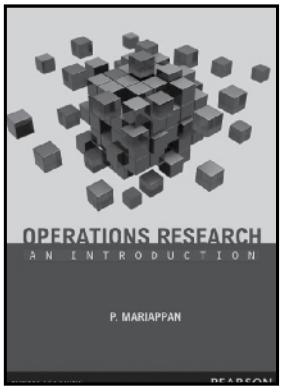
About the Book

Operations research is the study of optimization techniques. Designed to cater to the syllabi requirements of Indian universities, this book on operations research reinforces the concepts discussed in each chapter with solved problems. A unique feature of this book is that with its focus on coherence and clarity, it hand-holds students through the solutions, each step of the way.

Features

- Graphical solution to linear programming problems discussed by means of appropriate examples
- Economic interpretation of dual variables explained and various computational techniques elucidated
- Applications of the simulation model in practical business problems illustrated
- Detailed analysis of the critical path method (CPM) and the project evaluation review technique (PERT)
- Non-linear programming problems, quadratic programming and separable programming highlighted along with their applications

Contents



P Mariappan

ISBN: 9788131799345
Copyright: 2013
Pages: 550

Operations Research

About the Book

Designed according to the UGC curriculum for the operations research course, this textbook comprehensively covers all the fundamental concepts needed for undergraduate computer science degree programmes. Spread across ten chapters, the book covers the essential topics in optimizing techniques and linear programming using flowcharting methodology. The text is supported with a wide range of solved examples and end-of-chapter exercises making it an ideal companion for students.

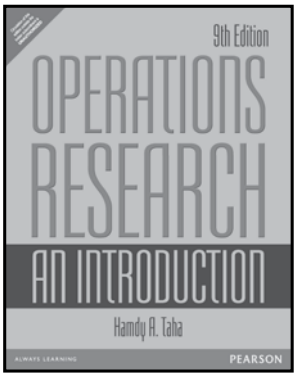
Features

- Detailed explanation on dynamic programming and sensitivity analysis.
- Indepth coverage of transportation problem and assignment problem.
- 275 solved examples.
- 300 end of chapter exercises and 100 multiple choice questions.

Contents

About the Authors

P Mariappan is from the department of mathematics, Bishop Heber College, Tiruchchirapalli, Tamil Nadu.



Hamdy A Taha

ISBN: 9789332518223
Copyright: 2014
Pages: 818

Operations Research: An Introduction, 9/e

About the Book

Operations Research: An Introduction 9/e continues to streamline the coverage of the theory, applications, and computations of operations research. Numerical examples are effectively used to explain complex mathematical concepts. A separate chapter of fully analyzed applications aptly demonstrates the diverse use of OR. The popular commercial and tutorial software AMPL, Excel, Excel Solver, and Tora are used throughout the book to solve practical problems and to test theoretical concepts.

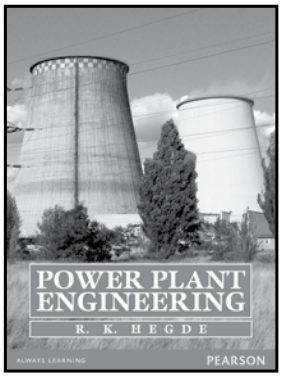
Features

- For the first time in this book, the new Section 3.7 provides a comprehensive (math-free) framework of how the different LP algorithms (simplex, dual simplex, revised simplex, and interior point) are implemented in commercial codes (e.g., CPLEX and XPRESS) to provide the computational speed and accuracy needed to solve very large problems
- • The new Chapter 10 covers efficient heuristics/metaheristics designed to find good approximate solution for integer and combinatorial programming problems. The need for the heuristics/metaheristics is in recognition of the fact that the performance of the exact algorithms has been less than satisfactory from the computational standpoint
- • The new Chapter 11 is dedicated to the important traveling salesperson problem. The presentation includes a variety of applications and the development of exact and heuristic solution algorithms
- • All the algorithms in the new Chapters 10 and 11 are coded in Excel in a manner that permits convenient interactive experimentation with the models
- • Numerous new problems have been added throughout the book
- • The TORA software has been updated

Contents

About the Author

Hamdy A. Taha is a University Professor Emeritus of Industrial Engineering with the University of Arkansas, where he taught and conducted research in operations research and simulation.



R. K. Hegde

ISBN: 97893325341OO
Copyright: 2015
Pages: 888

Power Plant Engineering

NEW

About the Book

Power Plant Engineering has been written to cater to the needs of budding mechanical engineers in their undergraduate study. Supplemented by clear illustrations and solved examples, the book provides a comprehensive coverage of topics at the required depth to students gain a firm foothold in the subject.

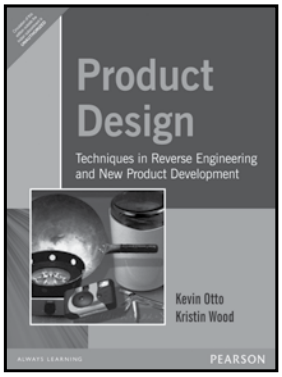
Features

- Information on contemporary topics in power plant technology such as super critical boiler technology
- Practical approach to delineate complex topics with visual aids and representational schemes
- Exhaustive coverage of power generation from non-conventional sources of energy
- Ample solved examples, multiple-choice and exercise questions for practice

Contents

About the Author

R. K. Hegde is Professor, Department of Mechanical Engineering in Srinivas Institute of Technology, Mangalore, Karnataka. The author has more than 20 years of rich industrial and academic experience. Earlier he was involved in power plant operation and maintenance, handling high pressure FBC boilers, Babcock–Wilcox boilers, turbines and pumps. He worked in a power plant in maintenance and is also an authorized boiler operation engineer.



Kevin Otto
Kristin Wood

ISBN: 9788177588217
Copyright: 2001
Pages: 1088

Product Design

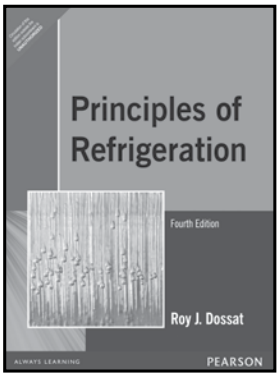
About the Book

Product Design presents an in-depth study of structured design processes and methods. Its fundamental approach is that of reverse engineering and teardowns, which present a new paradigm for design instruction. This permits a modern learning cycle of experience, hypothesis, understanding, and then execution. Otto and wood bring students concrete experiences with hands-on products, applications of contemporary technologies, and much more.

Features

- **Fundamental approach**—A systematic and methods-based strategy to product development.
- Students see good design before they attempt design.
- Concrete experiences with hands-on products.

Contents



Roy J. Dossat

ISBN: 978817758881 1
Copyright: 1997
Pages: 512

Principles of Refrigeration, 4/e

About the Book

Classic presentation of the principles, applications, and design of refrigeration systems and equipment. No special background in thermodynamics, physics, or calculus is required, as the essential concepts are reviewed in the first five chapters.

Contents

PEARSON

Edward G. Pita P.E.

ISBN: TBA
Copyright: TBA
Pages: TBA

Air Conditioning Principles and Systems: An Energy Approach, 4/e

COMING SOON

About the Book

For two-semester courses in Refrigeration and Air Conditioning, HVAC System Design, and Principles of Heating/Ventilating/AC/Refrigeration.

Using a minimum of mathematics, this text explores the fundamental concepts of air conditioning and their application to systems—explaining all concepts in a clear, practical manner, and focusing on problems and examples typically encountered on the job. It covers the latest, yet practical methods of load calculations, psychometrics, system design, and equipment description and performance.

Features

- NEW - Revised and added material throughout—Covers indoor air quality; air pollution from combustion; and the new environmental requirements on refrigerants.
- NEW - Use of the Internet for air conditioning work—Includes added explanations, examples, and problems throughout.
- NEW - Revised cooling load calculation data—Includes design weather data; appliance loads; and ventilation requirements.
- An understandable review of physical principles.
- Coverage of HVAC equipment description, performance, selection and specifications.
- Teaches students use, performance, specifications, and selection of HVAC equipment.
- Complete, practical explanation of psychometrics.
- A practical approach to important issues.
- Enables students to effectively address these same issues in the workplace.
- Many illustrative examples and problems—Dealing with real situations.
- Underlying theme of energy utilization and conservation throughout.
- Describes energy codes and standards, and examines each topic from an energy conservation viewpoint—essential for all future work in the air conditioning field.
- Example projects.

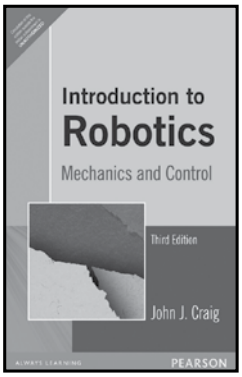
Contents

About the Author

Edward G. Pita is Professor Emeritus and Adjunct Professor in the Environmental Control Technology Department at New York City Technical College of the City University of New York. He received a B.S. degree from Purdue University, an M.S. degree from Columbia University, and a Ph.D. degree from the University of Maryland, all in mechanical engineering. He is a member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and is a registered professional engineer.

In addition to his career as an educator, Dr. Pita was chief mechanical engineer for a large consulting engineering firm responsible for HVAC projects for the United Nations, the State City of the Vatican, the U.S. Capitol, and many other governmental and private clients.

He has also worked in applications and systems engineering for the Carrier Corporation and the Worthington Corporation.



John J. Craig

ISBN: 9788131718360
Copyright: 2008
Pages: 408

Introduction to Robotics: Mechanics and Control, 3/e

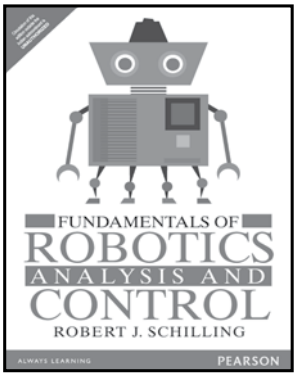
About the Book

Since its original publication in 1986, Craig's Introduction to Robotics: Mechanics and Control has been the market's leading textbook used for teaching robotics at the university level. With perhaps one-half of the material from traditional mechanical engineering material, one-fourth control theoretical material, and one-fourth computer science, it covers rigid-body transformations, forward and inverse positional kinematics, velocities and Jacobians of linkages, dynamics, linear control, non-linear control, force control methodologies, mechanical design aspects, and programming of robots.

Features

- Chapter 1: Introduction has been enhanced to broaden the introductory presentation of the field of robotics—Previews what is covered in the book.
- Real-world practicality with underlying theory presented.
- Large set of homework problems with a "difficulty grade" assigned.
- The most cited textbook on robotics in the field.
- "Programming Assignments" at the end of each chapter.

Contents



Robert J. Schilling

ISBN: 9789332555235
Copyright: 2015
Pages: 464

Fundamentals of Robotics: Analysis and Control

NEW

About the Book

An introduction to the fundamentals of robotics, and to the analysis and control of industrial robots.

Features

- uses case study examples of educational, industrial, and generic robots.
- includes numerous case studies of various robot types — five-axis Rhino XR-3, four-axis Adept One, six-axis Intelledex 660, three-axis planar articulated manipulator.
- provides complete kinematic solutions for several important generic classes of robotic arms.
- covers robot vision and task planning.

Contents

PEARSON

Ramachandran Nagarajan

ISBN: 9789332544802
Copyright: 2016
Pages: 320

Robotics

NEW

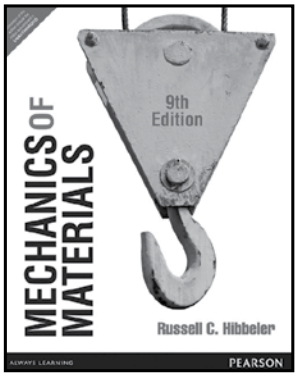
About the Book

Robotics is the branch of technology that deals with the design, construction, operation, and application of robots. It is a subject offered to the students of mechanical engineering in their final year. This book is written to cover the needs of a budding engineer at the undergraduate level.
This book emphasizes on building the fundamental concepts along with necessary mathematical analysis and graphical representation. Numerical problems are also present for better understanding the topics.

Features

- A detailed listing of chronological development of Robots Technology
- Composite transformation matrix , Object manipulations and wrist articulations are explained with detailed examples.
- Lucid coverage of grippers and tools with self explanatory figures
- Detailed coverage of Robot applications in industries

Contents



R. C. Hibbeler

ISBN: 9789332518605
Copyright: 2007
Pages: 888

Mechanics of Materials, 9/e

About the Book

Containing Hibbeler's hallmark student-oriented features, this text is in four-color with a photorealistic art program designed to help students visualize difficult concepts. A clear, concise writing style and more examples than any other text further contribute to students' ability to master the material.

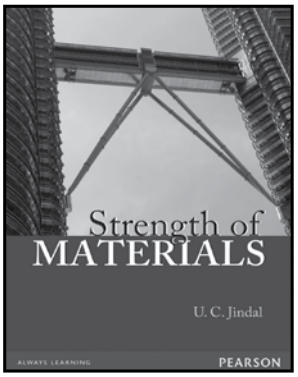
Features

- Problem Solving: A large variety of problem types from a broad range of engineering disciplines, stress practical, realistic situations encountered in professional practice, varying levels of difficulty, and problems that involve solution by computer.
- Visualization: This text is in four-color with a photorealistic art program designed to help students visualize difficult concepts.
- Review and Student Support: A thorough end of chapter review provides students with a concise tool for reviewing chapter contents.
- Accuracy: The accuracy of the text and problem solutions has been thoroughly checked by four other parties.

Contents

About the Author

R.C. Hibbeler graduated from the University of Illinois at Urbana with a BS in Civil Engineering (major in Structures) and an MS in Nuclear Engineering. He obtained his PhD in Theoretical and Applied Mechanics from Northwestern University.



U C Jindal

ISBN: 9788131759097
Copyright: 2011
Pages: 704

Strength of Materials

About the Book

Strength of Materials deals with the study of the effect of forces and moments on the deformation of a body. The book follows a simple approach in explaining the basic and advanced concepts with numerous solved and unsolved problems.

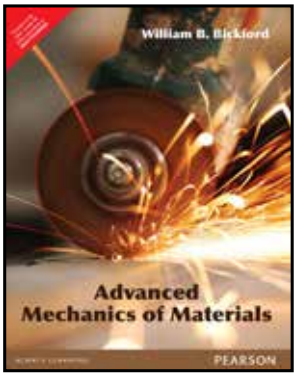
Features

- Separate chapters devoted to three dimensional stresses, theory of simple bending, theories of failure, mechanical properties, material testing and engineering materials
- Large number of solved examples to support the text

Contents

About the Author

Dr. U. C. Jindal is former Professor and Head of the Department of Mechanical Engineering, Delhi College of Engineering. For the last 45 years Dr Jindal has been involved in teaching, research and development activities in the mechanics group of subjects – engineering mechanics, strength of materials, machine design, theory of machines and materials science.



William B. Bickford

ISBN: 9789332559448
Copyright: 2016
Pages: 472

Advanced Mechanics of Materials, 1/e

NEW

About the Book

Students sometimes think of the different chapters in a solid mechanics text as a sequence of unrelated topics. Advanced Mechanics of Materials unifies these topics by providing a consistent, chapter by chapter treatment of theory that stresses the basic ideas of equilibrium, deformation, and material behavior. The author's approach helps students see the relationship between various classes of problems treated in different chapters. Bickford's development of the finite element method in chapter Two, and its application in several of the later chapters, is a unique and welcome approach in this new text. Numerous clear and easy to follow examples are included to illustrate the application of the theory to practical problems.

Features

Stresses equilibrium, deformation, and material behavior consistently in each chapter.

Introduces the finite element method early and uses it in subsequent chapters.

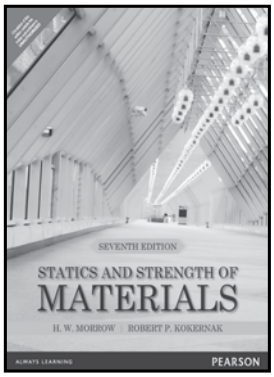
Provides 400 end-of-chapter problems that ask students to:

1) Verify some aspect of the theory developed in the chapter.
2) Verify that the results from a specific problem actually satisfy the requirements of the corresponding theory.
3) Demonstrate an understanding of the theory by application to practical situations.

Contents

About the Author

William B. Bickford is Professor of Mechanical and Aerospace Engineering at Arizona State University. His research interests are in the fields of solid mechanics and vibrations. He is the author of three other textbooks and he has been recognized for his excellence in the classroom with the College of Engineeringis Outstanding Teacher Award.



Harold I Morrow
Robert P Kokernak

ISBN: 9789332509351
Copyright: 2013
Pages: 528

Statics and Strength of Materials, 7/e

About the Book

This fully updated text presents logically organized, clear coverage of all major topics in statics and strength of materials, including the latest developments in materials technology and manufacturing/ construction techniques. A basic knowledge of algebra and trigonometry are the only mathematical skills it requires, although several optional sections using calculus are provided for instructors teaching in ABET accredited programs. A new introductory section on catastrophic failures shows students why these topics are so important, and 25 full-page, real-life application sidebars demonstrate the relevance of theory. To simplify understanding and promote student interest, the book is profusely illustrated.

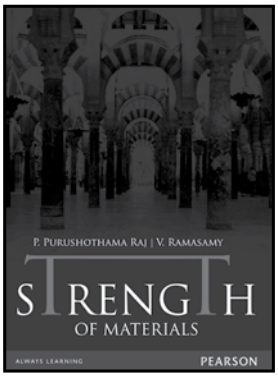
Features

- Coverage of the newest applications and materials technologies
- Strong linkage between theory and practiceâ€"through multiple real-life examples throughout
- Nearly 1,000 student problems including problems at all levels of difficulty
- Coverage of international system of units (SI) and US customary system
- Utilizes numerous illustrations from industry designed to maintain student interest and make the book more accessible

New to this edition

- Expanded introductory section includes powerful examples of catastrophe failures
- New! Cable analysis coverage demystifies an important but complex topic that is omitted from many texts
- New! More Full-Page Application Sidebars now includes 25 Application Sidebars, each drawing on the book's concepts and techniques to describe a real-life example
- New! CD-ROM presents animated worked examples

Contents



Purushothama Raj

ISBN: 9788131768549
Copyright: 2012
Pages: 550

Strength of Materials

About the Book

Designed for the undergraduate students of civil and mechanical engineering for their core paper on Strength of Materials, this book offers detailed explanations with clear illustrations and a wide variety of solved problems. The step-by-step derivations help students relate to the concepts easily.

Features

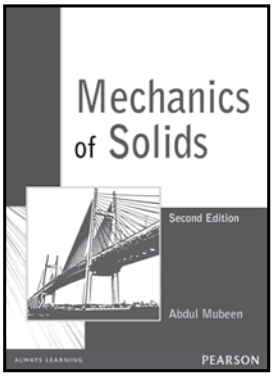
- Detailed explanations with clear illustrations and solved problems for all the core topics.
- Step-by-step derivations in each chapter makes the concepts self explanatory.
- Comprehensive coverage of "Flexural Stresses" & "Plane Trusses"
- Over 350 solved problems have been provided.
- Chapter highlights provided at the end of every chapter enables quick revision by students.

Contents

About the Authors

Dr. P Purushothama Raj is Principal, Sri Aravindar Engineering College.

Dr. Ramasamy is head of the department for Civil Engineering at Sri Adi Parashakthi College of Engineering.



Abdul Mubeen

ISBN: 9788131758885
Copyright: 2011
Pages: 668

Mechanics of Solids, 2/e

About the Book

This book is designed to fulfill the needs of the mechanics of solids or Strength of Materials courses often offered to undergraduate students of mechanical, civil, aeronautics and chemical engineering during the second and third semesters. The book has been thoroughly revised with multiple-choice questions, examples and exercises to match the syllabi requirement of various universities across the country.

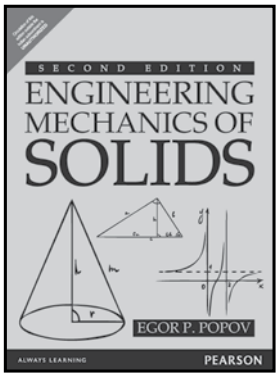
Features

- Two chapters explaining in detail the concept and applications of vibrations and strain energy methods
- 233 multiple-choice question with answers

Contents

About the Author

Abdul Mubeen is a professor at the Department of Mechanical Engineering, Jamia Millia Islamia, New Delhi.



Egor P. Popov

ISBN: 9789332550216
Copyright: 2016
Pages: 864

Engineering Mechanics of Solids, 2/e

NEW

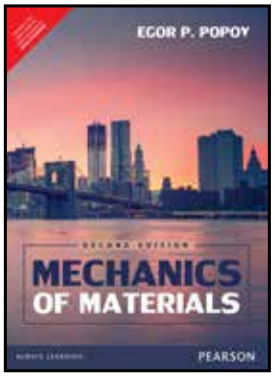
About the Book

For civil, mechanical, and aeronautical engineering courses. This book is a comprehensive, cross-referenced examination of engineering mechanics of solids. Traditional topics are supplemented by an exposure to several newly-emerging disciplines, such as the probabilistic basis for structural analysis, matrix methods, and plastic limit analysis.

Features

- NEW - Includes a greater number of chapters to focus on specific topics and to improve the overall presentation sequence.
- NEW - Includes an expanded chapter on Mechanical Properties of Materials.
- NEW - Emphasizes the SI system of units.
- NEW - Introduces a number of avant-garde topics including an advanced analytic expression for cyclic loading and a novel failure surface for brittle material.
- NEW - Most of section properties are given in the two systems of units.

Contents



Egor P. Popov

ISBN: 9789332559547
Copyright: 2016

Mechanics of Materials, 2/e

NEW

About the Book

This volume stresses fundamental principles of mechanics of materials, and introduces applications from various fields of engineering.

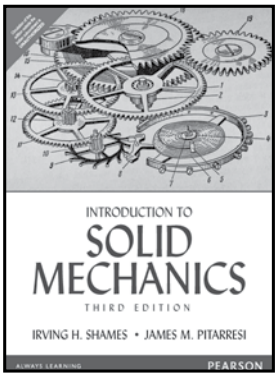
Features

- Includes numerous solved examples.
- Uses English and SI units throughout.

Contents

About the Author

Egor P. Popov, University of California, Berkeley



Irving H. Shames
James M. Pitarresi

ISBN: 9789332549906
Copyright: 2016
Pages: 769

Introduction to Solid Mechanics, 3e

NEW

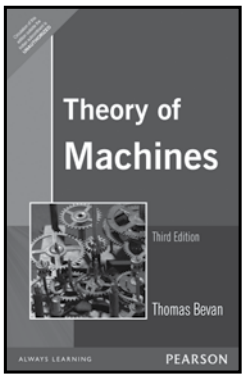
About the Book

For second or third-year solids courses, and a valuable reference for subsequent coursework in Mechanical Engineering, Civil Engineering or Material Science.
Rather than a rote "cookbook" approach to problem-solving, this book offers a rigorous treatment of the principles behind the practices, asking students to harness their sound foundation of theory when solving problems. A wealth of examples illustrate the meaning of the theory without simply offering recipes or maps for solving similar problems.

Features

- NEW - Greatly expanded, full-semester coverage of algebraic topology—Extensive treatment of the fundamental group and covering spaces. What follows is a wealth of applications—to the topology of the plane (including the Jordan curve theorem), to the classification of compact surfaces, and to the classification of covering spaces. A final chapter provides an application to group theory itself.
- Advanced topics—Such as metrization and imbedding theorems, function spaces, and dimension theory are covered after connectedness and compactness.
- Order of topics proceeds naturally from the familiar to the unfamiliar—Begins with the familiar set theory, moves on to a thorough and careful treatment of topological spaces, then explores connectedness and compactness (with their many ties to calculus and analysis), and then branches out to the new and different topics mentioned above.
- One-or two-semester coverage—Provides separate, distinct sections on general topology and algebraic topology.
- Each of the text's two parts is suitable for a one-semester course, giving instructors a convenient single text resource for bridging between the courses. The text can also be used where algebraic topology is studied only briefly at the end of a single-semester course.
- Many examples and figures—Exploits six basic counterexamples repeatedly.
- Exercises—Varied in difficulty from the routine to the challenging. Supplementary exercises at the end of several chapters explore additional topics.

Contents



Thomas Bevan

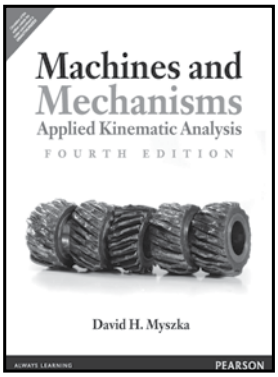
ISBN: 9788131729656
Copyright: 2009
Pages: 630

The Theory of Machines, 3/e

About the Book

The book is largely based on lectures given at the Manchester College of Technology. The lectures cover a period of one hour a week for three sessions. This book is valuable for the students who are preparing for a University degree in engineering.

Contents



David H. Myszka

ISBN: 9789332555204
Copyright: 2015
Pages: 576

Machines & Mechanisms: Applied Kinematic Analysis, 4/e

NEW

About the Book

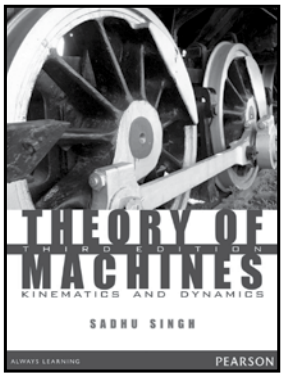
For all courses in machine motion, theory of machines, industrial mechanisms, mechanism analysis, mechanism design, and kinematics in departments of engineering technology and application-oriented mechanical engineering programs.

This up-to-date introduction to kinematic analysis ensures relevance by using actual machines and mechanisms throughout. It provides the techniques necessary to study the motion of machines while emphasizing the application of kinematic theories to real-world problems. State-of-the-art techniques and tools are utilized, and analytical techniques are presented without complex mathematics. Reflecting instructor and student feedback, this Fourth Edition's extensive improvements include: a new section introducing special-purpose mechanisms; expanded descriptions of kinematic properties; clearer identification of vector quantities through standard boldface notation; new timing charts; analytical synthesis methods; and more. All end-of-chapter problems have been reviewed, and many new problems have been added.

Features

- For all courses in machine motion, theory of machines, industrial mechanisms, mechanism analysis, mechanism design, and kinematics in departments of engineering technology and application-oriented mechanical engineering programs.
- This up-to-date introduction to kinematic analysis ensures relevance by using actual machines and mechanisms throughout. It provides the techniques necessary to study the motion of machines while emphasizing the application of kinematic theories to real-world problems. State-of-the-art techniques and tools are utilized, and analytical techniques are presented without complex mathematics. Reflecting instructor and student feedback, this Fourth Edition's extensive improvements include: a new section introducing special-purpose mechanisms; expanded descriptions of kinematic properties; clearer identification of vector quantities through standard boldface notation; new timing charts; analytical synthesis methods; and more. All end-of-chapter problems have been reviewed, and many new problems have been added.
- Hallmark Features
- Early emphasis on mechanism design–addressing design principles, not just analysis.
- Enables students to go beyond analysis of existing machinery, and invent unique mechanisms
- A focus on real, working machinery–beginning each example problem by introducing an actual machine that relies on the mechanism being analyzed
- Continually reminds students of the practical applications of motion and force analysis
- Introduction to basic analytical techniques–requiring only minimal preparation in mathematics (trigonometry)
- Gives students an alternative method of analysis that is especially helpful when evaluating design changes
- Hands-on computer analysis using Working Model software–through an extensive collection of integrated tutorials and problems appearing throughout the book
- Gives students a hands-on introduction to computer analysis using a leading commercial tool
- Application of kinematic theories to practical mechanisms–bridging the gap between theory and practice
- Guides students in understanding essential theoretical concepts and then applying them in real machines
- Self-contained format–including an introduction to the fundamental principles required in machine analysis.
- Develops students' skills for determining and optimizing the motion characteristics of machines
- Chapter-ending case studies–illustrating mechanisms widely used on industrial equipment
- Challenges students to understand and discuss the rationales behind designs, and suggest possible

Contents



Sadhu Singh

ISBN: 9788131760697
Copyright: 2012
Pages: 1392

Theory of Machines, 3/e

About the Book

A comprehensive textbook on Theory of Machines for undergraduate students of Mechanical and Civil Engineering. The main objective of the book is to present the concepts in a logical, innovative and lucid manner With easy to understand illustrations and diagrams; the book is a treasure in itself for Mechanical Engineers. The text gives an easy explanation of basic principles followed by advance topics. The book has been thoroughly revised with fresh examples and exercises to match the syllabi requirement of various universities across the country.

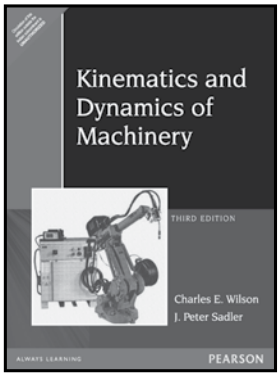
Features

- An exclusive chapter on mechanical vibrations and automatic control
- A separate chapter on velocity and acceleration in mechanisms is explained in detail
- 615 solved examples
- 210 practice problems with answers

Contents

About the Author

Dr Sadhu Singh retired as Professor and Head of the Department of Mechanical Engineering, Govind Ballabh Pant University of Agriculture and Technology, Pantnagar, Uttarakhand.



Charles E. Wilson
J. Peter Sadler

ISBN: 9788131720226
Copyright: 2008
Pages: 900

Kinematics and Dynamics of Machinery, 3/e

About the Book

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?".

Features

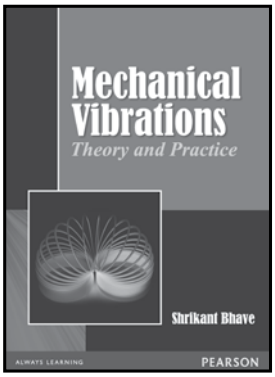
- It is a tool for professors who wish to develop the ability of students to formulate and solve problems involving linkages, cams, gears, robotic manipulators and other mechanisms.
- Coverage of a broad range of machines and mechanisms with practical applications given top consideration.

Contents

About the Authors

Charles E. Wilson is a Professor with the Department of Mechanical Engineering, New Jersey Institute of Technology.

J. Peter Sadler is a Professor with the Department of Mechanical Engineering, University of Kentucky.



Srikant Bhave

ISBN: 9788131732489
Copyright: 2010
Pages: 359

Mechanical Vibrations

About the Book

Mechanical Vibrations is an unequaled combination of conventional vibration techniques along with analysis, design, computation and testing. Emphasis is given on solving vibration related issues and failures in industry.

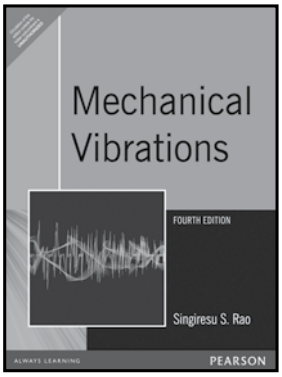
Features

- A chapter on "vibrations diagnostic and control
- Method of discretization, choice of element, shape functions etc. have been explained using MATLAB
- Running examples used throughout to explain the theoretical concepts
- Online case studies on reliability and failure analysis of rotating machinery
- Running examples used throughout to explain the theoretical concepts

Contents

About the Author

Shrikant Bhave is an internationally well known expert on the subject of vibration analysis and has nearly four decades of experience in teaching and in industry.



Singiresu S. Rao

ISBN: 9788177588743
Copyright: 2003
Pages: 1110

Mechanical Vibrations, 4/e

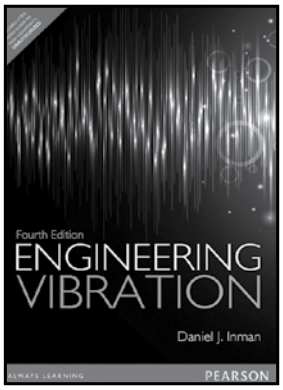
About the Book

Retaining the style of its previous editions, this text presents the theory, computational aspects, and applications of vibrations in as simple a manner as possible. With an emphasis on computer techniques of analysis, it gives expanded explanations of the fundamentals, focusing on physical significance and interpretation that build upon students' previous experience. Each self-contained topic fully explains all concepts and presents the derivations with complete details. Numerous examples and problems illustrate principles and concepts.

Features

- Interactive C++ and Fortran programs, and problems involving MATLAB, C++, and Fortran—Included in every chapter.
- Companion Website—Provides answers to all review questions, source codes of all programs, all figures in the book and more.

Contents



Daniel J Inman

ISBN: 9789332518483
Copyright: 2012
Pages: 688

Engineering Vibrations, 4/e

About the Book

Serving as both a text and reference manual, Engineering Vibration, 4e, connects traditional design-oriented topics, the introduction of modal analysis, and the use of MATLAB, Mathcad, or Mathematica. The author provides an unequaled combination of the study of conventional vibration with the use of vibration design, computation, analysis and testing in various engineering applications.

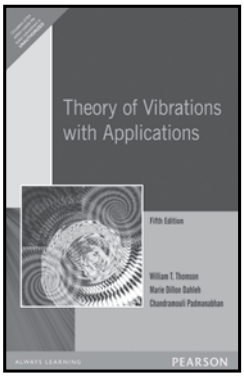
Features

- Special-interest windows are placed throughout the text where prior or background information summaries are required. This helps remind students of essential information pertinent to the text material, so they don't have to flip back to previous chapters or consult a reference text for formulas or other information.
- Examines topics that reflect some of the recent advances in vibration technology, changes in ABET criteria and the increased importance of both engineering design and modal analysis.
- In the Design for Vibration Suppression Chapter, students put vibration analysis into practice by learning how to use vibration theory to design systems, structures and devices. Use of computational codes throughout fully integrates modern software tools into the study of vibration, satisfying ABET criteria.
- To help students relate design and analysis, nearly every topic contains design-related examples or discussions.
- PREPARE STUDENTS FOR THEIR CAREER
- Computational software packages are integrated the text material to provide students with skills required by industry. This also allows early introduction to nonlinear vibration.
- Incorporates MATLAB, Engineering Vibration Toolbox, Mathematica, and Mathcad throughout to allow students to conduct and explore vibration analysis, "what if" studies, and design.
- Toolbox offers professional quality computer analyses, including basics, introduction to modal analysis with actual experimental data files and finite elements. Students are challenged with over 65 computer problems including use of manufacture's design charts, measurement analysis, and matrix eigen value computing for frequencies and modes

Contents

About the Authors

Daniel J. Inman, Virginia Polytechnic Institute and State University



William T. Thomson
Marie Dillon Dahleh

ISBN: 9788131704820
Copyright: 2008
Pages: 534

Theory of Vibrations with Applications, 5/e

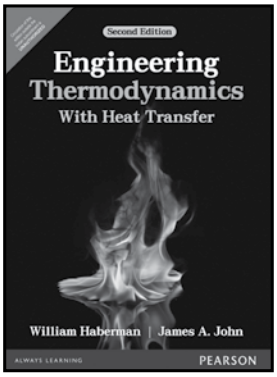
About the Book

A thorough treatment of vibration theory and its engineering applications, from simple degree to multi degree-of-freedom system.

Features

- Focuses on the physical aspects of the mathematical concepts necessary to describe the vibration phenomena.
- Provides many example applications, including typical problems faced by practicing engineers.
- MATLAB… has been introduced where appropriate to take advantage of this industry-standard software for necessary calculations.
- Mass and stiffness matrices are now defined alongside the discussion of normal mode vibrations, free vibrations, forced vibrations, absorbers, and dampers (Ch. 5).

Contents



William Haberman
James E.A. John

ISBN: 9789332559578
Copyright: 2016
Pages: 799

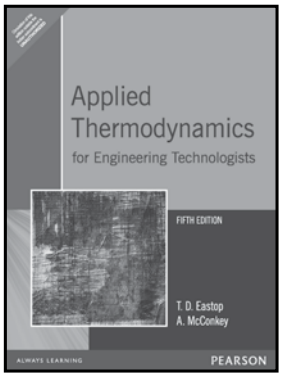
Engineering Thermodynamics with Heat Transfer, 2/e

NEW

About the Book

This book is intended to provide undergraduate engineering student with an understanding of the basic principles of thermodynamics and to introduce the student to the concepts of heat transfer.

Contents



T. D. Eastop
A. McConkey

ISBN: 9788177582383
Copyright: 4993
Pages: 736

Applied Thermodynamics for Engineering Technologists, 5/e

About the Book

Applied Thermodynamics for Engineering Technologists provides a complete introduction to the principles of thermodynamics for degree level students on courses in mechanical, aeronautical, environmental and energy gathering and engineering science courses. The fifth edition has been thoroughly revised to take account of modern teaching methods and perspectives.

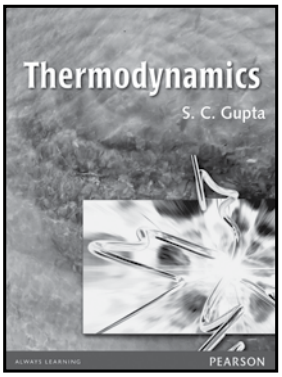
Features

- Practical applications of thermodynamics are stressed throughout
- The comprehensive coverage provides all the information students will need to complete their study of thermodynamics

Contents

About the Authors

Tom Eastop was Head of the School of Engineering at Wolverhampton Polytechnic. He is now Honorary Research Fellow at the University of Exeter. The Late **Allan McConkey** was head of the Department of Mechanical & Industrial Engineering at Dundee College of Technology.



S. C. Gupta

ISBN: 9788131717950
Copyright: 2005
Pages: 552

Thermodynamics

About the Book

This text is designed for the first course on thermodynamics offered to undergraduate students of mechanical engineering. The book presents the Macroscopic (classical) and Microscopic (Statistical) thermodynamics including applications to power cycles, and aims to create an analytical mind in the reader to solve problems.

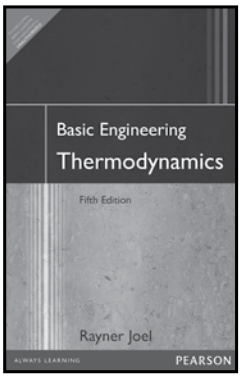
Features

- Zeroth, first and second law of thermodynamics
- Non-reactive and reactive gas mixtures with their second law analysis
- Analysis of binary mixtures and psychrometry
- Chapter on working substances – discusses the behavior of a substance in its different phases and the role of the two-dimensional charts in a cycle
- First and second law analysis of combined cycle adopted at Anta Gas Plant

Contents

About the Authors

S. C. Gupta, former Professor and Head, Department of Mechanical Engineering, Engineering College, Kota, is currently teaching at the RKG Institute of Technology, Ghaziabad. He has over 30 years of teaching experience and has taught thermodynamics, thermal engineering, fluid mechanics and vibrations.



Rayner Joel

ISBN: 9788131718889
Copyright: 2008
Pages: 660

Basic Engineering Thermodynamics, 5/e

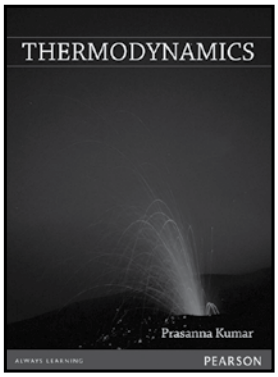
About the Book

The fifth edition of this well-established and popular text has been extensively revised and updated and provides a comprehensive introduction to the fundamentals and principles governing the successful conversion of heat into energy. Providing a basic non-mathematical approach to the subject, the book emphasizes the effective and efficient use of energy.The illustrations have all been updated and some new diagrams and photographs added. The number of revision questions at the end of each chapter has been increased.

Features

- Provides a basic non-mathematical approach to the subject.
- Emphasizes the effective and efficient use of energy.
- Illustrations have all been updated and some new diagrams and photographs added.
- Includes numerous worked examples.
- Includes increased number of revision questions at the end of each chapter.

Contents



Dr. Prasanna Kumar

ISBN: 9788131771853
Copyright: 2012
Pages: 660

Thermodynamics

About the Book

Designed for the undergraduate students of mechanical engineering for their core paper on Thermodynamics, this book offers lucid explanation of terms and concepts.

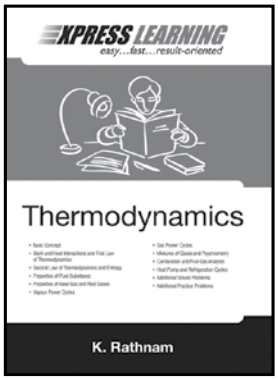
Features

- Fundamentals required for a basic course in thermodynamics are covered thoroughly to enable students to take up energy conversion topics in a subsequent semester.
- Separate chapters on Energy and Heat.
- A more rational, easily understandable method of energy addition, removal and accumulation is used to account for all energy transfers to and from the system.

Contents

About the Author

Prof Prasanna Kumar has completed his bachelor's degree in mechanical engineering from UVCE Bangalore and his postgraduate studies obtaining the degree of master of engineering in applied thermal sciences from the University of Roorkee. He obtained his PhD degree from the Indian Institute of Science, Bangalore. He is currently Professor at Northern India Engineering College, New Delhi.



Prof. Rathinam K

ISBN: 9788131795507
Copyright: 2013
Pages: 350

Thermodynamics-Express Learning

About the Book

Thermodynamics is offered as a core subject to students of mechanical engineering. A sound knowledge in Thermodynamics is essential to have a thorough understanding of how gadgets work efficiently.

To ensure easy conceptual clarity and numerical calculations, the author has introduced the subject in a question and answer format which makes the book ideal for learners. The style will also enhance the confidence of the students learning this basic subject.

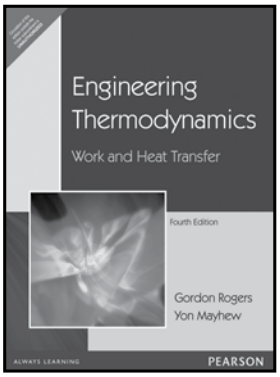
Features

- Unique Question and Answer format
- Step-by-step solutions of problems have been provided
- Variety of objective type questions will help students take up competitive exams like GATE, UPSC, etc..
- Answers to objective type questions have been provided separately which will help students cross verify the answers.

Contents

About the Author

Prof Rathinam is retired Professor, Department of Mechanical Engineering, Annamalai University.



Gordon Rogers
Yon Mayhew

ISBN: 9788131702062
Copyright: 1967
Pages: 736

Engineering Thermodynamics: Work and Heat Transfer, 4/e

About the Book

This well-established text covers the fundamentals of engineering thermodynamics, their application to particular fluids and the ways in which work and heat transfer are affected.

Features

- Uses the alternative and increasingly popular sign convention for work transfer.
- Provides a thorough revision for the treatment of perfect gas or combustion, particularly disassociation and several aspects of heat transfer.

Contents

PEARSON

Ramesh Prasad Sah
Prof. (Dr.) Ranadip Kumar Das

ISBN: TBA
Copyright: 2016
Pages: 120

Steam Tables

COMING SOON

About the Book

This book on steam tables is a collection of experimental data on temperature, pressure, volume and energy contained in water and steam. The data is organized in columns for readability. Steam tables helps in doing calculations that are required to make good use of steam in the various situations encountered in industries. This book has been written for undergraduate level engineering students who study Engineering Thermodynamics and Power plant Engineering. This book will be also useful for those professionals who are working in different power plants.

Features

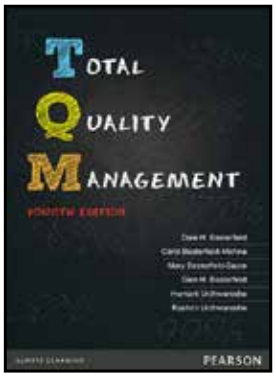
- Accurate data
- Better readability
- Coloured Mollier diagram in SI units

Contents

About the Author

Ramesh Prasad Sah is faculty, Department of Mechanical Engineering, Asansol Engineering College, Asansol

Prof. (Dr.) Ranadip Kumar Das is Professor and Head, Department of Mechanical Engineering, Indian School of Mines, Dhanbad



Dale H. Besterfield

ISBN: 9789332534452

Total Quality Management (2 Color), 4/e

NEW

About the Book

Total Quality Management refers to an integrated approach by management to focus all the functions and levels of an organization on quality and continuous improvement. Over the years, total quality management has become very important for improving a firm's processing capabilities in order to sustain competitive advantages. This book focuses on encouraging a continuous flow of incremental improvements from the bottom of the organization's hierarchy. This fourth edition includes a historical perspective of the quality movement in India. Updated information on various standards and a wider spectrum of quality-related standards has also been included.

Features

- More case studies and examples from the Indian context for the benefit of readers
- Pedagogical tools such as chapter objectives, summaries and multiple-choice questions, as well as expanded content on new management tools have been added
- Failure Mode and Effects Analysis (FMEA) and quality standards like the ISO 9000, ISO 14000 and TL 9000 have been revised
- Addition of concepts and information on product life cycle and Weibull, Design for Six Sigma (DFSS), Balanced Scorecard, Measurement Systems Analysis, Occupational Health and Safety Assessment Series (OHSAS) 18001 and 18002
- Information about business excellence awards such as Ramkrishna Bajaj National Quality Award (RBNQA), the Malcolm Baldrige Award,CII Exim Award and Deming Award will provide readers with a comprehensive perspective on the topic
- Concept of Part Level Quality Plans (PPAP), which is an integral part of most automotive companies has been added

Contents

About the Author

Dale H. Besterfield, Professor Emeritus, Southern Illinois University

Carol Besterfield-Mich na

Glen H. Besterfield, Associate Professor, University of South Florida

Mary Besterfield-Sacre, Associate Professor, University of Pittsburgh

Hemant Urdh wareshe, Director, Institute of Quality and Reliability, Fellow, American Society for Quality

Rashm i urdh wareshe, Director, Automotive Research Association of India

Poornima M Charantimath

ISBN: 9788131732625
Copyright: 2011
Page: 608

Total Quality Management, 2/e

About the Book

The enlarged and revised second edition of Total Quality Management blends the fundamental principles and historical foundation of total quality with practical applications and examples. The coverage of high-performance practices and developments in the quality management arena enables students to develop a basic appreciation of quality management concepts while retaining their focus on the goal of continuous improvement.

Features

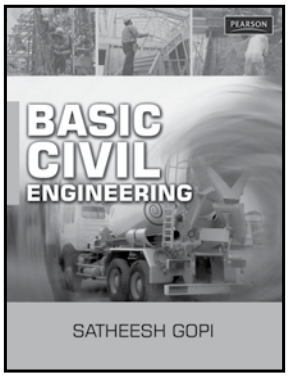
- Eleven new chapters: The second edition comprises 18 chapters with revised and expanded coverage on the latest techniques and practices followed in total quality management.
- Balanced coverage of the manufacturing and service sectors: The manufacturing and service sectors have been covered in greater detail by showcasing real-world practices from the Indian scenario.
- New chapters on Six Sigma and TPM: Completely new chapters on Six Sigma and TPM discuss the most recent trends and practices in total quality management.

Contents

About the Author

Poornima M. Charantimath is a professor of total quality management, entrepreneurship development and small business enterprises at the Karnataka Law Society's Institute of Management Education and Research, Belgaum.

Civil Engineering



Satheesh Gopi

ISBN: 9788131729885
Copyright: 2009
Pages: 348

Basic Civil Engineering

About the Book

Basic Civil Engineering is designed to enrich the preliminary conceptual knowledge about civil engineering to the students of non-civil branches of engineering. The coverage includes materials for construction, building construction, basic surveying and other major topics like environmental engineering, geo-technical engineering, transport traffic & urban engineering, irrigation & water supply engineering and CAD.

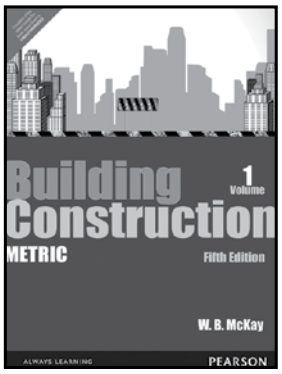
Features

- Quality and standard of Materials along with cost effectiveness.
- Modern field procedures for surveying such as Total Station, GPS and digital levels
- Building services like air conditioning, fire protection systems, lifts, escalators etc. and also repair and maintenance of structures.
- A chapter on CAD highlighting its importance in civil engineering.

Contents

About the Author

Satheesh Gopi has over 19 years of experience as a hydrographer and over five years of experience as a civil engineer and is currently the deputy director in the Hydrographic Survey Wing of the Kerala Port Department.



WB McKay

ISBN: 9789332508231
Copyright: 2013
Pages: 178

Building Construction, *Metric Volume 1, 5/e*

About the Book

A well-established series of reference books covering various aspects of building construction. Volumes I II and III are concerned essentially with the principles and sound methods of construction chiefly traditional in character. Volume IV describes more advanced building techniques with the latest systems well illustrated.

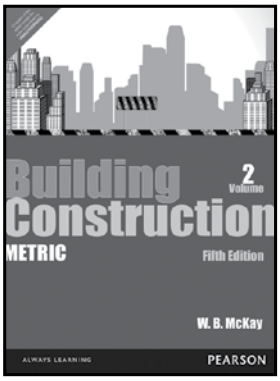
Features

- In metric units

Contents

About the Author

WB McKay, former registered architect and chartered structural engineer and Head of the Department of Building and Structural Engineering in the Manchester University Institute of Science and Technology



WB McKay

ISBN: 9789332509344
Copyright: 2013
Pages: 152

Building Construction, *Metric Volume II, 4/e*

About the Book

A well-established series of reference books covering various aspects of building construction. Volumes I II and III are concerned essentially with the principles and sound methods of construction chiefly traditional in character. Volume IV describes more advanced building techniques with the latest systems well illustrated.

Features

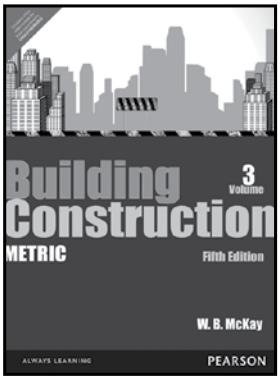
- In metric units

Contents

1. Brickwork
2. Drainage
3. Masonry
4. Mild Steel Roof Trusses
5. Homework Programme

About the Author

WB McKay, former registered architect and chartered structural engineer and Head of the Department of Building and Structural Engineering in the Manchester University Institute of Science and Technology



WB McKay

ISBN: 9789332508248
Copyright: 2013
Pages: 172

Building Construction, *Metric Volume III, 5/e*

About the Book

A well-established series of reference books covering various aspects of building construction. Volumes I II and III are concerned essentially with the principles and sound methods of construction chiefly traditional in character. Volume IV describes more advanced building techniques with the latest systems well illustrated.

Features

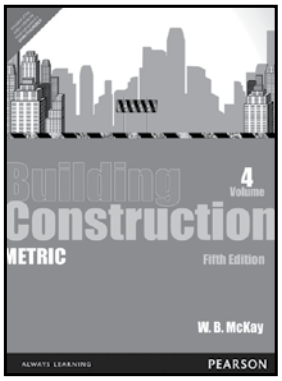
- In metric units

Contents

1. Carpentry
2. Joinery
3. Roof Coverings
4. Paintings
5. Homework Programme

About the Author

WB McKay, former registered architect and chartered structural engineer and Head of the Department of Building and Structural Engineering in the Manchester University Institute of Science and Technology



JK McKay

ISBN: 9789332508255
Copyright: 2013
Pages: 283

Building Construction, *Metric Volume IV, 4/e*

About the Book

A well-established series of reference books covering various aspects of building construction. Volumes I II and III are concerned essentially with the principles and sound methods of construction chiefly traditional in character. Volume IV describes more advanced building techniques with the latest systems well illustrated.

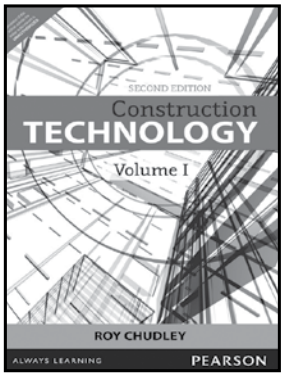
Features

- In metric units

Contents

About the Author

JK McKay, registered architect and chartered structural engineer and lecturer in Building construction at the Manchester University Institute of Science and Technology



Roy Chudley

ISBN: 9789332542051
Copyright: 2015
Pages: 272

Construction Technology - Volume-1, 2/e

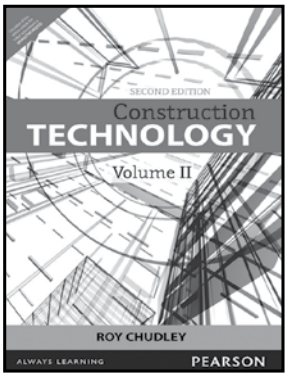
About the Book

CONSTRUCTION TECHNOLOGY is a four volume set that comprehensively covers the subject of Construction Technology through all technician levels. This book help prepare in a concise note form with ample illustrations.

Features

- Ample drawings to illustrate the text
- Metric system used

Contents



Roy Chudley

ISBN: 9789332542068
Copyright: 2015
Pages: 248

Construction Technology - Volume-2, 2/e

About the Book

CONSTRUCTION TECHNOLOGY is a four volume set that comprehensively covers the subject of Construction Technology through all technician levels. This book help prepare in a concise note form with ample illustrations.

Features

- Ample drawings to illustrate the text
- Metric system used.

Contents

Roy Chudley

ISBN: 9789332542075
Copyright: 2015
Pages: 256

Construction Technology - Volume-3, 2/e

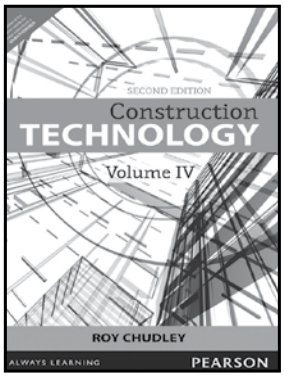
About the Book

CONSTRUCTION TECHNOLOGY is a four volume set that comprehensively covers the subject of Construction Technology through all technician levels. This book help prepare in a concise note form with ample illustrations.

Features

- Ample drawings to illustrate the text
- Metric system used

Contents



Roy Chudley

ISBN: 9789332542082
Copyright: 2015
Pages: 304

Construction Technology - Volume-4, 2/e

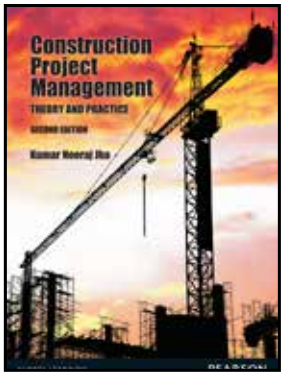
About the Book

CONSTRUCTION TECHNOLOGY is a four volume set that comprehensively covers the subject of Construction Technology through all technician levels. This book help prepare in a concise note form with ample illustrations.

Features

- Ample drawings to illustrate the text
- Metric system used

Contents



Kumar Neeraj Jha

ISBN: 9789332542013
Copyright: 2016
Pages: 904

Construction Project Management, 2e

New Edition

About the Book

The revised second edition of Construction Project Management discusses the various facets of construction project management with a special emphasis on the fundamental concepts. The major principles of project management are explained with the help of real-life case studies. Simple examples are used to facilitate the better understanding of basic concepts before complex problems are discussed.

Features

- Computer applications (Primavera and MS Project) are used to explain planning, scheduling, resource leveling, monitoring and reporting
- Line diagrams, cash-flow diagrams, bar diagrams and line graphs make the book interactive and easy to understand
- Real-life examples from the construction sites of the Delhi Metro, the Delhi International Airport construction, etc.
- Case studies on the preparation of documents for ISO 9001:2000, construction disputes, accidents in the construction industry, and preparation of estimates for live projects
- Additional solved problems in PERT and CPM (NEW)
- Introduction to earthworks and concreting equipment (NEW)
- Chapters on Linear programming and Transportation and Transshipment and Assignment problems (NEW)

Contents

PEARSON

P. Purushothama Raj

ISBN: 9789332544796
Copyright: 2016
Pages: 624

NEW

Building Construction Materials and Techniques

About the Book

Building construction materials and techniques is a subject offered to the students of civil engineering in their second year. This book is written to cover the subject in universities where it is offered as two different subjects as well as universities where it is offered as a combined single subject at the undergraduate level.
Of the 32 chapters in this book, 19 are dedicated to building construction while the remaining 13 focus on building materials. Each chapter is supplemented with numerous self-explanatory illustrations for easy comprehension.

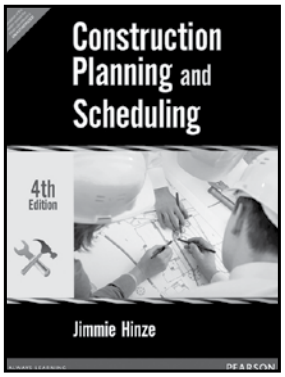
Features

- Lucid coverage of various building materials
- Elaborate coverage of concrete and precast concrete units
- Adequate detailing on masonry construction
- More than 350 review questions, 300 Objective questions and 200 illustrations
- Highly illustrated with line diagrams, cash-flow diagrams, bar diagrams, line graphs to make the book interactive and easy to understand.

Contents

About the Author

P. Purushothama Raj was Former Director, Adhiparasakthi Engineering College. He has over 30 years of teaching experience and has published journals in several national and international journals



Jimmie W. Hinze

ISBN: 9789332505735
Copyright: 2013
Pages:

Construction Planning and Scheduling, 4/e

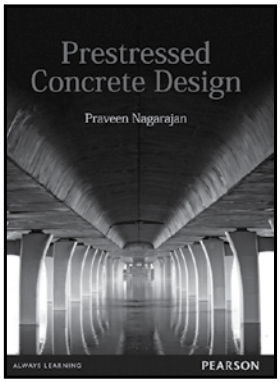
About the Book

Construction Planning and Scheduling, Fourth Edition offers broad coverage of all major scheduling subjects. This comprehensive resource is designed for construction management, planning and scheduling. It follows a logical progression, introducing precedence diagramming early and following with chapters on activity durations, resource allocations, network schedules, and more. It reflects current trends in scheduling (short-interval scheduling, computer scheduling, linear scheduling etc.) and includes chapters on arrow diagramming and PERT. With an eye on application, it includes a unique discussion of contract provisions related to scheduling and incorporates a sample project throughout.

Features

- A major emphasis on precedence diagramming-is a hallmark of the text
- A chapter devoted to arrow diagramming shows how to perform time calculations with arrow diagrams, represent the relationships between various tasks, understand the concepts of free float/ total float and more
- Unique discussion of contract provisions related to scheduling
- Coverage of short-interval scheduling discusses how contractors use short-interval schedules

Contents



Praveen Nagarajan

ISBN: 9789332513754
Copyright: 2013
Pages: 350

Prestressed Concrete Design

NEW

About the Book

This book is suited for a first course in prestressed concrete design offered to senior undergraduate students in civil engineering and postgraduate students in structural engineering. The book focuses on the behaviour of the prestressed concrete structural elements, with emphasis on clarity and precision in its discussions. Carefully chosen worked examples are included to delineate the design aspects while pointed chapter-end questions enable effortless recapitulation of the subject. This book, while being useful to both the students and teachers, will also serve as an invaluable reference for practising engineers.

Features

- The code provisions in IS: 1343 are critically analyzed and articulated.
- Design methods for torsion and the strut-and-tie method for bursting forces in anchorage zones are elucidated.
- Design of special structures such as pipes, water tanks and composite beams are unravelled.
- A step-by-step approach of problem-solving is adopted.

Contents

About the Author

Prof Praveen Nagarajan, is Assistant Professor, Department of civil engineering at National Institute of Technology, Calicut. He has published his papers in several national and international journals. He has over 10 years of teaching experience.

A. M. Neville
J.J. Brooks

ISBN: 9788131705360
Copyright: 1987
Pages: 456

Concrete Technology

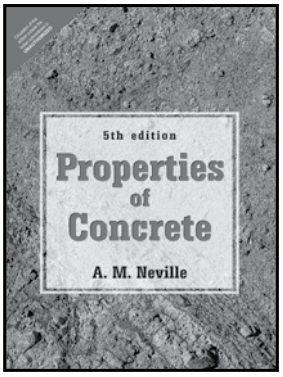
About the Book

This book gives students of concrete structure and designs a thorough understanding of all aspects of concrete design and technology from first principles. Examples and problems are given throughout to emphasize the important aspects of each chapter. An excellent course book for all students of Civil Engineering, Structural Engineering and Building at a degree or diploma level, this book is a valuable reference book for practicing engineers in the field.

Features

- Covers the fundamentals of concrete technology including concrete ingredients, properties and behaviour in the finished structure.
- Contains only what the student requires.
- Condensed version of well-known Properties of Concrete.

Contents



A. M. Neville

ISBN: 9788131791073
Copyright: 2013
Pages: 872

Properties of Concrete, 5/e

About the Book

Since its first publication in 1963, Properties of Concrete has been internationally acclaimed as the definitive work of reference on the subject for both the professional and the student engineer. The book has been translated into 12 languages and has sold well over half a million copies.

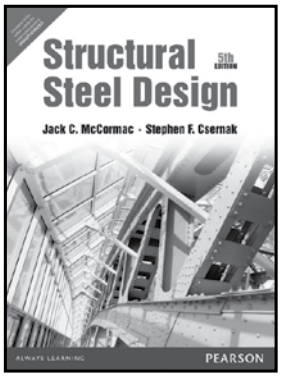
Features

- New material includes such topics as self-compacting (self-consolidating) concrete, recycled concrete aggregate, thaumasite sulfate attack, compactability test, and delayed ettringite formation
- Standards, both American (ASTM) and British/European updated to 2010 are used
- Both SI and American (Imperial) units are used throughout
- Includes 1500 full references to the world's literature on concrete and its constituents
- An extensive subject index containing over 6000 entries provides excellent ease of reference

Contents

About the Author

Adam Neville is a renowned international authority on concrete and author or co-author of nine other books, the latest of which are Neville on Concrete and Concrete: Neville's Insights and Issues, as well as over 250 research and technical papers.



Structural Steel Design, 5/e

Jack C. McCormac
Stephen F. Csernak

ISBN: 9789332505711
Copyright: 2013
Pages: 736

About the Book

Both Load and Resistance Factor Design (LRFD) and Allowable Stress Design (ASD) methods of designing steel structures are presented throughout the book. The book is carefully designed so that an instructor can easily teach LRFD or ASD (material exclusively pertaining to ASD is shaded).
This text is presented using an easy-to-read, student-friendly style.

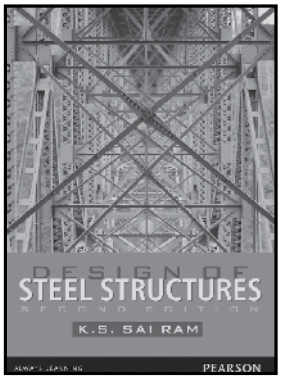
Features

- The load factors and load combinations defined in the textbook and used throughout the book in example problems and end of chapter problems for solution have been revised to meet those given in the ASCE 7-10 and Part 2 of the AISC Steel Construction Manual.
- The classification of compression sections for local buckling has been revised to the new definition of the new AISC Specification

Contents

About the Author

Jack C. McCormac, Clemson University / **Stephen F. Csernak**



Design of Steel Structures, 2/e

New Edition

Dr. K S Sai Ram

ISBN: 97893325421O5
Copyright: 2013
Pages: 480

About the Book

This book on Design of Steel Structures uses Limit State Method and follows the latest BIS Codes, BIS: 800: 2008.
A perfect mix of theory with relevant applications and inclusion of most recent design methodologies makes this an excellent offering to students and practicing engineers.

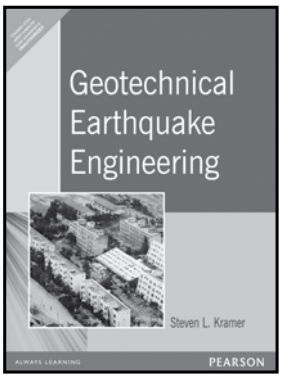
Features

- Uses Limit State Design principles.
- Latest BIS Codes: IS: 800: 2007
- Includes a wide variety of solved and unsolved problems.
- A new chapter on Steel Buildings which includes details of Roof Trusses
- Detailed coverage of Fillet Weld
- A new chapter of Steel Bridges

Contents

About the Author

Dr. K S Sai Ram is Prof and Head, Department of Civil Engineering at RVR and JC College of Engineering.



Steven L. Kramer

ISBN: 9788131707180
Copyright: 2006
Pages: 672

Geotechnical Earthquake Engineering

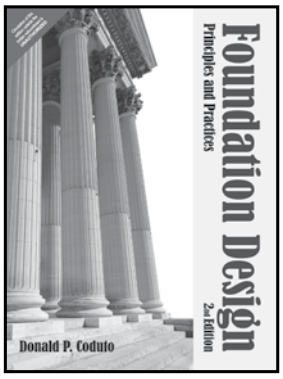
About the Book

This is the first book on the market focusing specifically on the topic of geotechnical earthquake engineering. **Also covers fundamental concepts in seismology, geotechnical engineering, and structural engineering**.

Features

- **Heavily referenced**—allows detailed exploration of background or more advanced material.
- **Chapter Summaries** emphasize the most important points.
- Broad, Interdisciplinary point of view, drawing from the fields of seismology and structural engineering.

Contents



Donald P. Coduto

ISBN: 9789332535008
Copyright: 2014
Pages: 888

Foundation Design: Principles and Practices, 2/e

About the Book

Covers the subject matter thoroughly and systematically, while being easy to read. Emphasizes a thorough understanding of concepts and terms before proceeding with analysis and design, and carefully integrates the principles of foundation engineering with their application to practical design problems.

Features

- NEW - Expanded coverage of earth retaining structures—Features separate full chapters on cantilever walls and sheet pile walls.
- NEW - A chapter on reliability-based design, reorganized chapters on deep foundations.
- NEW - Revised coverage of laterally loaded deep foundations.
- NEW - Expanded discussions of dynamic methods of deep foundation analysis.
- A multidisciplinary approach—Integrates geotechnical, structural, and construction aspects of foundation engineering.
- A strong presentation of basic principles and the underlying assumptions.
- Practical solutions to real design problems.
- Frequent references to uncertainties and reliability issues.
- Coverage of both geotechnical and structural issues.
- Extensive use of example problems.
- Questions and Practice Problems—Includes numerical problem solving, definitions, and short essay questions.
- Comprehensive problems at the end of each chapter.

New To This Edition

- Expanded coverage of earth retaining structures—Features separate full chapters on cantilever walls and sheet pile walls.
- A chapter on reliability-based design.
- Reorganized chapters on deep foundations.
- Revised coverage of laterally loaded deep foundations.
- Expanded discussions of dynamic methods of deep foundation analysis.
- More emphasis on the differences between strength requirements and serviceability requirements.

Contents

About the Author

Donald P. Coduto, Professor of Civil Engineering, California State Polytechnic University, Pomona

PEARSON

Donald P. Coduto
Man-chu Ronald Yeung
William A. Kitch

ISBN: TBA
Copyright: TBA
Pages: TBA

Geotechnical Engineering: Principles & Practices, 2/e

COMING SOON

About the Book

For junior-level soil mechanics or introductory geotechnical engineering courses.
This introductory geotechnical engineering textbook explores both the principles of soil mechanics and their application to engineering practice. It offers a rigorous, yet accessible and easy-to-read approach, as well as technical depth and an emphasis on understanding the physical basis for soil behavior.
The second edition has been revised to include updated content and many new problems and exercises, as well as to reflect feedback from reviewers and the authors' own experiences.

Features

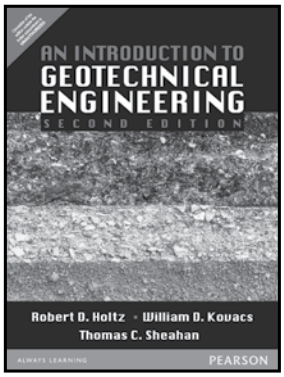
Clear and detailed explanations of soil mechanics principles.
See Chapter 9 (Stress) and Chapter 12 (Strength)
Applications of soil mechanics principles to practical geotechnical engineering problems engages students and helps them grasp key concepts more easily.
See Chapter 13 (Slopes), Chapters 14 and 15 (Foundations), and Chapters 16 and 17 (Earth Retaining Structures)
A strong presentation of basic principles and the underlying assumptions.
Applies principles to practical problems emphasizing the role of geotechnical engineering in real design projects.
Makes frequent references to sources of uncertainties in geotechnical analyses to help students understand that geotechnical engineering is not a precise science.
Offers a full chapter on engineering geology which is especially useful for those students with no previous exposure to geology.
Considers earth slopes, landslides, and related issues.
Makes extensive use of photographs.
Contains approximately 90 example problems.
Features approximately 400 questions and practice problems, including numerical problem-solving, definitions, short essay questions, and comprehensive problems, all at the end of a chapter.
Coordinated with a companion book, Foundation Design: Principles and Practices, 2/e.

About the Author

Donald P. Coduto is currently a professor of geotechnical engineering and chair of the Civil Engineering Department at the California State Polytechnic University, Pomona. He earned a B.S. in Civil Engineering from the California State Polytechnic University, Pomona, an M.S. in Geotechnical Engineering from the University of California, Berkeley, and an MBA from the Claremont Graduate University. He is an ASCE Fellow, a licensed Civil Engineer and a licensed Geotechnical Engineer, and has worked on a variety of geotechnical projects for both private and public sector clients.

Dr. Man-chu Ronald Yeung is currently a professor of civil engineering at the California State Polytechnic University, Pomona. He received a B.S. in Civil Engineering in 1986, an M.S. in Geotechnical Engineering in 1987, and a Ph.D. in Civil Engineering in 1991, all from the University of California, Berkeley. Before joining Cal Poly Pomona in 2005, Dr. Yeung had worked for several consulting firms and taught at several universities including Montana Tech, San Jose State University, and The University of Hong Kong. He is currently a member of the Editorial Board of the ASCE Journal of Geotechnical and Geoenvironmental Engineering, a member of the ASCE Rock Mechanics Committee, and the Treasurer of the Geotechnical Engineering Technical Group of the ASCE Los Angeles Section. He has been a registered Civil Engineer in California since 1994.

Dr. William A. Kitch is currently an associate professor of civil engineering at the California State Polytechnic University, Pomona. He received his B.S. in Civil Engineering in 1982 and his M.S. in Civil Engineering in 1983, both from the University of Illinois, Urbana-Champaign. He earned his Ph.D. in Civil Engineering in 1991 from the University of Texas at Austin. He is a retired Lt Col in the US Air Force and had over 23 years of practicing engineering experience in both the private and public sectors. He is a registered Civil Engineer in California and Colorado.



Robert D Holtz
William D Kovacs
Thomas C Sheahan

ISBN: 9789332507616
Copyright: 2013
Pages: 864

An Introduction to Geotechnical Engineering, 2/e

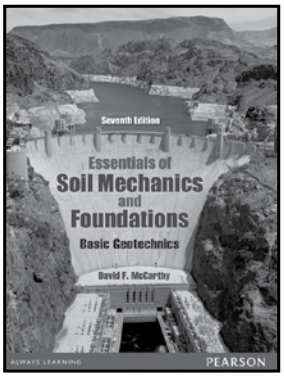
About the Book

An Introduction to Geotechnical Engineering 2e provides a descriptive, elementary introduction to geotechnical engineeringâ€"with applications to civil engineering practice. It focuses on the engineering classification, behavior, and properties of soils necessary for the design and construction of foundations and earth structures. It includes chapters on Geology, Landforms, and the Origin of Geomaterials. The book has been updated to include many new useful engineering property correlations, as well as units on both SI and customary engineering. It also covers an introduction to vibratory and dynamic compaction, the method of fragments, the Schmertmann procedure for determining field compressibility, secondary compresson, liquefaction, and an extensive use of the stress path method.

Features

- Focuses on the engineering classification, behavior, and properties of soils necessary for the design and construction of foundations and earth structures
- Introduces vibratory and dynamic compaction, the method of fragments, the Schmertmann procedure for determining field compressibility, secondary compression, liquefaction, and an extensive use of the stress path method

Contents



David F. McCarthy

ISBN: 9789332542020
Copyright: 2015
Pages: 848

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

NEW

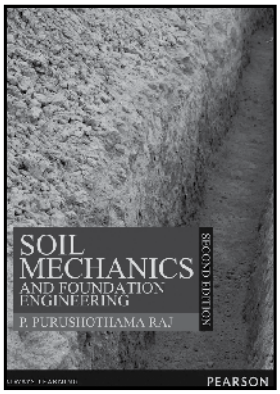
About the Book

Essentials of Soil Mechanics and Foundations: Basic Geotechnics, Seventh Edition, 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 new edition features a separate chapter on earthquakes, a more logical organization, and new material relating to pile foundations design and construction and soil permeability. It's rich applications, well-illustrated examples, end-of-chapter problems and detailed explanations make it an excellent reference for students, practicing engineers, architects, geologists, environmental specialists and more.

Features

- NEW TOPICS-Covers new developments in geotechnical topics such as:
- Soil Properties and Analyses, Pile Foundation Design and Testing, Micropiles, Soil Nail Walls, Launched Soil Nails, Soil Improvement
- NEW- Presents Soil Types and Structure before Soil Composition
- NEW- Includes a separate chapter on earthquakes
- More application to real-world situations-appears in this text than in many others
- Illustrative problems-appear within the body of the text

Contents



P. Purushothama Raj

ISBN: 9788131790816
Copyright: 2013
Pages: 928

Soil Mechanics and Foundation Engineering, 2/e

About the Book

The principles of soil mechanics and foundation engineering are dealt with in an elegant, yet simplified, manner in this text. It presents all the material required for a firm background in the subject, reinforcing theoretical aspects with sound practical applications.
The study of soil behavior is made lucid through precise treatment of the factors that influence it.

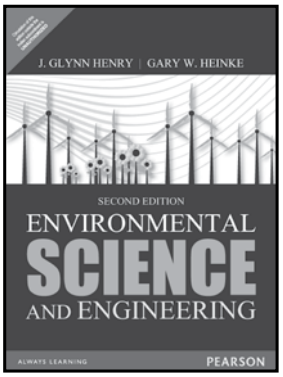
Features

- The measurement of soil properties is dealt with the conventions of the Bureau of Indian Standards. This included the methods of data collection, computation and presentation of results and limitations.
- Design of shallow foundations, pile foundations, drilled piers and caissons
- Discusses the latest techniques of ground investigation and soil improvement

Contents

About the Author

Dr. P Purushothama Raj is Principal, Sri Aravindar Engineering College, Villupuram.



D. J. Henry
Gary W. Heinke

ISBN: 9789332551749
Copyright: 2015
Pages: 778

Environmental Science and Engineering

NEW

About the Book

For one-term, undergraduate-level courses in Environmental Engineering, Pollution Control, Environmental Control, Human Environmental Systems, and Environmental Management.

Focused on current environmental problems, their causes, effects, and solutions, this text explores the basic nature of the natural systems. Using a technical (quantitative) approach —unusual for a book at the introductory level it maintains a broad perspective that appeals to all students, but at the same time is useful to those proceeding further in environmental or sanitary engineering.

Features

- Features unusually broad and balanced coverage of topics: in addition to the traditional topics of water quality, wastewater treatment, and air pollution, it explains the root causes of environmental problems and clarifies the relationships between natural systems and technology.
- provides discussions on solid and hazardous wastes, environmental management, and ethics topics seldom found in a single text.
- offers an authoritative perspective on both theory and practice: the authors are world renowned scientists and engineers with academic and practical experience in environmental matters.
- discusses the changing role of technology "preventive technology" as an alternative to traditional "end-of-pipe" solutions.
- considers recent data on the causes of environmental problems population and economic growth, energy growth, natural environmental hazards, and environmental disturbances.
- expands coverage of scientific background — e.g., atmospheric sciences, Cryptosporidium.
- Updates coverage of water consumption and drinking water standards.
- expands and updates coverage of water pollution:
- land-based treatment methods, trickling filters, rotating biological contactors, and dual processes.
- The effect of the new US EPA regulations (40 CFR Part 503 Standards for the Use or Disposal of Sewage Sludge) on future biosolids management.
- the trends in controlling water pollution from source control through collection and treatment to effluent reuse.
- Expands and revises coverage of air pollution — e.g., effects and sources.
- contains a completely reorganized discussion of solid wastes — e.g., source reduction, separation, recycling, recovery, composting, and incineration (using Detroit as an example).
- features a completely revised chapter on hazardous waste management, with new, updated tables and sections on:
- environmental effects, waste minimization, incineration, co-disposal, etc.
- A summary of the processes used at the 146 hazardous waste treatment facilities in the U.S.
- Site remediation — with a superfund site in Indiana as a case study.
- Updates coverage of environmental management.
- Describes a rational procedure for solving ethical problems.
- Provides data in SI or US units where appropriate.
- Provides figures, illustrations, and photographs throughout.
- Updates charts, graphs, tables, and other data.
- Provides more problems (with solutions) — over 300 total, and more case Studies.
- Includes an extensive list of references for each chapter.

Contents

PEARSON

Jerry A. Nathanson M.S.,P.E.
Richard A. Schneider M.S.,P.E.

ISBN: TBA
Copyright: TBA
Pages: TBA

Basic Environmental Technology: Water Supply, Waste Management and Pollution Control, 6/e

COMING SOON

About the Book

For introductory civil/construction technology program courses in environmental technology, water supply and pollution control, environmental quality control, environmental and sanitary design, and water/wastewater technology.

The clear, up-to-date, practical, visual, application-focused introduction to modern environmental technology.

Now fully updated, ***Basic Environmental Technology, Sixth Edition*** emphasizes applications while presenting fundamental concepts in clear, simple language. It covers a broad range of environmental topics clearly and thoroughly, giving students a solid foundation for further study and workplace success. This edition adds new coverage of environmental sustainability, integrated water management, low impact development, green building design, advanced water purification, dual water systems, new pipeline materials, hydraulic fracturing, constructed wetlands, single stream municipal solid waste recycling, plasma gasification of waste, updated EPA standards, and more. Hundreds of clear diagrams and photographs illuminate key concepts; practice problems and review questions offer students ample opportunity to deepen their mastery. Math is applied at a basic level, and all computations are fully explained with example problems; both U.S. and metric units are used. Students with less academic experience will also appreciate this text's review of basic math, and its basic primers on biology, chemistry, geology, hydrology, and hydraulics.

Teaching and Learning Experience

This easy-to-read text will help technology students quickly understand the latest issues and techniques related to water supply, waste management, and pollution control. It provides:

- **Thorough, up-to-date, application-focused coverage of the field's key issues, challenges, and techniques:** Prepares students for success in roles involving hydraulics, hydrology, water quality, water pollution mitigation, drinking water purification, water distribution systems, sanitary sewers, stormwater management, wastewater treatment/disposal, municipal solid waste, hazardous waste management, and the control of air and noise pollution
- **Simple and clear, with plenty of numerical examples and basic primers for less prepared students:** Written and designed for maximum accessibility, with introductory math and science primers for every student who needs them, and step-by-step walkthrough examples for all significant computations
- **Hundreds of diagrams and photos, and extensive pedagogical resources for faster, more intuitive learning:** Teaches visually and through example wherever possible; contains clear chapter summaries, an expanded glossary, and comprehensive, updated Instructor's materials

Features

Thorough, up-to-date, application-focused coverage of the field's key issues, challenges, and techniques:

- **Fully addresses all facets of environmental technology related to water supply, waste management, and pollution control**—preparing students to enter any organization involved with environmental technology
- **Teaches through real-world applications**—linking concepts to real-world issues that will be relevant to students
- **NEW! Discusses environmental sustainability, integrated water management, low impact development, and green building design throughout the book**—ensuring that students understand the field's most significant trends and opportunities
- **NEW! Offers expanded coverage of advanced wastewater treatment and recycling, especially membrane filtration technology**—enabling students to participate in advanced wastewater treatment projects
- **NEW! Covers many significant new topics and trends, including dual water**

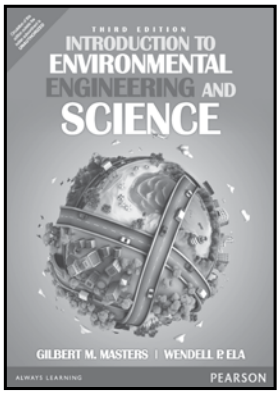
systems, new pipeline materials, environmental impacts of hydraulic fracturing (fracking), constructed wetlands, single stream municipal solid waste recycling, and plasma gasification of solid and hazardous waste—preparing students to participate in cutting-edge projects for many years to come

- **NEW! Reflects updated water and air quality standards and regulations, including the EPA's determination that CO2 is an air pollutant that can harm public health and welfare by causing global warming and climate change**—preparing students to help organizations respond to the latest government regulations
- **NEW! Contains expanded discussions of environmental education, certification, and employment**—giving students up-to-date information and guidance for finding jobs in the field
- **NEW! Introduces LEED green building project certification**—showing students how to earn the green building industry's most valuable credentials
- **Simple and clear, with plenty of numerical examples and basic primers for less prepared students:**
- **NEW! Contains hundreds of up-to-date, application-focused practice and review questions**—giving students all the quantitative problem-solving practice they need to succeed
- **Reviews all the basic math students need to perform this book's calculations**—ensuring that students can accurately perform environmental computations, even if they have limited backgrounds in mathematics
- **Contains basic primers on biology, chemistry, geology, hydrology, and hydraulics**—getting students up-to-speed on the essentials of each key science related to environmental technology
- **Uses both US customary and SI metric units throughout the text and in example problems, and includes a discussion of unit measurements and unit conversions**—preparing students to work in global environments that may use metric or US units, or both

Hundreds of diagrams and photos, and extensive pedagogical resources for faster, more intuitive learning:

- **Line drawings, diagrams, and two-tone photos throughout**—making virtually all key topics easier to understand
- **Clear chapter synopses**—emphasizing key points, and promoting more efficient review
- **NEW! Provides expanded glossary and acronyms lists**—giving students a single source for definitions and explanations of key environmental technology terms and acronyms
- **NEW! Expanded online Instructor's Resources materials, including worked solutions to all practice problems, text-page references for answers to review questions, supplemental problems, 100 + multiple-choice test Q&As, additional test problems and project assignments, photos, web/video links, and more**—helping instructors teach more effectively and efficiently, regardless of their program or the types of students they serve

Contents



Gilbert M. Masters
Wendell P. Ela

ISBN: 9789332549760
Copyright: 2015
Pages: 720

Introduction to Environmental Engineering and Science, 3/e

NEW

About the Book

Balanced coverage of all the major categories of environmental pollution, with coverage of current topics such as climate change and ozone depletion, risk assessment, indoor air quality, source-reduction and recycling, and groundwater contamination.

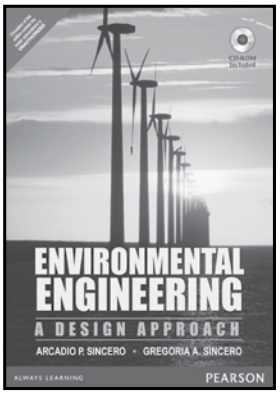
Features

- Risk Assessment (Chapter 4) - separated from hazardous substance legislation and is complete chapter in itself
- Explores urgent environmental issues that have become the focus of much of the environmental attention in recent years
  - Global Climate Change
  - Risk Assessment
  - Stratospheric Ozone Depletion
  - Greenhouse effect
  - Indoor air quality
  - Groundwater contamination
  - Acid Deposition
  - Hazardous Waste
- Numerous examples of each quantitative concept - Worked examples in each quantitative section
- Numerous problems at the end of each chapter
- Chapter covering Solid Waste Management and Resource Recovery - This chapter focuses on pollution prevention and product stewardship.
- Expanded coverage of water resources and Groundwater remediation - including challenges posed by subsurface contamination of nonaqueous-phase liquids.
- Covers the treatment of hazardous wastes and descriptions of the key pieces of environmental legislation that regulate hazardous substances.

Contents

About the Author

Gilbert M. Masters, Stanford University
Wendell P. Ela, University of Arizona



Arcadio P. Sincero
Gregoria A. Sincero

ISBN: 9789332549630

Environmental Engineering: A Design Approach

NEW

About the Book

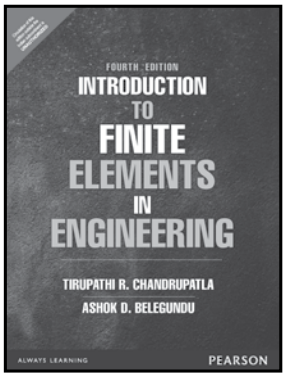
Suitable for use in undergraduate Environmental Engineering courses found predominantly in Civil Engineering, but also in Chemical and Environmental Engineering. The book may also be used by a variety of professional engineers and scientists.

This new text provides an exceptionally thorough treatment of environmental engineering. The most thorough text of its kind, it encompasses environmental chemistry and biology, hydraulics, and pneumatics; water treatment; wastewater treatment, both conventional and advanced; solid waste management; air pollution control; hazardous waste management and risk assessment; noise pollution and control; and environmental quality modeling. Through clear, straightforward writing, the authors provide incisive and insightful coverage while approaching the subject matter in a direct analytical manner. The text makes use of many practical, hands-on examples throughout to realistically demonstrate the applied nature of the field. This text, perhaps better than any other, combines comprehensive and authoritative coverage with current applications.

Features

- **Presents a no-nonsense, analytical approach to environmental engineering**, avoiding qualitative and blanket statements. This approach results in optimum accuracy, and gives students a better sense of the proper analytical tools that must be used to practice environmental engineering.
- **Complete coverage of the applications of chemical reactions** is included to allow the fullest possible understanding of a number of relevant processes such as wastewater treatment, decomposition in a landfill, composting, and burning fuel.
- **Exceptionally practical, realistic examples** are included throughout the text, clearly illustrating principles and concepts at work while demonstrating the applied nature of the discipline.
- **Provides a unified approach to the concept of settling**, treating the settling of air and of water together—giving students a clearer understanding that the process is the same in both mediums.
- **Treats surface water, subsurface water, and air quality modeling as part of the concept of conservation of mass**. The fundamental concept in modeling is simply the conservation of mass, so this approach reflects the clearest, most logical grouping of these types of modeling.

Contents



Tirupathi R. Chandrupatla
Ashok D. Belegundu

ISBN: 9789332551824
Copyright: 2013
Pages: 448

Introduction to Finite Elements in Engineering, 4/e

NEW

About the Book

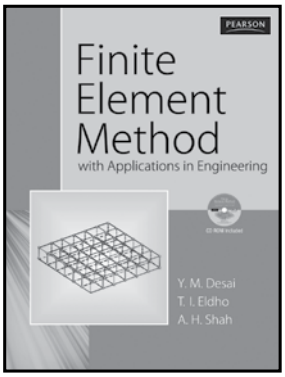
Introduction to Finite Engineering is ideal for senior undergraduate and first-year graduate students and also as a learning resource to practicing engineers.

This book provides an integrated approach to finite element methodologies. The development of finite element theory is combined with examples and exercises involving engineering applications. The steps used in the development of the theory are implemented in complete, self-contained computer programs. While the strategy and philosophy of the previous editions has been retained, the Fourth Edition has been updated and improved to include new material on additional topics.

Features

- Deep, comprehensive treatment of theory—Reveals several different aspects of finite elements analysis development.
- Provides the needed steps toward clear understanding, presentation, and computer implementation.
- Practical engineering situations—Presented as both examples and exercises.
- Brings the students more real-life situations and enables professors to discuss and assign real engineering problems.
- Integration of over 250 illustrations throughout the text—Provide visual representations of principles and practices discussed.
- Helps the student understand the presentation and helps the professors in their presentations.
- Emphasis on problem formulation and modeling in each chapter.
- Helps students develop a firm understanding of these critical skills.
- Theory and computer programs for preprocessing and postprocessing.
- Allows professors to assign large problems and students to prepare and display data efficiently

Contents



Y. M. Desai
T. I. Eldho
A. H. Shah

ISBN: 9788131724644
Copyright: 2011
Pages: 492

Finite Element Method with applications in Engineering

About the Book

This book presents a practical understanding of the finite element method with a variety of engineering applications that will aid students, teachers, practicing engineers and researchers. It begins with an introduction to the mathematical modeling of engineering problems and approximate methods of analysis. It then introduces the different approaches in FEM such as direct approach, principle of virtual work, variational principle and method of weighted residual. Finally, the applications of FEM to real-world problems are presented in 1D, 2D and 3D for structural analysis, heat and mass transfer, geo-mechanical, fluid flow and other problems.

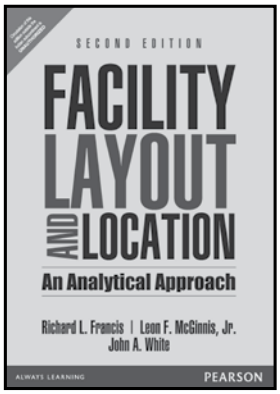
Features

- Separate chapters are devoted to basic mathematical modeling, approximate method of analysis, introduction and different approaches to FEM
- Comprehensive coverage of FEM interpolation functions
- Finite element analysis for various problems in 1D, 2D and 3D
- Comprehensive coverage of computer implementation of FEM and FEM software and web resources
- Large number of solved problems and exercise questions
- More than 200 figures for better understanding of the concepts

Contents

About the Author

Y. M. Desai and **T. I. Eldho** are professors in department of civil engineering at Indian Institute of Technology Bombay and **A. H. Shah** is a professor in Department of Civil Engineering at the University of Manitoba, CANADA.



Richard L. Francis
F. McGinnis Jr.
John A. White

ISBN: 9789332551787
Copyright:2015
Pages: 592

Facility Layout and Location: An Analytical Approach, 2/e

NEW

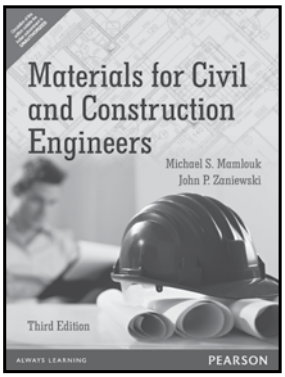
About the Book

A comprehensive introduction to quantitative methods for facility layout and location.

Features

- Treats problems of facility layout and location together and views them a "layout problem in the large."
- Introduces the field's issues and literature, along with basic tools and methodologies.
- Contains basic design and layout approaches and problem definitions.
- Contains extensive figures and tables, and numerical examples.

Contents



Michael S. Mamlouk
John P. Zaniewski

ISBN: 9789332535220
Copyright: 2014
Pages: 624

Materials for Civil and Construction Engineers, 3/e

About the Book

This introduction gives students a basic understanding of the material selection process and the behavior of materials — a fundamental requirement for all civil and construction engineers performing design, construction, and maintenance. The authors cover the various materials used by civil and construction engineers in one useful reference, limiting the vast amount of information available to the introductory level, concentrating on current practices, and extracting information that is relevant to the general education of civil and construction engineers. A large number of experiments, figures, sample problems, test methods, and homework problems gives students opportunity for practice and review.

Features

- This text limits the vast amount of information available on civil and construction engineering to an introductory level, concentrates on current practices, and extracts information that is relevant to the general education of civil and construction engineers. The text is organized into three parts:
  - o Introduction to Materials Engineering: The first section introduces the basic mechanistic properties of materials, environmental influences, basic material classes, and the atomic structure of materials.
  - o Characteristics of Materials Used in Civil and Construction Engineering: The second section, which represents a large portion of the book, presents the characteristics of the primary material types used in civil and construction engineering: steel, aluminum, aggregate, concrete, masonry, asphalt, wood, and composites.
  - o Laboratory Methods for the Evaluation of Materials: The third part of the book is a lab manual that includes typical experiments performed by students at this level.
- The discussion of each type of material includes information on the following:
  - o Basic structure of the materials
  - o Material production process
  - o Mechanistic behavior of the material and other properties
  - o Environmental influences
  - o Construction considerations
  - o Special topics related to the material discussed in each chapter
  - o Each chapter includes an overview of various test procedures to introduce the test methods used with each material.
- A large number of figures display concepts and equipment.
- Numerous sample problems and homework problems in each chapter enable professors to vary assignments between semesters.
- A complete set of slides and a solution manual are available to instructors.

Contents

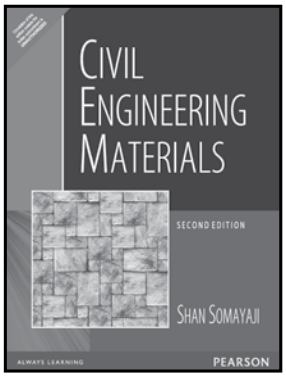
About the Author

Michael S. Mamlouk is Professor and Associate Chair (Undergraduate Studies) in the School of Sustainable Engineering and the Built Environment at the Arizona State University's Ira A. Fulton Schools of Engineering.

Dr. Mamlouk's main area of expertise includes pavement analysis and design, pavement maintenance and rehabilitation, and highway materials. He has served as the P.I. and Co-P.I. of many research projects sponsored by FHWA, NHI, U.S. Army Corps of Engineers, Arizona DOT, and various local agencies. John

P. Zaniewski is a Professor in Civil and Environmental Engineering at West Virginia University's College of Engineering and Mineral Resources.

Dr. Zaniewski has 16 years of academic experience preceded by 11 years of practicing engineering. In 1996, he accepted the Asphalt Technology Professor position with the Civil and Environmental Engineering faculty at WVU. Dr. Zaniewski has over 50 publications in the areas of pavement design, materials and management systems.



Shan Somayaji

ISBN: 9788131766316
Copyright: 2012
Pages: 496

Civil Engineering Materials, 2/e

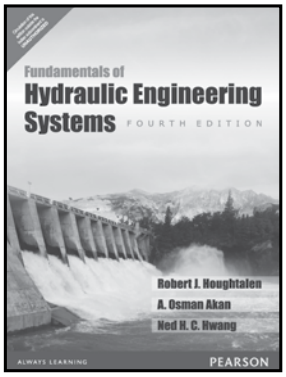
About the Book

This book deals with properties, applications and analysis of important materials of construction/civil engineering. It offers full coverage of how materials are made or obtained, their physical properties, their mechanical properties, how they are used in construction, how they are tested in the lab, and their strength characteristicsâ€"information that is essential for material selection and elementary design.

Features

- Updated code provisions
- Introduction to materials science wherever appropriate
- The chemical nature of a material
- A brief introduction to several important engineering materials
- A detailed discussion on the types and properties of rocks
- Rewritten sections on Mortar, Structure of Wood, Physical Properties of Wood, and Reinforcing Steel
- Expanded section on effects of variables on compressive strength of portland cement concrete
- Several new tables and figures
- Additional illustrative examples
- Chapter-end homework or review problems
- A focus on all common materials of civil engineering/construction
- In-depth coverage of each material
- Step-by-step solution technique
- Self-contained sections and purposeful repetition
- A brief review of properties of soil as a construction material
- Laboratory testing procedures for selected tests

Contents



Robert J. Houghtalen, A. Osman Akan, Ned H. C. Hwang

ISBN: 9789332507593
Copyright: 2013
Pages: 494

Fundamentals of Hydraulic Engineering Systems, 4/e

About the Book

This fundamental treatment of engineering hydraulics balances theory with practical design solutions to common engineering problems. The author examines the most common topics in hydraulics, including hydrostatics, pipe flow, pipelines, pipe networks, pumps, open channel flow, hydraulic structures, water measurement devices, and hydraulic similitude and model studies.

Features

- Examples and homework problems are provided for every major topic covered in the book
- Many software-friendly topics in hydraulics are provided, reflecting the wide use of software in engineering practice to accelerate and simply the design and analysis process
- Use of off-the-shelf software is encouraged throughout

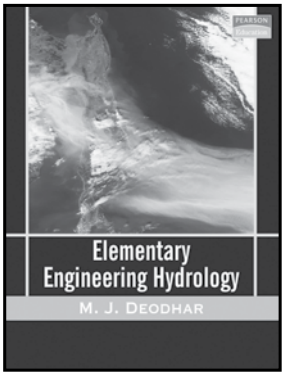
Contents

About the Author

Robert J. Houghtalen, Rose-Hulman Institute of Technology

A. Osman Akan, Old Dominion University

Ned H. C. Hwang, National Health Research Institutes



M. J. Deodhar

ISBN: 9788131708057
Copyright: 2009
Pages: 408

Elementary Engineering Hydrology

About the Book

Elementary Engineering Hydrology is a textbook for undergraduate and diploma students of civil engineering. It provides a comprehensive coverage of all the essential aspects of hydrology. To make it easy for students to grasp the concepts, all important topics have been divided into sub-topics, lending clarity to the subject matter. The text is interspersed with numerous figures and tables, and a wide range of solved problems to illustrate the underlying concepts and techniques effectively.

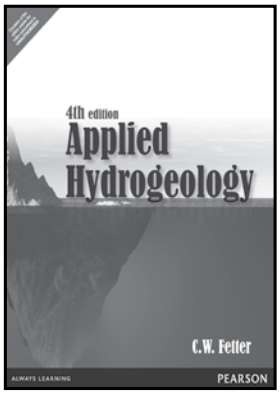
Features

- Chapter organization based on the progression of the stages of the hydrologic cycle
- Inclusion of recent developments in the field of discharge measurement of high velocity fluids, and rainfall simulation to measure the infiltration rate
- Separate chapters devoted to evaporation and transpiration, precipitation, infiltration, discharge measurement, etc.

Contents

About the Author

Professor M. J. Deodhar graduated in 1957 and completed his postgraduate studies in Hydraulics and Dam Engineering in 1959 from the University of Pune. He started his career as Assistant Research Officer in Maharashtra Engineering Research Institute, Nasik, and later became Professor and Head of the Civil Engineering Department in the Government College of Engineering at Karad, Amaravati and Pune.



C.W. Fetter

ISBN: 978933253511 4
Copyright: 2014
Pages: 614

Applied Hydrogeology, 4/e

About the Book

This best selling text gives students a balanced examination of all facets of hydrogeology. The text stresses the application of mathematics to problem solving rather than derivation of theory. It provides a balance between physical and chemical hydrogeology. Numerous case studies cultivate student understanding of the occurrence and movement of ground water in a variety of geologic settings.

Features

- NEW - Excel-based project included in the ground water modeling chapter.
- NEW - Five new case histories: The Dakota Aquifer, Fractures Sedimentary Rocks—Newark basin, Faults as Aquifer Boundaries, Desert Hydrology—Azraq basin, Jordan, and Use of multiple geophysical techniques to determine the extent and thickness of a critical confining layer.
- NEW - "Analysis" section in select chapters—Student is directed to a problem or issue that will require independent thought and problem solving techniques illustrated in the solved example problems.
- NEW - New Chapter 2, "Elements of the Hydrologic Cycle," combines the old chapters 2 and 3.
- NEW - Use of Internet to obtain hydrogeologic data and information.
- NEW - Brief introduction to ASTM Standards.
- Provides students with numerous example problems accompanied by step-by-step solutions.
- Incorporates an introduction to the methods of problem solving—Using dimensional analysis as well as a discussion of significant digits.
- Includes many more chapter problems throughout—Provides answers to odd numbered problems.

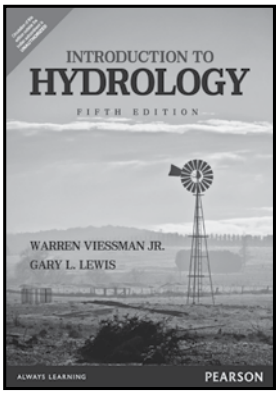
New to this Edition

- Updated references throughout the new edition.
- Excel-based project included in the ground water modeling chapter.
- Five new case histories: The Dakota Aquifer, Fractures Sedimentary Rocks—Newark basin, Faults as Aquifer Boundaries, Desert Hydrology—Azraq basin, Jordan, and Use of multiple geophysical techniques to determine the extent and thickness of a critical confining layer.
- "Analysis" section in select chapters—Student is directed to a problem or issue that will require independent thought and problem solving techniques illustrated in the solved example problems.
- New Chapter 2, "Elements of the Hydrologic Cycle," combines the old chapters 2 and 3.
- Use of Internet to obtain hydrogeologic data and information.
- Brief introduction to ASTM Standards.

Contents

About the Author

C.W. Fetter Jr., Emeritus, University of Wisconsin, Oshkosh



Warren Viessman
Gary L. Lewis

ISBN: 9789332555297
Copyright: 2016
Pages:624

Introduction to Hydrology, 5/e

NEW

About the Book

For students who expect to become involved in programs that are concerned with the development, management and protection of water resources.

The Fifth Edition of Introduction to Hydrology has been redesigned to better acquaint future water engineers, scientists and managers with the basic elements of the hydrologic cycle. Its focus is on presenting the principles of hydrology in the context of their application to real-world problems. The book identifies data sources, introduces statistical analyses in the context of hydrologic problem-solving, covers the components of the hydrologic budget, discusses hydrograph analysis and routing, and introduces groundwater hydrology, urban hydrology, hydrologic models and hydrologic design. Many solved examples and problems serve to amplify the concepts presented in the text. Computer applications are discussed and appropriate Web addresses are provided.

Features

- NEW - Topical organization—Covers underlying principles of hydrology in chapters 1 - 10 while chapters 11 - 13 cover application of these principles to practical problems in the field.
- Provides logical course development and basis for advanced studies in hydrology.
- NEW - Comprehensive coverage.
- Covers all aspects of the hydrologic cycle, and the manner in which they may be modified to deal with floods, droughts, potable water supply and urban drainage. Chapters 1, 4-8, and 10 cover the key components of the hydrologic cycle and chapters 11 - 13 and section 10.6 cover measures that can be taken to develop and control water.
- Numerous solved examples—Using both English and metric units.
- Enhances student comprehension and aids in homework and test preparation.
- Presentation of hydrologic models and modeling.
- Provides practice-oriented experiences for students and demonstrates how the basic hydrologic processes can be incorporated into engineering designs and water resources management processes.

Contents

PEARSON

Dr. Ashok Jain

ISBN: 9789332558557
Copyright: 2016
Pages: 656

Dynamics of Structures

NEW

About the Book

The text is conceived as a textbook for senior-level and graduate courses in Dynamics of Structures. It includes topics in the theory of structural dynamics, and applications of this theory to earthquake analysis, response, design, and evaluation of structures.

The text provides engineering students with an understanding of the dynamic response of structures and the analytical tools to determine such responses. This comprehensive text demonstrates how modern theories and solution techniques can be applied to a large variety of practical, real-world problems.

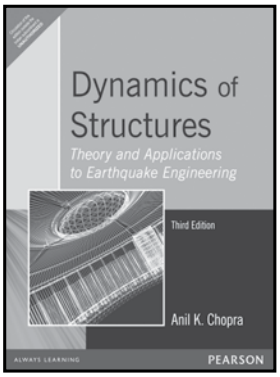
Features

- Covers computation of dynamic wind load, Non-linear analysis parameters
- Refers to Indian codes, ASCE-7, and Euro code 1998-Part-1
- Illustrates the application of MATLAB through programmes developed using basic tools
- Application of SAP 2000, ETABS programmes

Contents

About the Author

Dr Ashok K. Jain is Professor of Civil Engineering at the Indian Institute of Technology, Roorkee. A recipient of several awards, he has been a research fellow at the University of Michigan; a visiting Professor at the McGill University, Montreal; Director, Malaviya National Institute of Technology, Jaipur; and Head of Civil Engineering Department, I.I.T. Roorkee.



Anil K. Chopra

ISBN: 9788131713297
Copyright: 2007
Pages: 914

Dynamics of Structures, 3/e

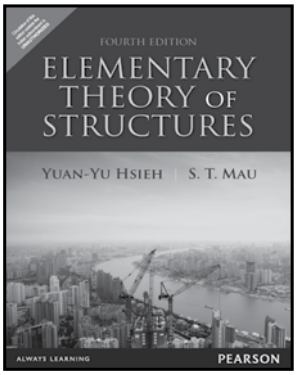
About the Book

Designed for senior-level and graduate courses in **Dynamics of Structures** and Earthquake Engineering. The text includes many topics encompassing the theory of structural dynamics and the application of this theory regarding earthquake analysis, response, and design of structures. No prior knowledge of structural dynamics is assumed and the manner of presentation is sufficiently detailed and integrated, to make the book suitable for self-study by students and professional engineers.

Features

- **Section on application of the inelastic design spectrum to structural design**–For allowable ductility, seismic evaluation of existing structures, and displacement-based structural design.
- Examples on dynamics of bridges and their earthquake response.
- Incorporation of three building codes and inclusion of the Eurocode.
- **Theory of dynamic response of structures**–Presented in a manner that emphasizes physical insight into the analytical procedures.
- **Structural dynamics theory**–Applied to conduct parametric studies that bring out several fundamental issues in the earthquake response and design of multistory buildings.
- **Analytical procedures**–Illustrated by over 100 worked out examples.
- Over 400 figures carefully designed and executed to be pedagogically effective

Contents



Yuan-Yu Hsieh

ISBN: 9789332559479
Copyright: 2016
Pages: 432

Elementary Theory of Structures, 4/e

NEW

About the Book

Featuring a simplified, but comprehensive, approach, this text explores two major methods of analysisforce method and displacement method from both the classical and matrix approaches.

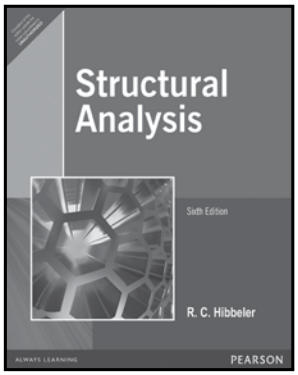
Features

- Elementary Theory of Structures has been revised and updated, it fully encompasses the use of computers in structural analysis with the incorporation of the matrix method and inclusion of a diskette containing computer programs for solving structural problems.

Contents

About the Author

Yuan-Yu Hsieh, National Taiwan University



R. C. Hibbeler

ISBN: 9788131721414
Copyright: 2008
Pages: 656

Structural Analysis, 6/e

About the Book

This book provides students with a clear and thorough presentation of the theory and application of structural analysis as it applies to trusses, beams, and frames. Emphasis is placed on teaching students to both model and analyze a structure. Procedures for Analysis, Hibbeler's problem solving methodologies, provides students with a logical, orderly method to follow when applying theory.

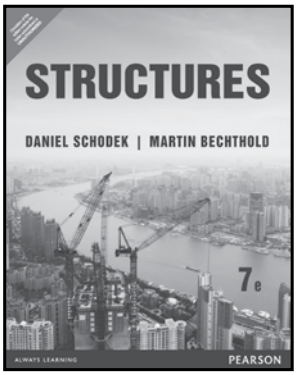
Features

- **Improved art program following the lead of Hibbeler's Engineering Mechanics series**-three dimensional, realistic art helps students better visualize and connect with the situation.
- **Improved coverage of loading**-especially with new coverage of snow loads.

Contents

About the Author

Russ Hibbeler graduated from the University of Illinois-Urbana with a B.S. in Civil Engineering (major in structures) and an M.S. in Nuclear Engineering. He obtained his Ph.D. in Theoretical and Applied Mechanics from Northwestern University.



Daniel Schodek
Martin Bechthold

ISBN: 9789332549869

Structures, 7/e

NEW

About the Book

For courses in Structures or Structural Analysis and Design.
Structures, Seventh Edition, offers single-volume coverage of all major topics in structural analysis and design. Focusing on how structures really work, the text discusses concepts from both engineering and architectural perspectives, exploring structural behavior, structural analysis, and design within a building context.

Features

For courses in Structures or Structural Analysis and Design.

- Structures, Seventh Edition, offers single-volume coverage of all major topics in structural analysis and design. Focusing on how structures really work, the text discusses concepts from both engineering and architectural perspectives, exploring structural behavior, structural analysis, and design within a building context.

Hallmark Features:

Integrative approach discusses structures from both an engineering and architectural perspective.

- Reinforces the larger goal of the text–to explore structural behavior, analysis and design within a building context.
- Softens the boundaries between statics, strength of materials, and architectural design.

Part I Introductory Concepts focuses on fundamental concepts of analysis and design.

- Introduces readers to the invariant set of physical principles that underlie the behavior of structures under load.
- Discusses basic analysis and design criteria, processes, modeling techniques, and more.

Part II Analysis and Design of Structural Elements introduces readers to most of the primary structural elements used in buildings and their analysis and design.

- Discusses the elements role in building, its behavior under load (both qualitative and quantitative), and methods for designing the element.

Part III Principles of Structural Design contains a unique examination of the logic of structural design.

- Discusses concepts as part of the larger building design process and gives design guidelines throughout.

Flexible organization makes it easy to align material with one's course goals.

- Offers coverage that can be adapted to fit specific course needs—e.g. an emphasis on qualitative, quantitative or both, or an emphasis on design or analysis or both.

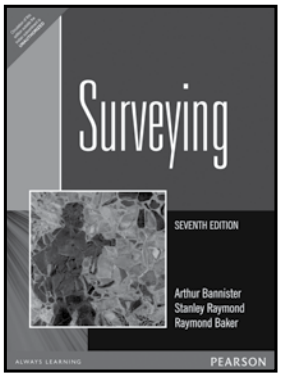
In-depth appendices discuss more advanced principles of structural analysis.

- Reinforces the book's flexible approach by presenting detailed structural analysis content in self-contained appendices.

Numerous examples, illustrations, and exercises show readers real-world applications and provide a context for learning.

- Makes material easier to understand and immediately relevant.

Contents



A. Bannister
Stanley Raymond
Raymond Baker

ISBN: 9788131700662
Copyright: 2006
Pages: 512

Surveying, 7/e

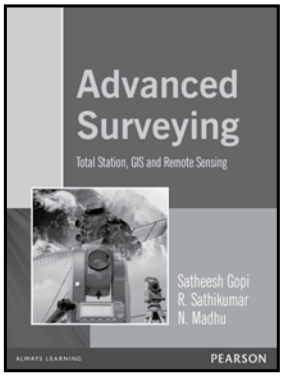
About the Book

Established as a classic text on surveying for over twenty years, Surveying is renowned for its concise and readable explanation of the basic principles and equipment used for land surveying and setting. This revision retains the comprehensive and authoritative nature of the work whilst making the text more accessible to students and professionals with updated methods and equipment throughout.

Features

- New chapter on satellite positioning systems.
- New photographs and instrument profiles, highlighting the latest equipment.
- New revised material throughout, including coverage of the surveying of existing buildings.
- New improved style and presentation to increase the text's clarity and accessibility.

Contents



Satheesh Gopi
R. Sathikumar
N. Madhu

ISBN: 9788131700679
Copyright: 2007
Pages: 386

Advanced Surveying: Total Station, GIS and Remote Sensing

About the Book

Modern Surveying is unimaginable without the use of electronic equipment and information technology. Surveying with conventional systems has been completely replaced with advanced automated systems.

Features

- Divided into three parts – Total Station, GIS and Remote Sensing
- Well drawn illustrations, black-and-white photographs and color plates that lend conceptual clarity to the subject

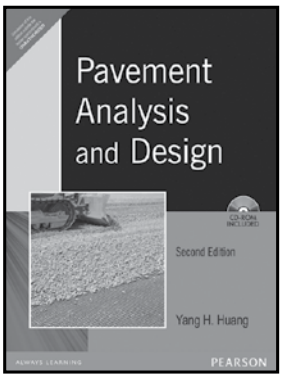
Contents

About the Authors

Satheesh Gopi has over 16 years experience as a hydrographer and is currently working as Marine Surveyor in the Hydrographic Survey Wing of the Kerala Port Department.

R. Sathikumar is presently Professor (Civil) with the College of Engineering, Thiruvananthapuram.

N. Madhu is Assistant Professor (Civil) with the College of Engineering, Thiruvananthapuram.



Yang H. Huang

ISBN: 9788131721247
Copyright: 2008
Pages: 792

Pavement Analysis and Design, 2/e

About the Book

This up-to-date text covers both theoretical and practical aspects of pavement analysis and design. It includes some of the latest developments in the field, and some very useful computer softwareâ€"developed by the authorâ€"with detailed instructions.

Features

- NEW - KENPAVE Windows programâ€"Based on the mechanistic-empirical method; written using Microsoft Visual Basic 6.0; combines the flexible and rigid pavements into a single package together with the addition of new input programs and computer graphics.
  - Demonstrates to students how theory can be put into practice, and gives them a better understanding of the pavement design process.
  - Serves as a useful tool for the structural design of raft foundationsâ€"an important subject in geotechnical engineering.
- **NEW - Revised material on the AASHTO overlay design method**.
  - Reflects the AASHTO design guide which was revised in 1993.
- **NEW - Added developments and information throughoutâ€"i.e.**, a new method based on the Mohr-Coulomb failure criterion; and new comparisons between KENLAYER and the latest Windows version of MICH-PAVE.
  - Keeps the book and students current, and broadens the scope of knowledge contained in both.
- **NEW - Three additional appendicesâ€"Superpave**; Pavement Management System; and Preview of 2002 Design Guide.
  - Provides students with the most current information available while new publications by the American Association of State Highway and Transportation Officials are being approved and implemented.

Contents

PEARSON

C. Jotin Khisty
B. Kent Lall

ISBN: TBA
Copyright: TBA
Pages: TBA

Transportation Engineering: An Introduction, 3e

COMING SOON

About the Book

For courses in Transportation Engineering in the Civil Engineering Department.
Transportation Engineering, 3/E offers students and practitioners a detailed, current, and interdisciplinary introduction to transportation engineering and planning.

Features

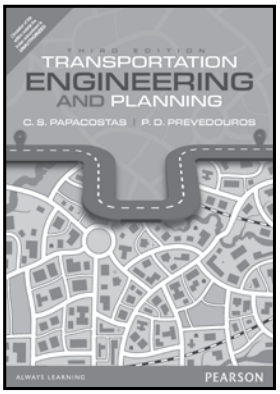
- NEW - Thoroughly revised and updated—Now includes the most current material.
- NEW - Chapter 1 includes the latest Federal Policies related to transportation and other issues, such as land use, energy, and systems integration of modes.
- NEW - Thoroughly revised Chapters 6 through 9—Includes the latest information drawn from the Highway Capacity Manual 2000, as well as the AASHTO Manual.
- NEW - Expanded Appendix to include a short section on "Statistics for Transportation Engineers."
- Provides for easy reference by students and field engineers.

Contents

About the Authors

C. Jotin Khisty received the Ph.D. degree in transportation systems engineering from The Ohio State University, Columbus. He has been a Professor of civil engineering and the Director of the Transportation and Infrastructure program at the Illinois Institute of Technology (IM, Chicago, since 1990. Before joining IIT, he was with the faculty at Washington State University, Pullman, from 1978 to1990, when he also served as the Deputy Director of the Washington State Transportation Research Center. He has had considerable field experience as a traffic engineer and transportation planner in Metropolitan Planning Organizations in the Midwest. He is the author of over 70 refereed publications and reports, related to transportation planning and systems thinking. Dr. Khisty is a registered professional engineer and a Life Member of the Amerkan Society of Civil Engineers, the Institute of Transportation Engineers, and Sigma Xi.

B. Kent Lall received the Ph.D. degree in transportation and environmental planning from the University of Birmingham, England. Since 1977 he has been a Professor of civil engineering at Portland State University, Portland. Previously, he has also held teaching and research positions in Canada, Australia, New Zealand, and India. His research interests include traffic operations using video-imaging technologies and intelligent transportation systems and he has authored over 50 publications and reports. Dr. Lall is a registered professional engineer. He was awarded the Frank M. Masters Award in Transportation Engineering by the American Society of Civil Engineers during 1999. In addition to ASCE, he is active with the Transportation Research Board, the Institute of Transportation Engineers, and ITS America. He has chaired several committees and edited proceedings of specialty conferences.



C.S. Papacostas
P.D. Prevedouros

ISBN: 97893325555150
Copyright: 2001
Pages: 686

Transportation Engineering and Planning, 3/e

NEW

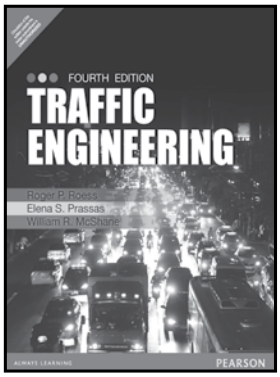
About the Book

For a course in transportation engineering in the Civil Engineering Department.
This detailed, interdisciplinary introduction to transportation engineering serves as a comprehensive text as well as a frequently cited reference. It begins with the basic sciences, mathematics, and engineering mechanics, and gradually introduces new concepts concerning societal context, geometric design, human factors, traffic engineering, and simulation, transportation planning, evaluation.

Features

- NEW - --Restructured--Organized in four main sections: DESIGN AND OPERATION (includes basic engineering principles, geometric design, human factors and traffic engineering); SYSTEMS (includes transportation modes, urban transportation, intelligent transportation systems [ITS], transportation planning and forecasting); IMPACTS (includes traffic impact studies, noise and pollution, and evaluation of transportation alternatives); and SUPPORTING ELEMENTS (such as economics, statistics, probability, queuing and software for traffic simulation and transportation analysis).
- NEW - --Updated coverage on Transportation Modes.
- NEW - --Updated coverage on Urban Systems--With extensive coverage of Intelligent Transportation Systems and the Quantification of Congestion.
- NEW - --Expanded Capacity Analyses--Of bikeway, freeway, intersection, pedestrian and transit facilities based on HCM 2000.
- NEW - --Coverage of Traffic Calming and basic Roundabouts.
- NEW - --Extensive coverage of transportation software--(Ch. 15).
- NEW - --Expanded coverage of Actuated Controllers--With numerous realistic case studies for Signal Design and Capacity Analysis.
- NEW - --Updated Demand Modeling and Forecasting.
- NEW - --Updated Traffic Impact Studies.
- Carefully chosen examples--Most accompanied by discussion and interpretations of results.
- Develops and illustrates concepts. Ex.___
- Exercises--Cover a full range of difficulty.
- Gives students hands-on practice in applying concepts. Ex.___

Contents



Roger P Roess
Elena S Prassas
William R McShane

ISBN: 9789332509368
Copyright: 2013
Pages: 744

Traffic Engineering, 4/e

About the Book

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.

Features

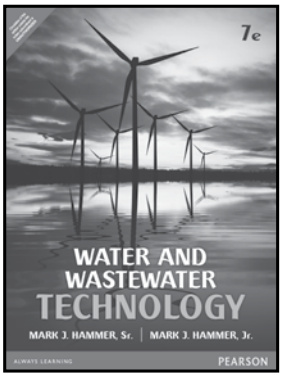
- Critical blend of theory and methodology shows students the direct application of traffic engineering concepts to real-world situations
- Accessible format gives students a clear and logical presentation
- Numerous sample problems and illustrations demonstrate the procedures and methodologies as they are used in practice
- Important computer programs demonstrate solutions throughout the text
- Coverage of underlying models highlights delay prediction, saturation flow rates, and the capacity of various types of facilities
- Presentation of signalization and signal analysis explains the underlying principles of the models that are used
- Emphasis on modern data collection tools and methodologies provides students with the details of how modern technology is used in the collection, reduction, and analysis of data

Contents

About the Authors

Dr. Roger P. Roess is Department Head in the Department of Civil Engineering at Polytechnic Institute of NYU.

Elena S. Prassas is an Associate Professor in the Department of Civil Engineering at Polytechnic Institute of NYU.



Mark J. Hammer, Sr.
Mark J. Hammer, Jr.

ISBN: 9789332550056
Copyright: 2012
Pages: 528

Water and Wastewater Technology, 7/e

NEW

About the Book

Appropriate for courses in Water Resources, Groundwater and Wastewater

The new seventh edition of Water and Wastewater Technology continues its tradition of coverage water processing principles and modern management practices, but now integrates a new emphasis on sustainability throughout.

Comprehensive coverage of topics such as:

- Water processing
- Water distribution
- Wastewater collection
- Conventional and advanced wastewater treatment
- Sludge processing

Features

- Coverage of new technologies
- Water supply and water sustainability woven throughout
- Coverage of energy reduction opportunities, and other processes important to water sustainability
- Extensive use of illustrations to explain concepts and demonstrate modern equipment and facilities
- Extensive use of charts, diagrams, and tables to make the mathematics more accessible

Contents

PEARSON

Syed R. Qasim
Edward M. Motley
Guang Zhu

ISBN: TBA
Copyright: TBA
Pages: TBA

Water Works Engineering: Planning, Design And Operation

COMING SOON

About the Book

This text/reference covers the technical aspects of planning and designing water treatment plants.

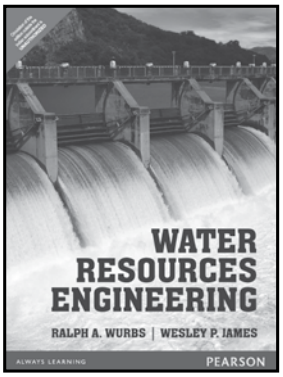
Contents

About the Authors

SYED R. QASIM, Professor of Civil and Environmental Engineering at The University of Texas at Arlington, has over 30 years of design, research and teaching experience in water and wastewater treatment processes. He has written three books, and published over 100 technical papers.

EDWARD M. MOTLEL is Vice President and Director of Engineering with Chiang, Patel & Yerby Inc., a consulting engineering firm in Dallas, TX. He has over 20 years of consulting experience in planning, design, and construction of advanced water, wastewater treatment, and conveyance projects.

GUANG ZHU has ten years of consulting experience with Beijing Municipal Engineering Design and Research Institute, Beijing, China, and is author of many technical papers in environmental engineering. He joined Chiang, Patel & Yerby Inc. as an environmental engineering process design engineer after completing his Ph.D. in 1996.



Ralph A. Wurbs
Wesley P. James

ISBN: 97893325555143
Copyright: 2015
Pages: 828

Water Resources Engineering

NEW

About the Book

For a basic course in water resources engineering. Also appropriate for more advanced undergraduate and graduate courses and as a reference for practicing engineers.

Designed to provide a broad coverage of pertinent topics concerning water resource engineering, this text focuses on fundamental topics of hydraulics, hydrology, and water management. Water resources engineering concepts and methods are addressed from the perspective of practical applications in water management and associated environmental and infrastructure management. The focus is on mathematical modeling and analysis using state-of-the-art computational techniques and computer software. The text is written to easily adapt to the spectrum of ways that individual courses and sequences of undergraduate and graduate courses are organized at various universities, providing flexibility for the instructor.

Features

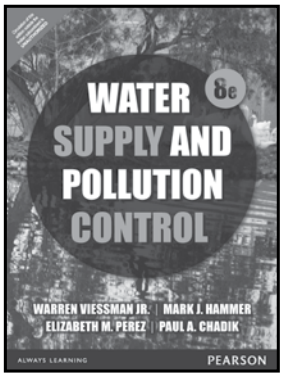
- Focus on professional practice.
- Prepares students for professional practice in a field with unlimited challenges and opportunities for serving society.
- Comprehensive coverage of fundamental concepts and techniques—Provides the foundation for water resources engineering.
- Provides the fundamentals to prepare students for life-long learning.
- Focus on modern computer-based modeling and analysis methods.
- Illustrates recent advances in computer technology and computational methods that have greatly increased capabilities for solving water resources engineering problems.
- Numerous carefully prepared example and homework problems.
- Provides students with ample opportunity to learn the material.
- Numerous figures—Illustrate the material.
- Provides students with drawings and schematics that greatly aid in comprehending the material.

Contents

About the Authors

Wesley P. James has over 40 years of experience in hydraulics, hydrology, and water resources engineering, working in federal agencies, private consulting, and universities. He has continued his consulting engineering practice since retiring in 1997 after 26 years with the Civil Engineering Department, Texas A&M University. His teaching, research, and consulting have been in the areas of watershed modeling, remote sensing, groundwater engineering, stormwater management, and design and analysis of hydraulic structures and facilities. Honors include the national J. M. Robbins Excellence in Teaching Award from the Chi Epsilon Civil Engineering Honor Society in 1990. Dr. James holds degrees in Civil Engineering from Montana State University, Purdue University, and Oregon State University.

Ralph A. Wurbs is a Professor in the Environmental and Water Resources Engineering Division with the Civil Engineering Department, Texas A&M University. He worked in the water resources program of the U.S. Army Corps of Engineers for nine years prior to joining the TAMU faculty in 1980. Much of his research and consulting have been related to river basin management. His several teaching awards include the national J. M. Bobbins Excellence in Teaching Award from the Chi Epsilon Civil Engineering Honor Society in 2000. His many publications include two other books published by Prentice Hall: Water Management Models: A Guide to Software (1995) and Modeling and Analysis of Reservoir System Operations (1996). Dr. Wurbs holds degrees from Texas A&M University, University of Texas at Arlington, and Colorado State University.



Warren Viessman
Mark J. Hammer
Elizabeth M Perez
Paul A. Chadik

ISBN: 9789332549616
Copyright: 2009
Pages: 864

Water Supply and Pollution Control, 8/e

NEW

About the Book

The Eighth Edition of this bestselling text has been revised and modernized to meet the needs of today's environmental engineering students who will be engaged in the design and management of water and wastewater systems. It emphasizes the application of the scientific method to problems associated with the development, movement, and treatment of water and wastewater. Recognizing that all waters are potential sources of supply, the authors present treatment processes in the context of what they can do, rather than dividing them along clean water or waste water lines. An abundance of examples and homework problems amplify the concepts presented.

Features

- The interconnectedness of all potential water sources is illustrated by the text's wide breadth of coverage – Water development, distribution, and use as well as water and wastewater development are all explored.
- Prominent coverage of monitoring drinking water for pathogens highlights this topic – an increasing concern as the security of drinking water becomes more critical.
- Expanded and updated material on indirect reuse of water for augmenting drinking water supplies gives prominence to this increasingly important component of water resources development.

Contents

About the Authors

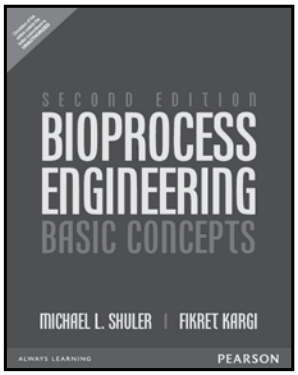
Warren Viessman, Jr. is Professor Emeritus with the Department of Environmental Engineering Sciences, College of Engineering University of Florida. He served as Associate Dean for Academic Programs from 1990 to 2003, and prior to that was Chairman of the Department of Environmental Engineering Sciences. Dr. Viessman is senior author of widely used textbooks on water supply and pollution control, hydrology, and water management. He has served on numerous national, regional and state committees and commissions, and is recognized for his outstanding contributions to water resources and environmental policy making and analysis at state and national levels. His many national awards attest to his efforts in these fields. He is an Honorary Member of the American Society of Civil Engineers and a registered professional engineer.

Mark L Hammer is Professor Emeritus of civil engineering and is an author of environmental engineering publications in the United States and Saudi Arabia. During his long tenure as a professor at the University of Nebraska-Lincoln, Dr. Hammer also served as the Director of the Environmental Protection Agency Grant in Water Quality Control. He has taught at the King Fahd University of Petroleum & Minerals and King Abdul Aziz University, Saudi Arabia, where he conducted environmental engineering research in addition to his teaching responsibilities. He is a member of the American Water Works Association and the Water Environment Federation.

Elizabeth M Perez has degrees in Environmental and Civil Engineering. Her specialties include hydrologic and hydraulic modeling, geographic information systems, ecological engineering, stormwater modeling, and watershed management.

Paul A. Chadik brings background of degrees in Chemical and Environmental Engineering and 23 years of teaching and research in water and wastewater treatment. He is a member of the faculty of the Department of Environmental Engineering Sciences at the University of Florida.

Chemical Engineering



Michael L. Shuler
Fikret Kargi

ISBN: 9789332549371
Copyright: 2015
Pages: 576

Bioprocess Engineering: Basic Concepts, 2/e

NEW

About the Book

This is the definitive, up-to-the-minute guide to systems management for every IT professional responsible for maintaining stable, responsive IT production environments. Top IT system management expert Rich Schiesser illuminates both the theoretical and practical aspects of systems management, using methods and examples drawn from decades of professional experience in roles ranging from data center leadership to infrastructure design. Schiesser covers every systems management discipline, every type of IT environment, and all elements of success: technology, processes, and people. This edition adds detailed new coverage of the popular IT Infastructure Library, showing how ITIL's 10 processes align with the 12 processes Schiesser presents. Another new chapter addresses key issues related to ethics, legislation, and outsourcing. Additional new coverage ranges from managing wireless networks, VoIP, and "ultra-speed" Internet to strategic security and new approaches to facilities management

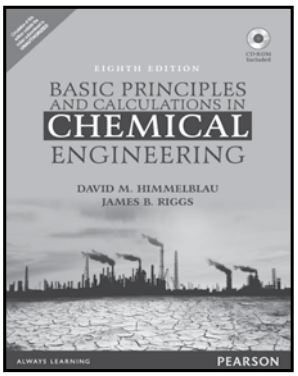
Features

Contents

About the Author

DR. MICHAEL L. SHULER is Professor in the School of Chemical Engineering, Cornell University. His areas of research include structured models, heterologous protein expression systems, cell culture analogs for pharmacokinetic models, in-vitro toxicology, plant-cell tissue culture, microbial functional genomics, and bioremediation.

DR. FIKRET KARGI is Professor of Environmental Engineering at Dokuz Eylul University in Ismir, Turkey. His current research includes bioprocessing of wastes for production of commercial products, development of novel technologies for biological treatment of problematic wastewaters, nutrient removal, and novel biofilm reactor development.



David M. Himmelblau
James B. Riggs

ISBN: 9789332549623
Copyright: 2014
Pages: 800

Basic Principles and Calculations in Chemical Engineering, 8/e

NEW

About the Book

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.

Offering a strong foundation of skills and knowledge for successful study and practice, it guides students through formulating and solving material and energy balance problems, as well as describing gases, liquids, and vapors. Throughout, the authors introduce efficient, consistent, student-friendly methods for solving problems, analyzing data, and gaining a conceptual, application-based understanding of modern chemical engineering processes. This edition's improvements include many new problems, examples, and homework assignments.

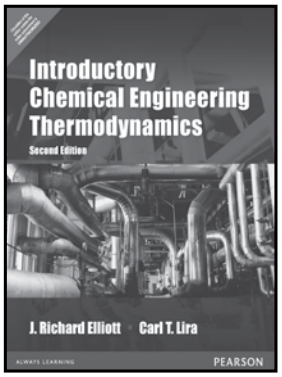
Features

- Thoroughly covers material balances, gases, liquids, and energy balances
- Contains new biotech and bioengineering problems throughout
- Adds new examples and homework on nanotechnology, environmental engineering, and green engineering
- All-new student projects chapter
- Self-assessment tests, discussion problems, homework, and glossaries in each chapter
- Power Points and instructor's solutions manual available for course use.

Contents

About the Author

David M. Himmelblau was (until his death in April) the American Petrofina Foundation Centennial Professor in Chemical Engineering at the University of Texas, Austin. The author of sixteen books, his areas of research included the use of artificial neural networks for fault diagnosis and data rectification. **James B. Riggs** is Professor in the Chemical Engineering Department at Texas Tech University, where he directs the Texas Tech Process Control and Optimization Consortium. His books include Chemical Process Control, Second Edition and An Introduction to Numerical Methods for Chemical Engineers, Second Edition.



J. Richard Elliot
Carl T. Lira

ISBN: 9789332524040
Copyright: 2014
Pages: 904

Introductory Chemical Engineering Thermodynamics, 2/e

About the Book

In this book, two leading experts and long-time instructors thoroughly explain therodynamics, taking the molecular perspective that working engineers require (and competitive books often avoid). This new Second Edition contains extensive new coverage of today's fast-growing biochemical engineering applications, notably biomass conversion to fuels and chemicals. It also presents many new MATLAB examples and tools to complement its previous usage of Excel and other software.

Features

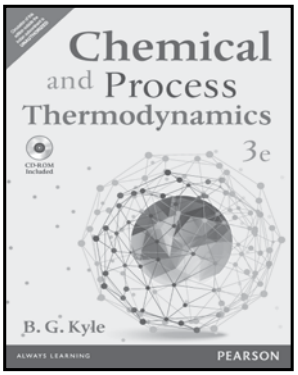
- Clear, colloquial, easy to use - and the only book in its market that focuses on the molecular perspective working engineers need
- Contains new MATLAB examples and tools, extensive new coverage of biochemical engineering and biomass conversions, and many other improvements
- Teaches molecular modeling and product design techniques that are rapidly being adopted in the marketplace
- Hierarchical instruction with increasing levels of detail: Content requiring deeper levels of theory is clearly delineated in separate sections and chapters
- Early introduction to the overall perspective of composite systems like distillation columns, reactive processes, and biological systems
- Learning objectives, problem-solving strategies for energy balances and phase equilibria, chapter summaries, and "important equations" for every chapter
- Extensive practical examples, especially coverage of non-ideal mixtures, which include water contamination via hydrocarbons, polymer blending/recycling, oxygenated fuels, hydrogen bonding, osmotic pressure, electrolyte solutions, zwitterions and biological molecules, and other contemporary issues
- Supporting software in formats for both MATLAB® and spreadsheets
- Online supplemental sections and resources including instructor slides, ConcepTests, coursecast videos, and other useful resources

Contents

About the Authors

J. Richard Elliott is Professor of Chemical Engineering at the University of Akron in Ohio. He has taught courses ranging from freshman tools to senior process design as well as thermodynamics at every level. He has worked with the NIST lab in Boulder and ChemStations in Houston. He holds a Ph.D. from Pennsylvania State University.

Carl T. Lira is Associate Professor in the Department of Chemical Engineering and Materials Science at Michigan State University. He teaches thermodynamics at all levels, chemical kinetics, and material and energy balances. He has been recognized with the Amoco Excellence in Teaching Award and multiple presentations of the MSU Withrow Teaching Excellence Award. He holds a Ph.D. from the University of Illinois.



B. G. Kyle

ISBN: 9789332549364
Copyright: 2003
Pages: 788

Chemical and Process Thermodynamics, 3/e

NEW

About the Book

This is an example-rich guide to chemical engineering thermodynamics that focuses on current techniques, new applications, and today's revolutionary computer tools. The sequentially organized book helps in discovering both the "how" and "why" of chemical engineering thermodynamics, and helps to improve the problem-solving effectiveness with an extensive collection of sophisticated PC software.
This brand new third edition reflects newly-developed techniques and applications and includes a thorough treatment of complex chemical equilibria as well as philosophy and practice of modeling thermodynamic systems.
CD-ROM: The accompanying CD-ROM contains nine executable programs, three spreadsheets for professional calculations, POLYMATH numerical analysis software, and EQUATIONS OF STATE software for thermodynamic process visualization on 3D PVT diagrams.

Features

- The 1st and 2nd laws of thermodynamics
- Fluid behavior and thermodynamic networks
- Heat effects, equilibrium and stability
- Phase equilibrium
- Chemical equilibrium
- Thermodynamic analysis of processes, physicomechanical processes and more.

Contents

PEARSON

B. Wayne Bequette

ISBN: TBA
Copyright: TBA
Pages: TBA

Process Control: Modeling, Design and Simulation

COMING SOON

About the Book

This is the first book to offer a fully integrated introduction of the fundamental topics of process dynamics with MATLAB software tools that allow students to learn the material interactively through computer-based simulation exercises. Process Control: Modeling, Design and Simulation presents realistic problems and provides the software tools for students to simulate processes and solve practical, real-world problems. Ultimately, the book will teach students to analyze dynamic chemical processes and develop automatic control strategies to operate them safely and economically.

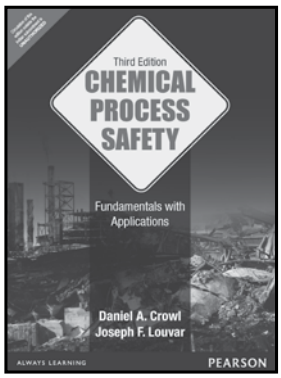
Features

- Interactive MATLAB/SIMULINK exercises—Emphasize model-based control techniques.
- Reinforce and enhance the student's ability to learn new model-based techniques.
- Effect of process scale (design) on control.
- Provides students with an appreciation of the dynamic nature of chemical processes and helps them develop strategies to operate these procedures.
- Biomedical problems.
- Motivates students with interesting real-world problems that touch on the latest topics.
- Modules containing practical problems—Tied back to each chapter.
- Enables students to integrate the techniques and reinforce the concepts presented throughout the book.
- Additional material is available on the Internet.
- Helps students focus on the fundamental concepts, rather than sorting through an encyclopedia of every possible behavior or control problem.

Contents

About the Author

B. WAYNE BEQUETTE is Professor of Chemical Engineering at Rensselaer Polytechnic Institute. His teaching and research interests are in the areas of process systems and control engineering for biomedical systems, pharmaceuticals, chromatography, and complex chemical processes. He is Associate Editor of Automatica, a journal of the International Federation of Automatic Control, and General Chair for the 2003 American Control Conference. He is the author of Process Dynamics: Modeling, Analysis, and Simulation (Prentice Hall).



Daniel A. Crowl
Joseph F. Louvar

ISBN: 9789332524057
Copyright: 2014
Pages: 736

Chemical Process Safety: Fundamentals with Applications, 3/e

About the Book

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 understanding of safety and the application required to safely design and manage today's sophisticated processes.

The third edition continues the definitive standard of the previous editions. The content has been extensively updated to today's techniques and procedures, and two new chapters have been added. A new chapter on chemical reactivity provides the information necessary to identify, characterize, control, and manage reactive chemical hazards. A new chapter on safety procedures and designs includes new content on safely management, and specific procedures including hot work permits, lock-tag-try, and vessel entry.

Features

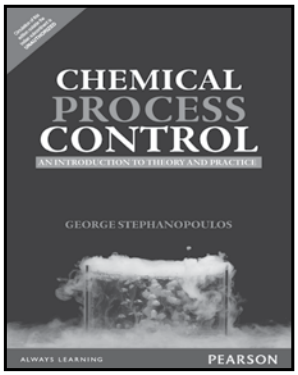
- New chapter on Chemical Reactivity
- New chapter on Safe Design Features and Procedures
- Extensively updated content
- Additional homework problems
- Power Point Slides and an instructor's solutions manual available for course use

Contents

About the authors

Daniel A. Crowl is Herbert H. Dow Professor for Chemical Process Safety at Michigan Tech. He serves on the AIChE Center for Chemical Process Safety (CCPS) Safety and Chemical Engineering Education (SACHE) Committee, and is author/editor of several AIChE books on process safety. His awards include AIChE's Bill Doyle Award; the ACS Chemical Health and Safety Award; the Walton/Miller award from AIChE's Safety and Health Division; and the AIChE Board's Gary Leach Award. He is a Fellow of AIChE, ACS Safety and Health Division , and CCPS.

Joseph F. Louvar is Research Professor at Wayne State University's College of Engineering, where he teaches chemical process safety, risk assessment, and process design. He was recently the CCPS staff consultant for the Undergraduate Education Committee, commonly known as the Safety and Chemical Engineering Education Committee (AIChE's SACHE) and has previously chaired this committee for over ten years. His books include Health and Environmental Risk Analysis: Fundamentals with Applications(Prentice Hall, 1997)



George Stephanopoulos

ISBN: 9789332549463
Copyright: 2003
Pages: 704

Chemical Process Control: An Introduction to Theory and Practice

NEW

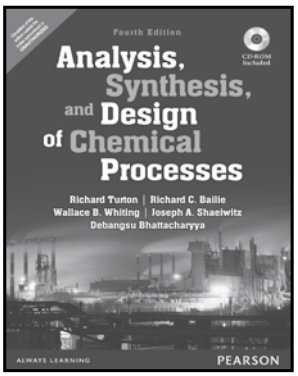
About the Book

A thorough overview of all aspects of chemical process control — process modeling, dynamic analyses of processing systems, a large variety of control schemes, synthesis of multivariable control configurations for single units and complete chemical plants, analysis and design of digital computer control systems.

Features

- Emphasizes problem formulation, analysis of posed control problems, and the synthesis and evaluation of alternative control systems.
- Provides a complete understanding of control design and implementation rather than a mere list of mechanistic tools.
- Discusses both controller design concepts and hardware elements needed for practical implementation of various control schemes.
- Emphasizes controllers' actions and their relative advantages and drawbacks.

Contents



Richard Turton
Richard C. Bailie
Wallace B. Whiting
Joseph A. Shaeiwitz

ISBN: 9789332550346
Copyright: 2013
Pages: 1004

Analysis, Synthesis and Design of Chemical Processes, 4/e

NEW

About the Book

Process design is the focal point of chemical engineering practice: the creative activity through which engineers continuously improve facility operations to create products that enhance life. Effective chemical engineering design requires students to integrate a broad spectrum of knowledge and intellectual skills, so they can analyze both the big picture and minute details - and know when to focus on each. Through three previous editions, this book has established itself as the leading resource for students seeking to apply what they've learned in real-world, open-ended process problems. The authors help students hone and synthesize their design skills through expert coverage of preliminary equipment sizing, flowsheet optimization, economic evaluation, operation and control, simulation, and other key topics. This new Fourth Edition is extensively updated to reflect new technologies, simulation techniques, and process control strategies, and to include new pedagogical features including concise summaries and end-of-chapter lists of skills and knowledge.

Features

- The #1 chemical process design guide, used by 60% of chemical engineering departments: updated with new techniques and control strategies
- A proven tool for helping students integrate process knowledge to start solving open-ended problems
- Updated with improved pedagogy throughout, including four new case studies on simulation in design
- Includes new advanced chapters on both steady state and dynamic simulators
- Adds expanded coverage of lower- and higher-level process control strategies, including MPC
- Companion website: che.cemr.wvu.edu/publications/projects/

Contents

About the Author

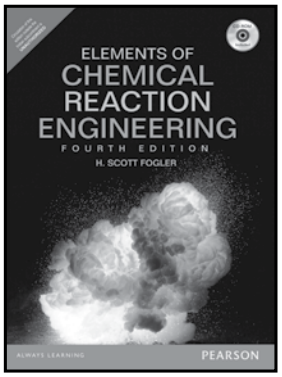
Richard Turton is professor of chemical engineering and professor in the Statler College of Engineering and Mineral Resources at West Virginia University. He has taught WVU's senior design course for more than twenty-five years.

Richard C. Bailie, professor emeritus at WVU, taught chemical engineering design for more than twenty years. He has extensive experience in process evaluation, pilot plant operation, and plant startup.

Wallace B. Whiting, professor emeritus at the University of Nevada, Reno, has practiced and taught chemical process design for more than twenty-four years.

Joseph A. Shaeiwitz has been involved in WVU's senior design sequence and sophomore- and junior-level integrated design projects for twenty years.

Debangsu Bhattacharyya, associate professor in the department of chemical engineering at WVU, has worked in computer-aided simulation, design, construction, and in the operation of a large petroleum refinery for more than ten years.



H. Scott Fogler

ISBN: 9789332549326
Copyright: 2006
Pages: 1116

Elements of Chemical Reaction Engineering, 4e

NEW

About the Book

The book presents in a clear and concise manner the fundamentals of chemical reaction engineering. The structure of the book allows the student to solve reaction engineering problems through reasoning rather than through memorization and recall of numerous equations, restrictions, and conditions under which each equation applies. The fourth edition contains more industrial chemistry with real reactors and real engineering and extends the wide range of applications to which chemical reaction engineering principles can be applied (i.e., cobra bites, medications, ecological engineering)

Features

- The best selling chemical reaction engineering book just got better!
- The fundamentals of chemical reaction engineering -- presented in a clear and conciser manner
- The reader learns how to solve problems through reasoning rather than getting lost in trying to remember which formula applies to what situation
- Reader develops critical and creative thinking skills they can apply to many situations, becoming more productive and self-reliant
- The solutions manual is now available for download through the IRC

Contents

About the authors

H. Scott Fogler is the Arthur F. Thurnau Professor, Vennema Professor of Chemical Engineering at the University of Michigan. His research interests include flow and reaction in porous media, fused chemical relations, gellation kinetics, and chemical reaction engineering problems in the petroleum industry. He has graduated 37 Ph.D. students and has more than 200 refereed publications in these areas. Fogler is the AIChE 2008 President-elect. He has chaired ASEE's Chemical Engineering Division, served as director of the American Institute of Chemical Engineers, earned the Warren K. Lewis Award from AIChE for contributions to chemical engineering education, and received the Chemical Manufacturers Association's National Catalyst Award. He is the co-author of the bestselling textbook Strategies for Creative Problem Solving, Second Edition (Prentice Hall, 2008).

PEARSON

Joel R. Fried

ISBN: TBA
Copyright: TBA
Pages: TBA

Polymer Science and Technology, 3/e

COMING SOON

About the Book

This text describes how plastics, rubber, and fibers are synthesized, processed into useful materials, characterized, and compounded with fillers and other additives to improve performance for specific applications. Their use in a wide variety of technologies including membrane separations, electronics, and energy production and storage is described. A new chapter in the Third Edition shows how computer correlations and simulations can be used to predict properties of new plastics and to better understand how existing plastics perform.

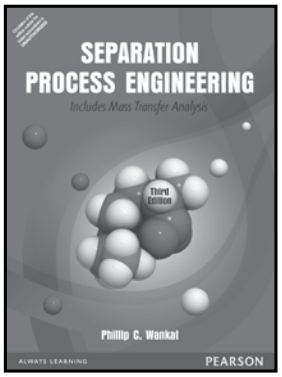
Features

- Comprehensive coverage of polymer synthesis including new coverage of controlled radical polymerization and the use of click chemistry
- Expanded coverage on nanomaterials including POSS and graphene
- Added coverage of biomedical engineering, drug delivery, polymeric solar cells
- New coverage of the use of artificial neural networks and topological indices to predict polymer properties
- The first coverage of the use of molecular molecular dynamics and Monte Carlo methods in the simulation of polymeric systems in any textbook

Contents

About the authors

Dr. Joel R. Fried is professor and chair of the department of chemical and biomedical engineering at Florida State University. Previously, he was professor and the Wright Brothers Endowed Chair in Nanomaterials at the University of Dayton. He is also professor emeritus of chemical engineering and fellow of the graduate school at the University of Cincinnati, where he directed the Polymer Research Center and led the department of chemical engineering. He holds B.S. degrees in biology and chemical engineering, and an M.E. degree in chemical engineering from Rensselaer Polytechnic Institute. He also holds M.S. and Ph.D. degrees in polymer science and engineering from the University of Massachusetts, Amherst.



Phillip C. Wankat

ISBN: 9789332524842
Copyright: 2014
Pages: 984

Separation Process Engineering : Includes Mass Transfer Analysis, 3/e

About the Book

Separation Process Engineering, Third Edition, is the most comprehensive, accessible text available on modern separation processes and the fundamentals of mass transfer. Phillip C. Wankat teaches each key concept through detailed, realistic examples using real data-including up-to-date simulation practice and new spreadsheet-based exercises.

Features

- In addition to up-to-date material, this book uses what is known about how students learn. The result is a book that students find easy to read and understand.
- Detailed examples that use real data to solve real engineering problems, organized in a common format for ease of understanding.
- This edition features a large number of new problems that use real data to solve real engineering separation and mass transfer problems.
- Extensive coverage and examples of industrially important separation methods, including: flash distillation; continuous column distillation including extractive and azeotropic distillation; batch distillation; absorption; stripping; extraction; membrane separations; adsorption; ion exchange; and chromatography.
- Simulation exercises for process simulators and exercises for spreadsheets presented in chapter appendices so that they do not cause confusion in courses that do not use these techniques.
- New detailed coverage of mass transfer fundamentals and applications in separation processes.

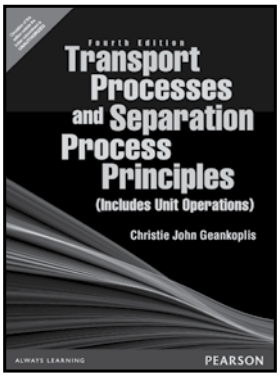
New to this Edition

- Detailed coverage of mass transfer fundamentals and applications in separation processes
- Detailed design procedures and problems are now included for liquid-liquid extraction. These design methods are not in the 2nd edition and are not in competing books; these design methods plus the simulation exercises for extraction make the coverage of extraction the most detailed of any of the textbooks on the market.
- Detailed spreadsheet examples and VBA programs, now included in appendices
- All new sets of problems

Contents

About the Authors

Phillip C. Wankat is Clifton L. Lovell Distinguished Professor of Chemical Engineering and director of undergraduate degree programs at Purdue University's School of Engineering Education. His current research interests include adsorption, large-scale chromatography, simulated moving bed systems, and distillation, as well as improvements in engineering education. He received the 2007 Distinguished Education Alumni Award of Distinction from Purdue's College of Education, and the 2005 Shreve Prize in Chemical Engineering. With K. S. Knaebel, he contributed the Mass Transfer section to Perry's Handbook of Chemical Engineering, Eighth Edition (McGraw-Hill, 2008).



Christie John Geankoplis

ISBN: 9789332549432
Copyright: 2013
Pages: 1040

Transport Processes and Separation Process Principles (Includes Unit Operations), 4/e

NEW

About the Book

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).

The title of this Fourth Edition has been changed from Transport Processes and Unit Operations to Transport Processes and Separation Process Principles (Includes Unit Operations). This was done because the term Unit Operations has been largely superseded by the term Separation Processes which better reflects the present modern nomenclature being used. The main objectives and the format of the Fourth Edition remain the same. The sections on momentum transfer have been greatly expanded, especially in the sections on fluidized beds, flow meters, mixing, and non-Newtonian fluids. Material has been added to the chapter on mass transfer. The chapters on absorption, distillation, and liquid-liquid extraction have also been enlarged. More new material has been added to the sections on ion exchange and crystallization. The chapter on membrane separation processes has been greatly expanded especially for gas-membrane theory.

Features

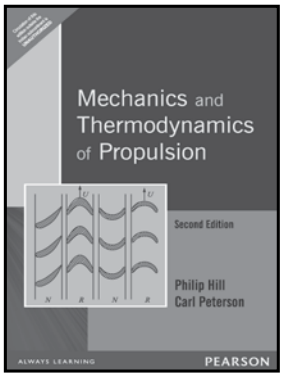
- The comprehensive, unified, up-to-date guide to transport and separation processes.
- A more thorough coverage of momentum, heat, and mass transport processes and new coverage of separation process applications.
- Greatly expanded coverage of momentum transfer, including fluidized beds and non-Newtonian fluids.
- More detailed discussions of mass transfer, absorption, distillation, liquid-liquid extraction, and crystallization.

Contents

About the authors

CHRISTIE JOHN GEANKOPLIS is a Professor of Chemical Engineering and Materials Science at the University of Minnesota. His current research interests involve transport processes, biochemical reactor engineering, mass transfer in liquid solutions, and diffusion and/or reaction in porous solids. He holds a Ph.D. in Chemical Engineering from the University of Pennsylvania.

Aeronautical Engineering



Philip G. Hill
Carl R. Peterson

ISBN: 9788131729519
Copyright: 2009
Pages: 760

Mechanics and Thermodynamics of Propulsion, 2/e

About the Book

In this textbook, the authors show that a few fundamental principles can provide students of mechanical and aeronautical engineering with a deep understanding of all modes of aircraft and spacecraft propulsion. The book also demonstrates how these fundamental principles can lead directly to useful quantitative assessments of performance as well as possibilities for improvement. The second edition provides a wide range of new illustrative material on modern aircraft and rocket engines. The author s have also improved their explanations of pertinent physical phenomena and have introduced preliminary design procedures in this edition.

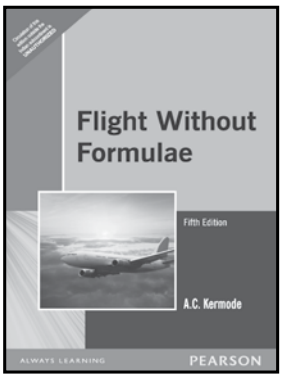
Features

- Focus on fundamental principles which can provide students of mechanical and aeronautical engineering with a deep understanding of all modes of aircraft and spacecraft propulsion.
- The book also demonstrates how these fundamental principles can lead directly to useful quantitative assessments of performance as well as possibilities for improvement.
- This edition provides a wide range of new illustrative material on modern aircraft and rocket engines.
- Improved explanations of pertinent physical phenomena and an introduction to preliminary design procedures are provided.

Contents

About the Authors

Philip Hill, University of British Columbia
Carl Peterson, Massachusetts Institute of Technology



A.C. Kermode

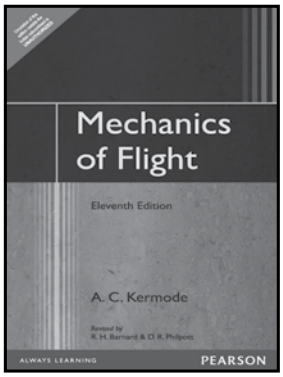
ISBN: 9788131713891
Copyright: 1999
Pages: 314

Flight Without Formulae, 5/e

About the Book

This fifth edition, updated by Bill Gunston, is an account of the basic principles of flight, explained as simply as possible and excluding all mathematical formulae. It is intended to be of use as an introductory text for trainee pilots and students as well as for the general reader.

Contents



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

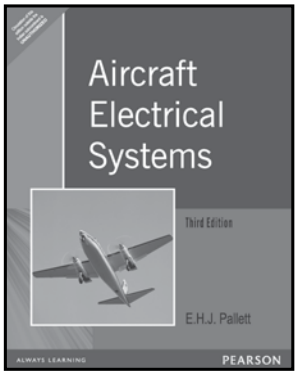
ISBN: 9788131716571
Copyright: 2007
Pages: 512

Mechanics of Flight, 11/e

Features

- New chapter on modern developments.
- Updated sections on hypersonic aircraft and space flight.
- Improved illustrations and photographs updated.
- SI units used throughout.

Contents



E.H.J. Pallett

ISBN: 9788131703892
Copyright: 2009
Pages: 240

Aircraft Electrical Systems, 3/e

About the Book

The third edition of this established text continues to provide up-to-date information on the operating principles and applications of the systems and equipment used in aircraft for the generation, distribution and utilisation of electrical power. The fundamental principles of electricity are reviewed, and systems and equipment used in a wise range of aircraft currently in service are dealt with. The text is supported by numerous diagrams, photographs and useful appendices. Examination-type test question are included at the end of the book. Intended as a course book for students wishing to obtain an Aircraft Maintenance Engineer's License.

Contents

E.H.J. Pallett

ISBN: 9788131728130

Pages: 414

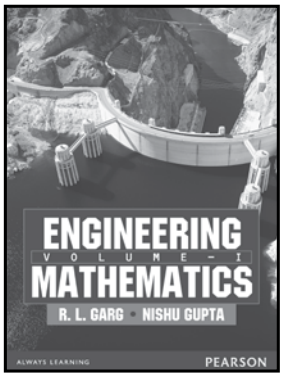
Aircraft Instruments, 2/e

About the Book

The Purpose of this authoritative and Internationally accepted handbook is to Provide clear explanations of the operating principles of the instruments and associated systems needed for flight handling and navigation, and for monitoring the performance of aircraft power plants. In updating and revising for this second edition, the author has taken the opportunity to expand his original treatment of same devices, such as the gyroscope and synchronous transmission systems, to introduce representative examples of new development, and to incorporate tables of physical data basic to the operation of certain types of instruments.

Contents

Core Engineering



R.L. Garg
Nishu Gupta

ISBN: 9788131789902
Copyright: 2015
Pages: 1260

Engineering Mathematics Volume I

NEW

About the Book

Engineering mathematics is taught as a compulsory paper to all undergraduate students. The course is offered in three semesters, due to its enormous coverage.

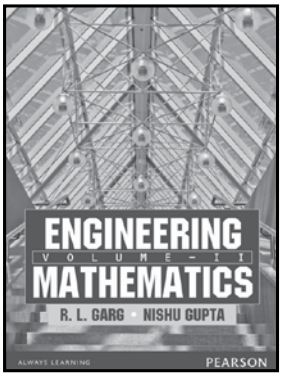
This text uses synthetic division and suppression method of partial fraction in order to solve the problems in an easy and short manner. The inclusion of examples related to direct engineering applications is an integral part of the book.

Contents

About the Authors

RL Garg is a retired Professor, Maharaja Agrasen Institute of Technology, Delhi. He has been teaching Mathematics for last 35 years and been on the examination panel of various universities and state service board exams.

Nishu Gupta is an Assistant Professor at Maharaja Agrasen Institute of Technology, Delhi. She has been teaching for last 16 years.



R.L. Garg
Nishu Gupta

ISBN: 9789332536333
Copyright: 2015
Pages: 900

Engineering Mathematics Volume II

NEW

About the Book

Engineering mathematics is taught as a compulsory paper to all undergraduate students. The course is offered in three semesters, due to its enormous coverage.

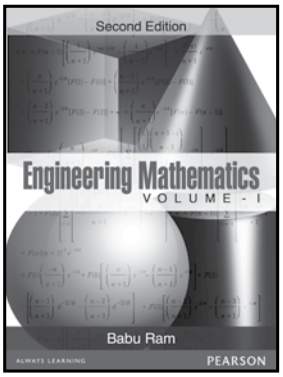
This text uses synthetic division and suppression method of partial fraction in order to solve the problems in an easy and short manner. The inclusion of examples related to direct engineering applications is an integral part of the book.

Contents

About the Authors

RL Garg is a retired Professor, Maharaja Agrasen Institute of Technology, Delhi. He has been teaching Mathematics for last 35 years and been on the examination panel of various universities and state service board exams.

Nishu Gupta is an Assistant Professor at Maharaja Agrasen Institute of Technology, Delhi. She has been teaching for last 16 years.



Babu Ram

ISBN: 9788131784709
Copyright: 2012
Pages: 608

Engineering Mathematics Volume-I, 2e

About the Book

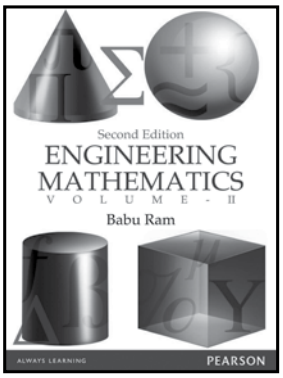
Engineering Mathematics is an interdisciplinary subject offered to the undergraduate engineering students. Considering the vast coverage of the subject, usually this paper is taught in three to four semesters. The two volumes in Engineering Mathematics by Babu Ram offer a complete solution to these papers.

Features

Contents

About the Authors

Babu Ram received his Ph.D in mathematics in 1973 from Kurukshetra University, Kurukshetra, India. He was formerly Professor of Mathematics and Dean, Faculty of Physical Sciences, at Maharshi Dayanand University, Rohtak, and has been teaching mathematics for the past 36 years.



Babu Ram

ISBN: 9788131785034
Copyright: 2012
Pages: 960

Engineering Mathematics Volume-II, 2e

About the Book

Engineering Mathematics is an interdisciplinary subject offered to the undergraduate engineering students. Considering the vast coverage of the subject, usually this paper is taught in three to four semesters. The two volumes in Engineering Mathematics by Babu Ram offer a complete solution to these papers.

Features

Contents

About the Authors

Babu Ram received his Ph.D in mathematics in 1973 from Kurukshetra University, Kurukshetra, India. He was formerly Professor of Mathematics and Dean, Faculty of Physical Sciences, at Maharshi Dayanand University, Rohtak, and has been teaching mathematics for the past 36 years.

PEARSON

Sivaramakrishna Das
Vijaya Kumari

ISBN: 9789332519121
Copyright: 2016
Pages: 1600

Engineering Mathematics

COMING SOON

About the Book

Engineering Mathematics is an interdisciplinary subject offered to the undergraduate engineering students. Considering the vast coverage of the subject, usually this paper is taught across multiple semesters. This book on Engineering Mathematics is designed for the 1st, 2nd, and 3rd semester papers on engineering mathematics. The book offers a large number of exercises and a variety of solved examples with reference to engineering applications wherever appropriate.

Features

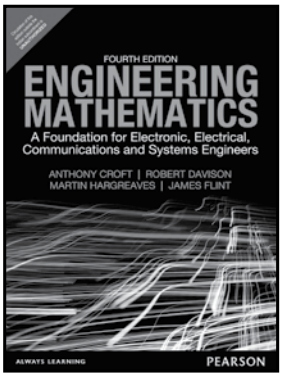
- Simple presentation with clarity and rigor
- Sufficient conditions in maxima and minima of several variables as an application of quadratic form has been given
- Comprehensive coverage of Laplace Transforms, includes details of Inverse LaplaceTransforms
- Detailed coverage of Vector Calculus
- Treatment of three dimensional analytical geometry consisting of the topics sphere, cone and cylinder
- Pedagogy:
  Over 800 solved examples
  Over 1000 exercise questions with answers

Contents

About the Authors

Professor P. Sivaramakrishna Das is Professor of Mathematics and Head of the Department of Science and Humanities, K. C. G. College of Technology, Chennai (a unit of Hindustan group of colleges).

Professor C. Vijayakumari is retired Professor of Mathematics, Queen Mary's College, Chennai



Colin Flint
Anthony Croft
Martin Hargreaves
Robert Davison

ISBN: 9789332507586

Pages: 984

Engineering Mathematics: A Foundation for Electronic, Electrical, Communications and Systems Engineers, 4e

About the Book

Engineering Mathematics is the leading undergraduate textbook for Level 1 and 2 mathematics courses for electrical and electronic engineering, systems and communications engineering students. It includes a basic mathematics review, along with all the relevant maths topics required for these engineering degrees.

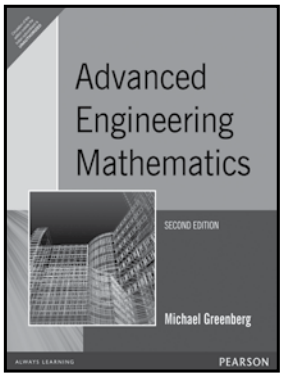
Features

• Students see the application of the maths they are learning to their engineering degree through the book's applications-focussed introduction to engineering mathematics, that integrates the two disciplines
• Provides the foundation and advanced mathematical techniques most appropriate to students of electrical, electronic, systems and communications engineering, including: algebra, trigonometry and calculus, as well as set theory, sequences and series, Boolean algebra, logic and difference equations
• Integral transform methods, including the Laplace, z and Fourier transforms are fully covered
• Students learn and test their understanding of mathematical theory and the application to engineering with a huge number of examples and exercises with solutions
• New Engineering Example showcase feature, covering an extensive range of modern applications, including music technology, electric vehicles, offshore wind power and PWM solar chargers
• New mathematical sections on number bases, logs and indices, summation notation, the sinc x function, waves, polar curves and the discrete cosine transform
• New exercises and answers

Contents

About the Authors

Anthony Croft, Loughborough University, UK
Robert Davison, De Montfort University
Martin Hargreaves, De Montfort University
James Flint, University of Loughborough



Michael Greenberg

ISBN: 9788177585469
Copyright: 1998
Pages: 1324

Advanced Engineering Mathematics, 2e

About the Book

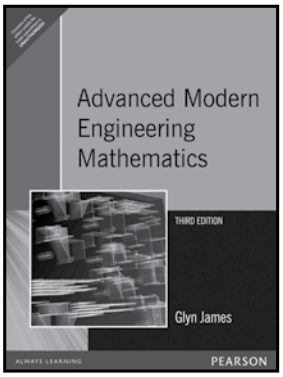
This clear, pedagogically rich book develops a strong understanding of the mathematical principles and practices that todays engineers and scientists need to know. Equally effective as either a textbook or reference manual, it approaches mathematical concepts from a practical-use perspective making physical applications more vivid and substantial. Its comprehensive instructional framework supports a conversational, down-to-earth narrative style offering easy accessibility and frequent opportunities for application and reinforcement.

Features

Contents

About the Author

Michael Greenberg, University of Delaware



Glyn James

ISBN: 9788131711248
Copyright: 2007
Pages: 972

Advanced Modern Engineering Mathematics, 3e

About the Book

Building on the foundations laid in the companion text Modern Engineering Mathematics 3e, this book gives an extensive treatment of some of the advanced areas of mathematics that have applications in various fields of engineering, particularly as tools for computer-based system modelling, analysis and design.

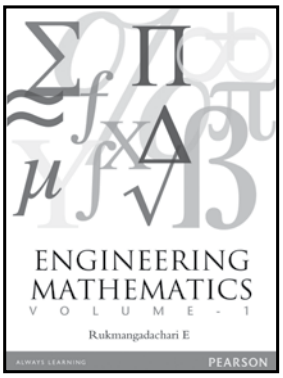
Features

- Additional graded examples and exercises
- Increased emphasis on software packages, particularly symbolic algebra packages. Particular emphasis on use of MATLAB and MAPLE, with basic commands introduced and illustrated
- More emphasis on numerical methods such as the treatment of finite elements

Contents

About the Author

Glyn James, Coventry University



E. Rukmangadachari

ISBN: 9788131761311
Copyright: 2012
Pages: 616

Engineering Mathematics - Vol I

About the Book

Engineering Mathematics Vol I is designed for the 1st semester paper on engineering mathematics, and offers a large number of exercises and a variety of solved examples with reference to engineering applications wherever appropriate, and over 800 objective-type questions that include multiple-choice questions, fill in the blanks, match the following and true or false statements.

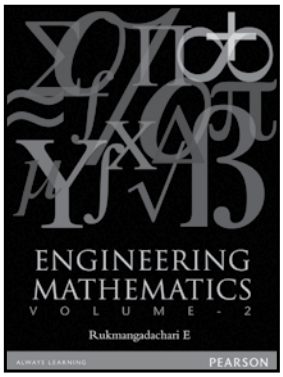
Features

- Lucid coverage of convergent tests for sequences and series
- Solutions of first order differential equations and in depth coverage of curve tracing
- Applications to one-dimensional heat equations, wave equations and Laplace equations
- Numerical methods include Cubic Spline method, Runge-Kutta methods and Adamsâ€“Bashforthâ€“Moulton methods

Contents

About the Authors

E Rukmangadachari is former head of Computer Science and Engineering as well as Humanities and Sciences at Mall Reddy Engineering College, Secunderabad. He is an MA from Osmania University, and an M.PHIL. AND Ph.D. degree holder from Sri Venkateswara University, Thirupathi.



E. Rukmangadachari

ISBN: 9788131784952
Copyright: 2007
Pages: 600

Engineering Mathematics - Vol II

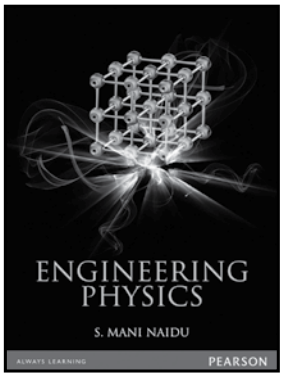
About the Book

Designed for the core papers Engineering Mathematics II and III, which students take up across the second and third semesters, this book offers detailed theory with a wide variety of solved examples with reference to engineering applications, along with over 1,000 objective-type questions that include multiple choice questions, fill in the blanks, match the following and true or false statements.

Features

- Separate chapter on conformal mapping
- Detailed examination of argument principle and Rouche's theorem
- Separate chapter on curve fitting
- Variety of problems in each chapter

Contents



Mani Naidu

ISBN: 9788131761632
Copyright: 2014
Pages: 640

Engineering Physics

NEW

About the Book

This book on Engineering Physics is designed to cater to the needs of first year undergraduate engineering students. Written in a lucid style, this book assimilates the best practices of conceptual pedagogy, dealing at length with various topics such as crystallography, principles of quantum mechanics, free electron theory of metals, dielectric and magnetic properties, semiconductors, nanotechnology, etc…

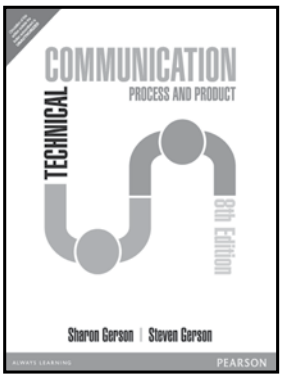
Features

- Solved problems in each chapter incorporate vivid details to guide the student through the subject.
- Replete with exercises and multiple choice questions, the chapter end pedagogy provides enhanced and discerning inputs to a streamlined and systematic learning approach.
- Detailed explanations of topics on Holography and Acoustics.
- Comprehensive coverage of Nuclear Physics

Contents

About the Authors

Dr. Mani Naidu is Prof and Head, Department of Physics at Sri Vidhyanikethan college of Engineering. He was a research assistant at Regional Engineering College, Trichy.



Sharon Gerson
Steven Gerson

ISBN: 9789332518599
Copyright: 2014
Pages: 704

Technical Writing Process and Product, 8e

About the Book

Technical Communication: Process and Product, 8e by Sharon J. Gerson and Steven M. Gerson, provides a proven, complete methodology that emphasizes the writing process and shows how it applies to both oral and written communication. With an emphasis on real people and their technical communication, it provides complete coverage of communication channels, ethics, and technological advances. This edition includes information on dispersed teams, collaboration tools, listening skills, and social networking. Using before/after documents, authentic writing samples and skill-building assignments, the book provides a balance of how-to instruction with real-world modeling to address the needs of an evolving workplace.

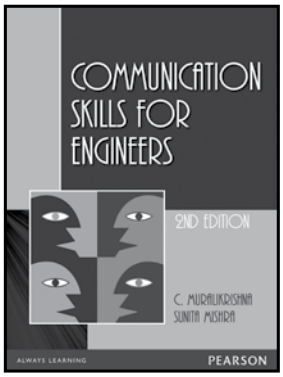
Features

- A proven, complete writing methodology that emphasizes the writing process—and shows how it applies to both oral and written communication
- An emphasis on real people and their writing challenges and experiences—see Communication at Work scenarios, Spotlights, and the Writing Process at Work.
- Numerous example-driven features, including the following
  - Frequently Asked Question boxes—provide answers to some of the most pressing concerns.
  - Technology Tips—show students how to use Microsoft 2010.
  - Dot Com Updates —direct students to useful web sites and online resources.
  - Checklists—guide students through the revision stage of their writing.
  - Real-world examples with callouts—show students illustrations of authentic documents.
  - Before/after examples—provide actual documents written by real businesspeople before and after revision.
  - Documents for different audiences—include examples of documents written for lay, low-tech and high-tech audiences.
- A variety of skill-building assignments, including
  - Individual and Collaborative Activities
  - Case Studies
  - Individual and Team Projects
  - Problem-Solving Think Pieces
  - Web Workshops

Contents

About the Authors

Sharon J. Gerson and **Steven M. Gerson** are dedicated career professionals who have a combined total of over 80 years teaching experience at the college and university level. They have taught technical writing, business writing, professional writing, and technical communication to thousands of students, attended and presented at dozens of conferences, written numerous articles, and published several textbooks, including The Red Bridge Reader (third edition, co-authored by Kin Norman), Writing That Works: A Teacher's Guide to Technical Writing.



C. Muralikrishna
Sunita Mishra

ISBN: 9788131733844
Copyright: 2007
Pages: 386

Communication Skills for Engineers, 2e

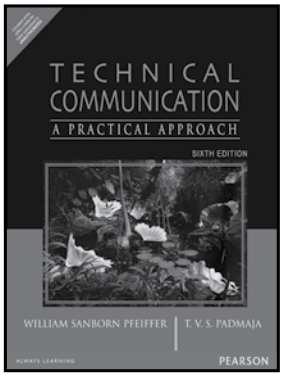
About the Book

The new second edition of Communication Skills for Engineers brings in a sound understanding and insight into the dynamics of communication in all spheres of life â€“ interpersonal, social and professional. The book hinges on the premise that effective communication is an outcome of using the right combination of skills alongside an appropriate attitude.

Features

- Interactive Approach: Makes the reading engaging and interesting
- Activities: Provides practice and practical understanding of concepts
- Review Questions: Facilitates testing and reinforce learning
- Chapter objectives and summaries: Helps students and trainers to get better perspective of the contents

Contents



William Sanborn Pfeiffer
Padmaja

ISBN: 9788131700884
Copyright: 2007
Pages: 708

Technical Communication : A Practical Approach, 6/e

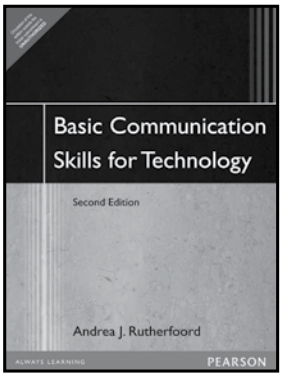
About the Book

Technical Communication: A Practical Approach 6e emphasizes one simple principle: you learn to write best by doing as much writing as possible. This book engages students by having them write early (starting in Chapter 1) and provides students with consistent, easy-to-follow guidelines for writing all types of technical documents. With a new chapter â€œWeb Pages and Writing for the Webâ€ (Chapter 11) and attention to global communication and ethics, Technical Communication: A Practical Approach 6e continues to provide students with a relevant, contemporary and authoritative introduction to the dynamic field of technical communication that prepares them for on-the-job writing.

Features

- NEWâ€“ â€œWeb Pages & Writing for the Webâ€ (Chapter 11) contributed by an expert in web page design and web communication that provides students with expanded and authoritative coverage of communicating effectively on the Web.
- Annotated writing models: Numerous professional examples of technical documents that provide students with a variety of opportunities to build their communication skills.

Contents



Andrea J Rutherfoord

ISBN: 9788177584073
Copyright: 202
Pages: 416

Basic Communication Skills for Technology, 2e

About the Book

This book provides practical applications of writing in vocational/technical fields, Presenting clear, simplified explanations of key concepts and skills in written communication, Rutherfoord's guide covers the writing process in a systems approach that integrates reading, planning, writing, and revising.

Features

- Fourteen technical reading passages that introduce or demonstrate each writing topic.
- Integration of reading, writing, spelling, word usage, and vocabulary exercises and assignments within each chapter.
- Complete and independent grammar and mechanics units for flexible planning and individualized study.
- Exercises and models using common technical vocabulary and concepts.
- Explanations of concepts in language that is easy to understand and apply.
- This book is designed to help readers gain a working knowledge of all the major skills for career-related communication, including e-mail, graphics, reports, business correspondence, presentations, job interviews, and resumes.
- Updated reading passages to reflect current communication needs and practices.
- Updated writing topics to reflect current trends in writing, including the use of e-mail, desktop publishing, and the Internet.
- Updated chapter on report-writing (with sample reports) that introduces three common business/technical documents: the descriptive report, lab report, and proposal.
- New assignments that require use of the Internet for research and communication.
- New chapter on public speaking that introduces the basic techniques for preparing and delivering professional presentations and interviews.
- New chapter on the job search that focuses on the electronic job search, preparation of traditional and electronic resumes, cover letters, and thank-you letters.

Contents

PEARSON

K. Sesha Maheswaramma
Mridula Chugh

ISBN: TBA
Copyright: 2016
Pages: 650

Engineering Chemistry

COMING SOON

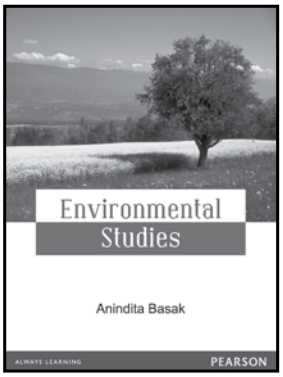
About the Book

Engineering Chemistry is an interdisciplinary subject offered to undergraduate Engineering students. This book introduces the fundamental concepts in a simple and concise manner and highlights the role of chemistry in the field of engineering.
It includes a large number of end-of-chapter exercises that test the student's understanding besides being useful from the examination point of view.

Features

- Exhaustive coverage of Instrumentation methods
- In-depth discussion on fuels and polymers
- Ample illustrations and solved numerical problems
- Short questions and answers at the end of each chapter
- A handy lab manual section that includes preferred viva questions

Contents



Anindita Basak

ISBN: 9788131721186
Copyright: 2009
Pages: 320

Environmental Studies

About the Book

This book covers the course requirements for Environmental Studies for undergraduate students of all disciplines. It aims to educate the readers about nature, ecosystems, natural resources, biodiversity, pollution, and the current challenges faced by environmentalists. It integrates the social impact associated with environmental issues through national and international case studies.

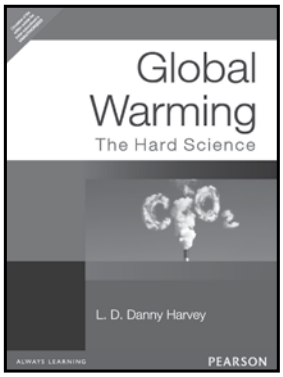
Features

- This book completely follows the UGC model curriculum.
- Discusses current topics in the global environment scenario such as ecological footprint, carbon trading, and emission trading
- Equipped with a complete list of ISO standards for environment management systems
- Entire unit devoted to field work with more than 10 experiments for quantitative evaluation of ecosystems
- Has more than 30 case studies to illustrate environmental issues
- An updated list of international conventions and protocols
- Comprehensive glossary for quick recapitulation of technical terms
- Updated statistical information on air quality standards, permissible exhaust limit, and so on.

Contents

About the Authors

Dr. Anindita Basak is presently Reader in Chemistry at Sushilavati Government Women's College, Rourkela. She was also deputed as a visiting scientist at National Institute of Technology, Rourkela from 2004 to 2006. She has published 16 papers in journals of national and international repute. She has extensive research experience in different fields of chemistry, polymer science, and environmental science.



Danny Harvey

ISBN: 9788131733318
Copyright: 1999
Pages: 368

Global Warming

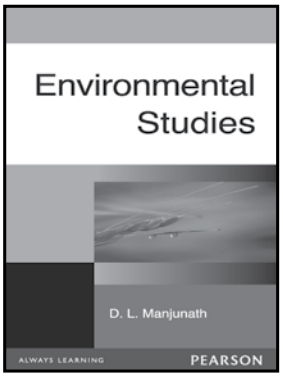
About the Book

Global Warming: The Hard Science presents a comprehensive, qualitatively rigorous, and critical discussion of the science underlying the global warming issue. The major processes in the climate system needed to understand projected human-induced climatic change are presented in detail. Observational systems used to monitor changes in the climate system and the ways in which the raw data are analyzed in order to produce estimates of current trends are also critically reviewed. It will be an indispensable text for students wanting a comprehensive understanding of the science of global warming, as well as for lecturers and researchers who want to improve their understanding of global warming research outside their own subdiscipline. It is set to become the definitive textbook on the science behind the global warming issue. Global warming is now seen as fundamental to the study of the environment and this text clearly emphasises not only the importance of global warming in the environmental change process, but also introduces students to the science required to analyse these changes accurately.

Features

- Provides a comprehensive introduction to global warming and the relationship between weather, climate and environmental change
- Looks at the major factors, both natural and anthropogenic, driving environmental change
- Discusses how global warming is affected by human activity
- Examines in detail the topical issue of projected sea level rise
- Boxed material, as well as numerous illustrations and diagrams, make the science of global warming accessible and easily understood

Contents



D. L. Manjunath

ISBN: 9788131709122
Copyright: 2007
Pages: 216

Environmental Studies

About the Book

Environmental Studies, focuses in clear and simple language, on the basic scientific content necessary to understand environmental issues. It details the latest developments in the field and reflects several major shifts in environmental science education this century. Designed as a foundational text for environmental science courses and spread over eleven chapters, the book includes various aspects of ecology such as ecosystems, environmental impacts, and current environmental issues.

Features

- Pedagogical treatment of the subject to help students grasp fundamentals
- A strong focus on statistical data that illustrates the deterioration of our surroundings, with emphasis on environmental abuse
- Images that portray the current degeneration of our environment

Contents

About the Authors

D. L. Manjunath, Head, Department of Civil Engineering, Malnad College of Engineering, Hassan

PEARSON

Prof. Dr. N. S. Varandani

ISBN: TBA
Copyright: 2016
Pages: 480

Environmental Studies

COMING SOON

About the Book

The book is intended to address the requirements of the Environmental Engineering-I course. The book is written in a style that makes learning Environmental Engineering interesting and informative.

The book covers various aspects of environmental sciences, water and its treatment, environmental microbiology, water pollution, air pollution and its control, and noise pollution and its control.

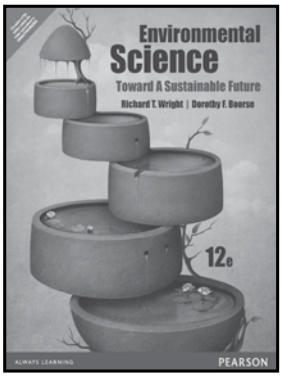
Features

- Exhaustive coverage of Principles of House Drainage
- Extensive coverage of basic to advanced water treatment methods
- Noise and noise control strategies are explained in detail
- Exclusive chapter on Environmental Impact assessment and Environmental audit
- Numerous worked examples, exercises and review questions
- Images that portray the current degeneration of our environment

Contents

About the Authors

Prof. Dr. N. S. Varandani is Principal Research Scientist, Env & Energy Efficiency RW, GERMI, Gandhinagar



Richard T. Wright
Dorothy F. Boorse

ISBN: 9789332555389
Copyright: 2014
Pages: 664

Environmental Science: Toward a Sustainable Future, 12/e

NEW

About the Book

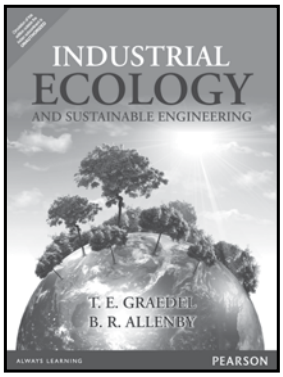
For introductory courses in Environmental Science, Environmental Studies, and Environmental Biology.

By emphasizing the memorable themes of science, sustainability and stewardship, the Eleventh Edition of this popular textbook helps students understand the science behind environmental issues and what they can do to build a more sustainable future. This thorough revision features updated content, graphics, and photos, plus the addition of new co-author Dorothy Boorse.

Features

- An impartial presentation is known for scientific accuracy and thorough topic coverage.
- Three unifying themes of science, sustainability, and stewardship help students conceptualize the task of forging a sustainable future.
- Essays explore the three themes at appropriate points within chapters and provide a memorable perspective on the topic. Themes are recapped and discussed at the end of each chapter to help students connect the chapter topics to the themes. A final capstone chapter revisits these themes.
- Timely coverage of topical concerns including the Aral Sea as a major environmental disaster; emerging diseases like swine flu; the 2008 World Population Data Sheet; the 2008 Iowa floods; the "green revolution;" the Endangered Species Act controversy; restoration of the Everglades, and the 2007 Global Forest Resources Assessment.
- Unique chapter on Ecosystem Capital (Chapter 7: The Use and Restoration of Ecosystems) explores how ecosystems provide valuable goods and services to society.

Contents



T. E. H Graedel
Braden R. Allenby

ISBN: 9789332556959
Copyright: 2010
Pages: 352

Industrial Ecology and Sustainable Engineering

NEW

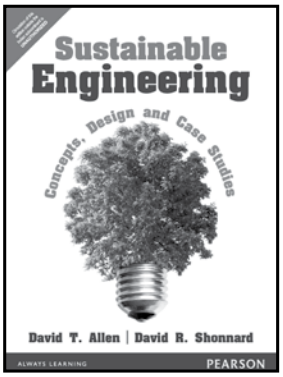
About the Book

The first text available devoted completely to industrial ecology/green engineering, this introduction provides everything instructors need to teach a successful course–including visuals–in one source. The authors use industrial ecology principles and cases to ground the discussion of sustainable engineering, and thus offer practical and reasonable approaches to an otherwise difficult and sometimes otherworldly subject.

Features

- **Methods to better incorporate concerns about environmental and social issues into design decisions**–from the level of products and manufacturing processes to factories and material flow systems–are discussed.
- **A complete suite of homework problems** is included.
- **A set of vugraphs** enables professors to present from the start a sophisticated, self-contained course that is of high interest to environmental science, environmental policy, and engineering schools of all types.

Contents



Dr. David T. Allen
Dr. David R. Shonnard

ISBN: 9789332556577
Copyright: 2016
Pages: 340

Sustainable Engineering: Concepts, Design and Case Studies, 1/e

NEW

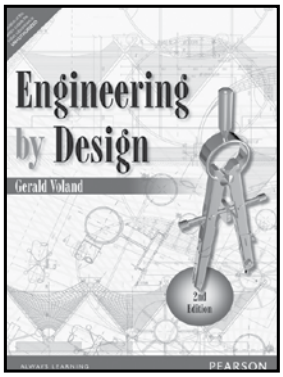
About the Book

Sustainable Engineering: Design and Analysis is the first textbook to offer a unified approach and comprehensive tools for evaluating the environmental, economic, and societal impacts of engineering designs. It builds on the authors' comprehensive benchmarking study of the incorporation of sustainability concepts in engineering curricula, and integrates well-accepted principles and methods from their highly successful textbook, Green Engineering. David Allen and David Shonnard cover everything students and professionals need to improve sustainability in any engineering discipline. They integrate coverage of sustainability concepts and lifecycle principles, quantitative engineering design principles and methods, evaluation tools, case studies, industry perspectives, and more. Readers will learn how to utilize green materials, design green processes and products, and assess the economic value and societal impacts of green designs. Using this book, engineering faculty can bring greater coherence to their instruction on sustainability issues, easily integrating sustainability topics into existing courses. Note: This text condenses the new Second Edition of Green Engineering: Environmentally Conscious Design of Chemical Processes, scheduled for publication in summer of 2012.

Features

- Builds on the well-accepted principles introduced by leading experts Allen and Shonnard in Green Engineering
- Helps engineering educators incorporate sustainability into their curricula without adding separate courses
- Offers a powerful unified approach that integrates case studies, industry perspectives, and essential engineering and quantitative design skills
- The first text to provide comprehensive tools for evaluating environmental, economic, and societal impacts of engineering designs
- There is a solutions manual available for download on the IRC for course use.

Contents



Gerard Voland

ISBN: 9789332535053
Copyright: 2014
Pages: 496

Engineering by Design, 2/e

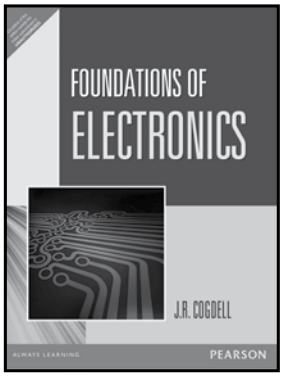
About the Book

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.

Features

- NEW - Edition includes new or increased coverage of economic analysis and decision-making (Ch. 10), manufacturing and materials (Ch. 11), and modeling (Ch. 6).
- NEW - Features new case studies and more photographs to give this book an increased visual appeal.
- Case Studies-Present an ideal or benchmark solution which may serve as a model for future work
- Case Histories-Describe how problems were actually solved and the consequences of the decisions that were made.
- Case Problems-Set forth open-ended situations that leave the choice of a solution up to the reader. Case Problems can be "learning modules" designed to put students to work in teams to define the problem and solve it through research, discussion, and/or lab work.

Contents



J R Cogdell

ISBN: 9788131764046
Copyright: 2011
Pages: 428

Foundations of Electronics

About the Book

Provides detailed, clear explanations of the fundamentals of electrical and electronics engineering, keeping readers focused on the basics. Maintains a strong emphasis on vocabulary throughout, encouraging further thought and communication based on chapter discussions. Used with Foundations of Electric Circuits, this book is ideal for a one-semester course in circuits and electronics for physics, engineering, or computer science students.

Features

- Emphasis is placed on clear definitions of concepts and vocabulary
- Problems are offered at three levels: "What if" problems extending examples in the text, with answers; "Check our understanding" problems after each major section, with answers, and extensive end-of-chapter problems identified with chapter sections, with answers for odd problems
- Full pedagogical tools: chapter objectives, marginal aids, chapter summaries, chapter glossaries tied to context, and a complete index

Contents

Debashis De
Kamakhya Prasad Ghatak

ISBN: 9788131710685
Copyright: 2010
Pages: 632

Basic Electronics

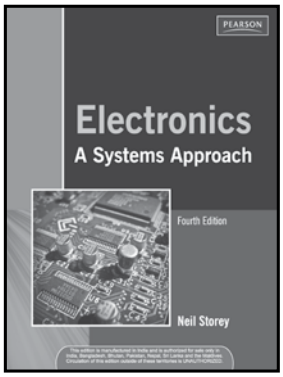
About the Book

Basic Electronics, meant for the core science and technology courses in engineering colleges and universities, has been designed with the key objective of enhancing the students' knowledge in the field of electronics. Solid state electronics being a rapidly-evolving field of study, each topic has been extensively researched for the latest updates, and the authors have supplemented the chapters with customized pedagogical features. The required knowledge in mathematics has been developed throughout the book and no prior grasp of physical electronics has been assumed as an essential requirement for understanding the subject. Detailed mathematical derivations illustrated by solved examples enhance the understanding of the theoretical concepts. With its simple language and clear-cut style of presentation, this book presents an intelligent understanding of a complex subject like electronics.

Features

- **Outline** and **Objectives** provide a brief look at the chapter, and help the students and the instructors prepare for class.
- **Figures** and **Tables** illustrate the major concepts providing a perspective into the real-life applications.
- **Solved Examples** after every key topic and mathematical derivation help the students develop a strong foundation in analysis.
- **For Advanced Readers** identify and analyse the vital concepts to support advanced learning.
- **Points to Remember** recreate the chapter for fast recapitulation.
- **Objective Questions, Review Questions** and **Practice Problems** allow the students to evaluate themselves on a chapter-by-chapter basis

Contents



Neil Storey

ISBN: 9788131734124
Copyright: 2009
Pages: 824

Electronics: A Systems approach, 4e

About the Book

The fourth edition of **Electronics: A Systems Approach** is an outstanding introduction to this fast-moving, important field. Fully updated, it covers the latest changes and developments in the world of electronics. It continues to use Neil Storey's well-respected systems approach, firstly explaining the overall concepts to build students' confidence and understanding, before looking at the more detailed analysis that follows. This allows the student to contextualise what the system is designed to achieve, before tackling the intricacies of the individual components. The book also offers an integrated treatment of analogue and digital electronics, highlighting and exploring the common ground between the two fields. This fourth edition represents a significant update and a major expansion of previous material, and now provides a comprehensive introduction to basic electrical engineering circuits and components in addition to a detailed treatment of electronic systems. This extended coverage permits the book to be used as a stand-alone text for introductory courses in both Electronics and Electrical Engineering.

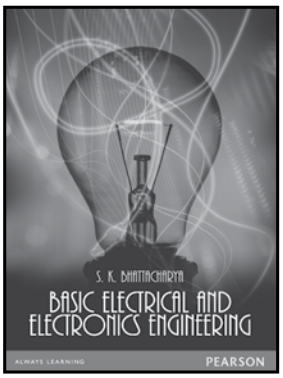
Features

- A range of new chapters covering the basics of Electrical Circuits and Components
- An introduction to Resistive, Capacitive and Inductive elements, Alternating Voltages and Currents, and AC Power
- New chapters on the Frequency Characteristics of AC circuits and on Transient Behaviour
- A new consolidated treatment of Noise and Electromagnetic Compatibility (EMC)
- A new chapter on the Internal Circuitry of Operational Amplifiers.

Contents

About the Authors

Dr. Neil Storey is a member of the School of Engineering at the University of Warwick, where he has many years of experience in teaching electronics to undergraduate, post-graduate and professional engineers. He is also the author of Electrical and Electronic Systems and Safety-Critical Computer Systems, both published by Pearson Education.



S. K. Bhattacharya

ISBN: 9788131754566
Copyright: 2011
Pages: 740

Basic Electrical and Electronics Engineering

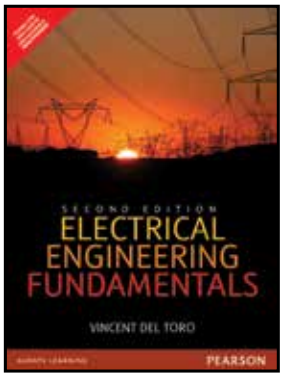
About the Book

This book provides an overview of the basics of electrical and electronic engineering that are required at the undergraduate level. Efforts have been taken to keep the complexity level of the subject to bare minimum so that the students of non electrical/electronics can easily understand the basics. It offers an unparalleled exposure to the entire gamut of topics such as Electricity Fundamentals, Network Theory, Electro-magnetism, Electrical Machines, Transformers, Measuring Instruments, Power Systems, Semiconductor Devices, Digital Electronics and Integrated Circuits. Extensive use of illustrations, examples and exercises in accordance with the progressive development of the concepts covered within the chapter make the reading more exciting.

Features

- Covers syllabus prescribed by all universities.
- Easy to understand explanation of basic concepts.
- Also covers a Major Concepts from Basic Electronics â€“ suitable for universities teaching Basic Electrical and Electronics together in one paper
- Step by step tutorial based approach.
- Excellent Pedagogy
  - 238 Solved examples
  - 754 Illustrations
  - 526 Unsolved Review questions
  - 314 Multiple choice questions

Contents



Vincent Del Toro

ISBN: 9789332551763
Copyright: 1997
Pages: 940

Electrical Engineering Fundamentals, 2/e

NEW

About the Book

Electrical Engineering Fundamentals focuses on the five principal zones within the discipline of electrical engineering. The author also develops new content that is more attuned to the needs of the students and uses new fundamental laws to clarify the concepts and ideas in a more structured manner.

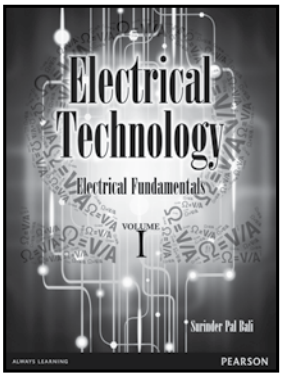
The second edition of the book, Electrical Engineering Fundamentals is intended to be put in use where Del Toro's other text, Principles of Electrical Engineering is being used. As a text, although it is primarily designed for students of electrical engineering, non-majors can subscribe to the text easily because of its accessible content. The student can use the Classical Method or the Laplace Transform Method to solve problems.

Contents

About the Authors

Vincent Del Toro was an Emeritus Professor of City College of New York and an Electrical Engineer. His other books include Electric Machines and Power Systems, Principles of Control Systems Engineering and Electric Power Systems.

He graduated from CCNY and Brooklyn Polytechnic University before turning to his enriching career in education and academics. He was a well-known educator and had garnered Educator of the Year awards for his contributions in the field. He wrote 10 books along with the best-selling books Electrical Engineering Fundamentals and Principles of Electrical Engineering. He died at the age of 82 on July 5, 2006 in New Jersey.



Surinder Bali

ISBN: 9788131785935
Copyright: 2013
Pages: 608

Electrical Technology: Volume I

About the Book

The book is written and organized in a very simple manner keeping in mind the needs for today's students. As the book introduces the subject with basic fundamentals like System of Units, Fundamentals of Electrons thereby helping engineering students in building their concepts. The Volume I of the book comprises of 54 Chapters covering topics in three-parts, Part A covers Electrical Fundamentals, Part B: Electric Machines & Part C: Electric Measurements.
The book is highly illustrative with 1500+ figures & illustrations and 1400+ solved/unsolved problems as well as 500+ MCQ's.

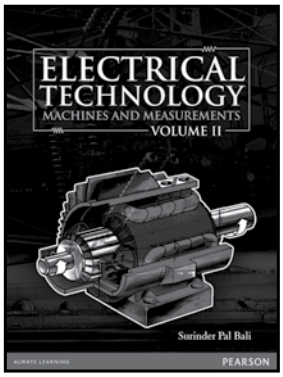
Features

- Presents a comprehensive coverage on the fundamentals of the subject, such as Dielectric Materials, Electrochemical Action, Inductors, and Hysterisis.
- Chapters focusing on magnetic materials, complex algebra, fourier series, first and second order systems
- Additional solved examples provided at the end of chapter for concrete understanding of topics
- Web Supplements includes animations, important formulae, periodic chart, key terminology, Diagrammatic Symbols etc.
- Excellent pedagogy
  - Learning Objectives
  - Chapter Summary
  - 900+ illustrations
  - 450+ solved questions
  - 450+ unsolved questions
  - 300+ MCQs with answers

Contents

About the Authors

S. P. Bali has been associated with the field of electronics for over 45 years. With over 20 years of teaching experience, he has been teaching new entrants in the field of electronics and taken diploma-level courses in the Military College of Electronics and Mechanical Engineering (MCEME), Secunderabad. He has contributed articles to magazines and has authored several books.



Surinder Bali

ISBN: 9789332514416
Copyright: 2013
Pages: 456

Electrical Technology: Volume II

About the Book

Electrical Technology,, Volume 2 is the second offering of the book on Electrical Technology and serve the need of undergraduate students of electrical and electronics engineering. The book is divided into two parts consisting of 24 chapters. Part on Electric Machines introduces AC and DC machines and Part on Electrical Measurements discusses various electrical instruments and measurements.

The book is also packaged with DoCircuits- a web-based circuit simulator, specially created to help students practice key circuits. It works across platforms (Windows/Mac/Linux) and does not require any installation or plug-ins. Besides being used as a practice/pre-lab tool by students, it can also serve as an exciting tool for instructors to teach the circuits.

Apart from the free version, the book is also accompanied with an access code to avail the full version of DoCircuits at an exciting offer. The access details and code are given on the inside front cover.

Features

- Exhaustive coverage on rotating machines including AC, DC and special machines
- Detailed discussion on synchronous generators and motors in separate chapters
- End-of-chapter solved examples for concrete understanding of the concepts
- Web Supplements includes animations, important formulae, periodic chart, key terminology, Diagrammatic Symbols etc.
- Excellent pedagogy
    - Learning Objectives
    - Chapter Summary
    - 500+ illustrations
    - 170+ solved questions
    - 380+ unsolved questions
    - 270+ MCQs with answers

Contents

About the Authors

S. P. Bali has been associated with the field of electronics for over 45 years. With over 20 years of teaching experience, he has been teaching new entrants in the field of electronics and taken diploma-level courses in the Military College of Electronics and Mechanical Engineering (MCEME), Secunderabad. He has contributed articles to magazines and has authored several books.

PEARSON

Allan R. Hambley

ISBN: TBA
Copyright: 2013
Pages: 916

Electrical Engineering: Principles & Applications, 6/e

COMING SOON

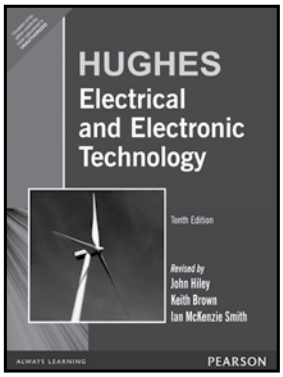
About the Book

Electrical Engineering: Principles and Applications, 6e 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. Wide varieties of pedagogical features stimulate student interest and engender awareness of the material's relevance to their chosen profession.

Contents

About the Authors

Allan R. Hambley received his B.S. degree from Michigan Technological University, his M.S. degree from Illinois Institute of Technology, and his Ph.D. from Worcester Polytechnic Institute. He has worked in industry for Hazeltine Research Inc., Warwick Electronics, and Harris Government Systems. He is currently Professor of Electrical Engineering at Michigan Tech.



Edward Hughes
Ian McKenzie Smith
Dr John Hiley
Keith Brown

ISBN: 9788131733660

Hughes Electrical and Electronic Technology, 10/e

About the Book

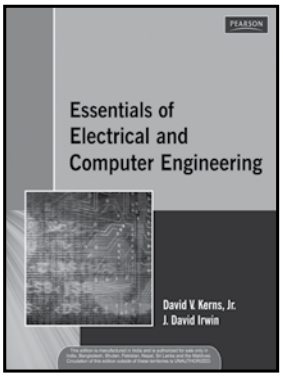
All engineers need to understand the fundamental principles of electrical and electronic technology. The tenth edition of this best-selling text offers a clear and comprehensive introduction to the area, with balanced coverage of electrical, electronic, and power engineering. This revision has been updated to take into account key developments in the subject, including a new chapter on Electrical Energy Systems – an important addition which explores (among other topics) the principles of sustainable electricity generation.

Hughes Electrical and Electronic Technology is a must-have text for all university and college engineering students requiring a comprehensive introduction to electrical and electronic engineering. It is also appropriate as a reference for any practitioners and technicians working in this, or any other engineering discipline.

Features

- Brand new chapter on Electrical Energy Systems including a detailed examination of renewable energy sources
- Updated and extended coverage in key areas such as Op-Amps; Induction Motors; and Fibre optics
- Even more exercises and examples added to enhance problem solving skills

Contents



David V. Kerns Jr.
J. David Irwin

ISBN: 9788177580198
Copyright: 2004
Pages: 672

Essentials of Electrical and Computer Engineering

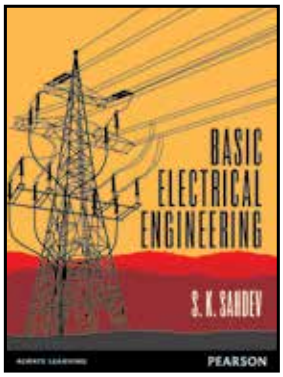
About the Book

With its clear presentation of fundamentals in the context of various applications from all engineering fields, this text by proven authors represents the best balanced general introduction to the field available. It introduces the latest technologies such as MEMS (Microelectromechanical Systems) to illustrate how modern technologies are interdisciplinary.

Features

- Large amount of examples and drill exercises and margin notes.
- Optional use of MATLAB as a computing tool.
- A lucid, readable discussion of digital technology.
- A large number of worked examples, drill exercises, and homework problemsâ€"Designed to illustrate key principles.
- Coverage of the material and information needed to prepare for the FE (Fundamentals of Engineering) examâ€"A prerequisite for students who want to pursue a Practicing Engineer license.

Contents



SK Sahdev

ISBN: 9789332542167
Copyright: 2015
Pages: 768

Basic Electrical Engineering

NEW

About the Book

Attuned to the needs of undergraduate students of engineering in their first year, Basic Electrical Engineering enables them to build a strong foundation in the subject. A large number of real-world examples illustrate the applications of complex theories. The book comprehensively covers all the areas taught in a one-semester course and serves as an ideal study material on the subject.

Features

- Detailed coverage on AC Circuits and DC Circuits
- Step-by-step problem-solving methodology to hone problem-solving skills
- Extended coverage on electric machines and measurements
- Coverage on specialized motors like hysteresis motor, stepper motor, linear induction motor and universal motor
- In-depth discussion on renewable sources of energy (eText)
- Separate chapters on Domestic Wiring and Illumination and Earthing and Electrical Safety (eText)
- Excellent pedagogy
  - 700+ Figures and Illustrations
  - 450+ Solved Questions
  - 400+ Unsolved Questions
  - 300+ MCQs

Contents

About the Authors

Dr. SK Sahdev Associate Dean Lovely Professional University

AUTHOR INDEX

ISBN	Author	Title	Price	Pages
9789332556577	Allen / Shonnard	Sustainability Engineering: Concepts, Design and Case Studies, 1e	275.00	144
9788177582758	Amrine	Manufacturing Organization & Management, 6e	899.00	8
9789332558557	Ashok Jain	Dynamics of Structures, 1/e	450.00 (T)	91
9789332559554	Auslander	Mechatronics: Mechanical System Interfacing, 1/e	299.00	36
9789332549364	B. G. Kyle	Chemical and Process Thermodynamics 3e	499.00	110
9788131770504	Babu	Engineering Mechanics	459.00	16
9788131784709	Babu Ram	Engineering Mathematics Volume-I, 2e	389.00	128
9788131785034	Babu Ram	Engineering Mathematics Volume-II, 2e	509.00	128
9788131700662	Bannister	Surveying, 7e	649.00	95
9788131721186	Basak	Environmental Studies	379.00	138
9789332518520	Beckwith	Mechanical Measurement, 6e	749.00	33
9788131701829	Bentley	Principles of Measurement Systems, 3e	649.00	34
TBA	Bequette	Process Control: Modeling, Design and Simulation	495.00	111
9789332534452	Besterfield	Total Quality Management (2 Color), 4/e	625.00	59
9788131729656	Bevan	Theory of Machines, 3e	569.00	49
9788131754566	Bhattacharya	Basic Electrical and Electronics Engineering	429.00	148
9788131732489	Bhave	Mechanical Vibrations	419.00	52
9789332559448	Bickford	Advanced Mechanics of Materials, 1/e	449.00	44
9788131732533	Bolton	Mechatronics: Electronic Control Systems in Mechanical and Electrical Engineering, 4e	689.00	34
TBA	Budinski / Budinski	Engineering Materials: Properties and Selection 9e	650.00	12
9788131788257	Carryer / Ohline / Kenny	Introduction to Mechatronic Design	839.00	35
9789332551824	Chandrupatla / Belegundu	Introduction to Finite Elements in Engineering 4e	529.00	19

*** Prices are subject to change without prior notice ** TBA - To be announced**

ISBN	Author	Title	Price	Pages
9789332551824	Chandrupatla / Belegundu	Introduction to Finite Elements in Engineering 4e	529.00	83
9788131721643	Chang	Computer-Aided Manufacturing, 3e	789.00	3
9788131766385	Chang	Engineering Management: Challenges in the New Millennium	599.00	10
9788131732625	Charantimath	Total Quality Management, 2/e	499.00	60
9788131713297	Chopra	Dynamics of Structures, 3e	749.00	92
9789332542051	Chudley	Construction Technology - Volume 1, 2/e	379.00	65
9789332542068	Chudley	Construction Technology - Volume 2, 2/e	379.00	66
9789332542075	Chudley	Construction Technology - Volume 3, 2/e	379.00	66
9789332542082	Chudley	Construction Technology - Volume 4, 2/e	379.00	67
9789332535008	Coduto	Foundation Design: Principles and Practices 2/e	749.00	73
TBA	Coduto / Yeung / Kitch	Geotechnical Engineering: Principles & Practices 2e	525.00	77
9788131764046	Cogdell	Foundations of Electronics	479.00	145
9788177589023	Cohen	Gas Turbine Theory, 5e	669.00	25
9788131718360	Craig	Introduction to Robotics: Mechanics and Control, 3e	699.00	42
9789332507586	Croft	Engineering Mathematics: A Foundation for Electronic, Electrical, Communications and Systems Engineers, 4e	769.00	130
9789332524057	Crowl	Chemical Process Safety: Fundamentals with Applications 3/e	775.00	112
9789332519121	Das	Engineering Mathematics, 1/e	875.00 (T)	129
9788131710685	De	Basic Electronics	509.00	146
9789332551763	Del Toro	Electrical Engineering Fundamentals	529.00	149
9788131708057	Deodhar	Elementary Engineering Hydrology	529.00	88
9788131724644	Desai	Finite Element Method with applications in Engineering	479.00	20
9788131724644	Desai/Eldho/ Shah	Finite Element Method with applications in Engineering	479.00	84
978817758881 1	Dossat	Principles of Refrigeration, 4e	669.00	40
9788131721407	Douglas	Fluid Mechanics, 5e	859.00	21
9788177582383	Eastop	Applied Thermodynamics for Engineering Technologists, 5e	789.00	55
9789332524040	Elliott	Introductory Chemical Engineering Thermodynamics 2/e	899.00	109
9789332518544	Esposito	Fluid Power with Applications, 7e	689.00	22
97893325351 14	Fetter	Applied Hydrogeology, 4/e	719.00	89
9789332549326	Fogler	Elements of Chemical Reaction Engineering 4e	699.00	115
9789332551787	Francis / Mcginnis / White	Facility Layout and Location: An Analytical Approach 2e	499.00	85
TBA	Fried	Polymer Science and Technology 2e	475.00	116

*** Prices are subject to change without prior notice** **** TBA - To be announced**

ISBN	Author	Title	Price	Pages
9788131789902	Garg / Gupta	Engineering Mathematics Volume I	675.00	127
9789332536333	Garg / Gupta	Engineering Mathematics Volume II	550.00	127
9789332549432	Geankoplis	Transport Processes and Separation Process Principles (Includes Unit Operations) 4e	599.00	118
9789332518599	Gerson	Technical Writing Process and Product, 8e	769.00	134
9788131729885	Gopi	Basic Civil Engineering	459.00	63
9788131700679	Gopi	Advanced Surveying: Total Station, GIS and Remote Sensing	559.00	95
9789332556959	Graedel / Allenby	Industrial Ecology and Sustainable Engineering	449.00	143
9788177585469	Greenberg	Advanced Engineering Mathematics, 2e	899.00	131
9789332549814	Groover	Automation, Production Systems, and Computer-Integrated Manufacturing 3e	649.00	4
9788177584165	Groover	CAD/CAM: Computer-Aided Design and Manufacturing	619.00	5
9788177583649	Gupta	Fluid Mechanics and Hydraulic Machines	599.00	23
9788131717950	Gupta	Thermodynamics	569.00	56
9789332559578	Haberman	Engineering Thermodynamics with Heat Transfer, 2/e	699.00	54
TBA	Hambley	Electrical Engineering: Principles & Applications 6e	625.00	152
9789332550056	Hammer, Sr. / Hammer, Jr.	Water and Wastewater Technology 7e	499.00	100
9788131733318	Harvey	Global Warming	725.00	139
9789332534100	Hegde	Power Plant Engineering	550.00	39
9789332551749	Henry / Heinke	Environmental Science and Engineering 2e	559.00	78
9788131726990	Hibbeler	Engineering Mechanics: Statics & Dyanamics in SI Units, 11e	789.00	17
9789332518605	Hibbeler	Mechanics of Materials (SI Units), 9e	819.00	43
9788131721414	Hibbeler	Structural Analysis, 6e	859.00	93
9788131729519	Hill	Mechanics and Thermodynamics of Propulsion, 2e	829.00	121
9789332549623	Himmelblau / Riggs	Basic Principles and Calculations in Chemical Engineering 8e	649.00	108
9789332505735	Hinze	Construction Planning and Scheduling 4e	379.00	69
9789332559455	Hodge / Koenig	Compressible Fluid Dynamics, 1/e	599.00	24
9789332507616	Holtz / Kovacs / Sheahan	An Introduction to Geotechnical Engineering 2e	719.00	75
9789332507593	Houghtalen	Fundamentals of Hydraulic Engineering Systems 4/e	549.00	87
9789332559479	Hsieh	Elementary Theory of Structures, 4/e	429.00	92
9788131721247	Huang	Pavement Analysis and Design 2e	959.00	96
9788131733660	Hughes	Hughes Electrical and Electronic Technology, 10e	799.00	153
9789332518483	Inman	Engineering Vibrations, 4/e	609.00	53

*** Prices are subject to change without prior notice ** TBA - To be announced**

ISBN	Author	Title	Price	Pages
9788131711248	James	Advanced Modern Engineering Mathematics, 3e	875.00	132
9789332549340	James D. Bethune	Engineering Graphics with AutoCAD 2015	699.00	6
9789332542013	Jha	Construction Project Management, Theory and Practices, 2/e	599.00	67
9788131759110	Jindal	Material Science and Metallurgy	389.00	13
9788131759103	Jindal	Experimental Stress Analysis	379.00	18
9788131716595	Jindal	Machine Design	669.00	27
9788131759097	Jindal	Strength of Materials	519.00	44
9789332508255	JK McKay	Building Construction, Metric Volume 4, 4/e	479.00	65
9788131718889	Joel	Basic Engineering Thermodynamics, 5e	649.00	56
9788131706787	Junnarkar	Machine Drawing	529.00	29
9788177581706	Kalpakjian	Manufacturing Engineering and Technology, 4e	859.00	30
9788131705667	Kalpakjian	Manufacturing Processes for Engineering Materials, 5e	919.00	30
9788131713891	Kermode	Flight without Formulae, 5e	609.00	122
9788131716571	Kermode	Mechanics of Flight, 11e	779.00	123
9788177580198	Kerns / Irwin	Essentials of Electrical and Computer Engineering	769.00	154
9788131763872	Khan/Siddique/Kumar	Engineering Economy	379.00	15
TBA	Khisty / Lall	Transportation Engineering: An Introduction 3e	595.00	97
9789332550032	Kibbe / White / Meyer / Curran / Stenerson	Machine Tool Practices 9e	699.00	32
9788131707180	Kramer	Geotechnical Earthquake Engineering	789.00	72
9789332505759	Kumar	Basic Mechanical Engineering	379.00	3
9789332556973	Lindberg	Processes and Materials of Manufacture 3e	559.00	31
9789332535220	Mamlouk	Materials for Civil and Construction Engineers, 3/e	669.00	86
9788131761632	Mani Naidu	Engineering Physics	419.00	133
9788131709122	Manjunath	Environmental Studies	319.00	140
9788131799345	Mariappan	Operations Research	325.00	37
9789332549760	Masters	Introduction to Environmental Engineering and Science 3e	459.00	81
9789332542020	McCarthy	Essentials of Soil Mechanics and Foundations: Basic Geotechnics7	769.00	76
9789332505711	McCormac	Structural Steel Design, 5/e	649.00	71
9788131727133	Mills / Ganesan	Heat Transfer, 2e	829.00	26
9788131733844	Mishra	Communication Skills for Engineers, 2e	350.00	135
9788131760642	Moaveni	Finite Element Analysis, 3e	639.00	20

*** Prices are subject to change without prior notice ** TBA - To be announced**

ISBN	Author	Title	Price	Pages
9789332509351	Morrow / Kokernak	Statics and Strength of Materials 7e	609.00	45
9789332550124	Morse / Babcock	Managing Engineering and Technology 6e	549.00	9
9788131758885	Mubeen	Mechanics of Solid, 2e	519.00	46
9789332555204	Myszka	Machines & Mechanisms: Applied Kinematic Analysis 4e	559.00	50
9789332526471	Natarajan / Balasubramani / Tamilarasi	Operations Research 2e	549.00	37
TBA	Nathanson / Schneider	Basic Environmental Technology: Water Supply, Waste Management and Pollution Control 6e	550.00	79
9788177585407	Necsulescu	Mechatronics	699.00	35
9788131705360	Neville	Concrete Technology	669.00	70
9788131791073	Neville	Properties of Concrete, 5e	789.00	70
9788177587647	Niyogi	Introduction to Computational Fluid Dynamics	609.00	23
9788131705339	Norton	Machine Design: An Integrated Approach, 2e	899.00	28
9788177588217	Otto	Product Design	869.00	39
9788131703892	Pallett	Aircraft Electrical Systems, 3e	579.00	123
9788131728130	Pallett	Aircraft Instruments, 2e	759.00	124
97893325555150	Papacostas / Prevedouros	Transportation Engineering and Planning 3e	499.00	98
9788131761625	Parashivamurthy	Material Science and Metallurgy	299.00	13
9789332550148	Park	Contemporary Engineering Economics 5e	649.00	15
9788131700884	Pfeiffer	Technical Communication, 6e	675.00	135
TBA	Pita	Air Conditioning Principles and Systems: An Energy Approach 4e	375.00	41
9788131706770	Pohit/Ghosh	Machine Drawing with AutoCAD	529.00	29
9789332550216	Popov	Engineering Mechanics of Solids 2e	599.00	47
9789332559547	Popov	Mechanics of Materials, 2/e	599.00	47
9788131771853	Prasanna Kumar	Thermodynamics	389.00	57
9789332513754	Praveen Nagarajan	Presetressed Concrete Structures	379.00	69
9789332543560	Pravin Kumar	Industrial Engineering and Management	450.00	11
9789332549494	Pulkrabek	Engineering Fundamentals of the Internal Combustion Engine 2e	499.00	25
9788131768549	Purushotam Raj	Strength of Materials	439.00	46
9788131790816	Purushothama Raj	Soil Mechanics and Foundation Engineering 2/e	669.00	77
9789332544802	Ramachandran/ Nagarajan	Robotics	275.00 (T)	43

*** Prices are subject to change without prior notice** **** TBA - To be announced**

ISBN	Author	Title	Price	Pages
9788177588743	Rao	Mechanical Vibrations 4e	799.00	52
9788131795507	Rathnam	Express Learning - Thermodynamics	275.00	57
9789332509368	Roess / Prassas / Mcshane	Traffic Engineering 4e	749.00	99
9788131702062	Rogers	Engineering Thermodynamics, 4e	789.00	58
9788131733837	Rudramoorthy	Heat and Mass Transfer	519.00	26
9788131784952	Rukmanga-dachari	Engineering Mathematics - Vol II	459.00	133
9788131761311	Rukmanga-dachari	Engineering Mathematics - Vol I	419.00	132
9788177584073	Rutherfoord	Basic Communication Skills for Technology, 2e	550.00	136
TBA	Sah	Steam Tables	99.00 (T)	58
9789332542167	Sahdev	Basic Electrical Engineering	399.00	155
9789332542105	Sai Ram	Design of Steel Structures, Revised 2/e	399.00	71
9789332555235	Schilling	Fundamentals of Robotics: Analysis and Control	449.00	42
9789332549869	Schodek / Bech-thold	Structures 7e	599.00	94
TBA	Sesha	Engineering Chemistry, 1/e	499.00 (T)	137
9788131700907	Shackelford	Introduction to Materials Science for Engineers, 6/e	849.00	14
9788131710562	Shah/Rana	Engineering Drawing, 2e	519.00	5
9789332549906	Shames / Pitar-resi	Introduction to Solid Mechanics 3e	599.00	48
9788177581232	Shames / Rao	Engineering Mechanics – Statics and Dynamics	779.00	17
9788131732229	Sharma	Engineering Mechanics	509.00	18
9789332549371	Shuler / Kargi	Bioprocess Engineering: Basic Concepts 2e	499.00	107
9789332549630	Sincero / Sin-cero	Environmental Engineering: A Design Approach	559.00	82
9788131722275	Singh	Manufacturing Technology, 2e	419.00	31
9788131760697	Singh	Theory of Machines, 3/e	659.00	51
9788131766316	Somayaji	Civil Engineering Materials 2e	529.00	87
9788131785935	SP Bali	Electrical Technology Volume I	459.00	150
9789332514416	SP Bali	Electrical Technology Volume II	459.00	151
9788177584219	Spotts	Design of Machine Elements, 8e	789.00	28
9789332549463	Stephanopoulos	Chemical Process Control: An Introduction to Theory and Practice	449.00	113
9788131734124	Storey	Electronics: A Systems approach 4e	769.00	147
9788131734421	Sullivan	Engineering Economy, 14e	609.00	16

*** Prices are subject to change without prior notice ** TBA - To be announced**

ISBN	Author	Title	Price	Pages
TBA	Syed R. Qasim / Edward M. Motley / Guang Zhu	Water Works Engineering: Planning, Design And Operation	495.00	101
9789332518223	Taha	Operations Research: An Introduction, 9/e	775.00	38
9788177585193	Thirumaleshwar	Fundamentals of Heat and Mass Transfer	709.00	27
9788131704820	Thomson	Theory of Vibrations with Applications, 5e	649.00	54
9789332550346	Turton / Bailie / Whiting / Shaeiwitz	Analysis, Synthesis and Design of Chemical Processes 4e	899.00	114
9788131706008	Van Vlack	Elements of Materials Science & Engineering, 6e	669.00	14
TBA	Varandani	Environmental Studies	425.00 (T)	141
9788131720486	Versteeg	An Introduction to Computational Fluid Dynamics The Finite Volume Method, 2e	789.00	24
9789332555297	Viessman / Lewis	Introduction to Hydrology 5e	499.00	90
9789332549616	Viessman, Jr. / Hammer / Perez / Chadik	Water Supply and Pollution Control 8e	699.00	103
9789332535053	Voland	Engineering By Design 2e	649.00	145
9789332524842	Wankat	Separation Process Engineering: Includes Mass Transfer Analysis: 3/e	875.00	117
9789332549982	Warren J. Luzadder / Jon M. Duff	Fundamentals of Engineering Drawing, The: With an Introduction to Interactive Computer Graphics for Design and Production 11e	499.00	7
9789332508231	WB McKay	Building Construction, Metric Volume 1, 5/e	449.00	63
9789332509344	WB McKay	Building Construction, Metric Volume 2, 4/e	449.00	64
9789332508248	WB McKay	Building Construction, Metric Volume 3, 5/e	449.00	64
9788131720226	Wilson	Kinematics and Dynamics of Machinery, 3e	889.00	51
9789332555389	Wright / Nebel	Environmental Science 12e	699.00	142
9789332555143	Wurbs / James	Water Resources Engineering	599.00	102

*** Prices are subject to change without prior notice ** TBA - To be announced**

Your Nearest Pearson Contact

NORTH

Vishal Dhawan
vishal.dhawan@pearson.com

DELHI NCR

Binit Kumar Shukla
binit.shukla@pearson.com
9871105803

Sunil Sharma
sunil.sharma2@pearson.com
9810038092

Navdeep Singh Virdi
navdeep.singh@pearson.com
9818692884

Kamal Bisht
kamal.bisht@pearson.com
9871877866

Gaurav Sharma
gaurav.sharma5@pearson.com
9650078659

Mohd Suhail
mohd.suhail@pearson.com
9871437770

Avinash Kumar Shukla
avinash.kumar2@pearson.com
97187 07999

Sahil Kumar
sahil.kumar@pearson.com
8447920102

Pallav Jain
pallav.jain@pearson.com
9654011114

Arvind Kumar Rai
arvind.rai@pearson.com
9350401333

Ishaan Yadav
ishaan.yadav@pearson.com
9999811082

PUNJAB

Chandigarh

Munish Modi
munish.modi@pearson.com
9582925252

MADHYA PRADESH

Bhopal

Gaurav Singh Yadav
gaurav.yadav@pearson.com
9981593703

RAJASTHAN

Jaipur

Dushyant Singh
dushyant.singh@pearson.com
9314020121

Gaurav Choudhary
gaurav.choudhary@pearson.com
9983340113

UTTAR PRADESH

Lucknow

Santosh Kumar
santosh.kumar2@pearson.com
9415517650

EAST

Vishal Dhawan
vishal.dhawan@pearson.com

WEST BENGAL

Kolkata

Binit Kumar Shukla
binit.shukla@pearson.com
9871105803

Syed Belaluddin
syed.belal@pearson.com
9831105388

Tapan Kumar Saha
tapan.saha@pearson.com
9830137194

Vishwajeet Banick
vishwajeet.banick@pearson.com
9831499052

Surajit Kumar Kalita
surajit.kumar@pearson.com
9007490111

ASSAM

Guwahati

Bikash Haloi
bikash.haloi1@pearson.com
9508588889

BIHAR

Patna

Satyendra Sahay
satendra.sahay@pearson.com
9334391431

ODISHA

Bhubaneshwar

Ranjan Kumar Mishra
ranjan.mishra@pearson.com
9437276051

WEST

Niraj Mishra
niraj.mishra@pearson.com

MAHARASHTRA

Mumbai

Vikas Misar
vikas.misar@pearson.com
9820062721

Dhiren Chandramohan Vakharia
dhiren.vakharia@pearson.com
9833320212

Siddhesh Gaikwad
siddhesh.gaikwad@pearson.com
9930022807

Pune

Dheeraj Gujrati
dheeraj.gujrati@pearson.com
9890491116

Naren Mahato
naren.mahato@pearson.com
7219602464

Kedar Vinod Pise
kedar.pise@pearson.com
9923505251

GUJARAT

Ahmedabad

Gaurav Gagwani
gaurav.gagwani@pearson.com
9898813419

SOUTH

A.K Dhanpal
dhanapal.ak@pearson.com

TAMIL NADU

Chennai

G. Mark Pani Jino
mark.jino@pearson.com
9003258275

G. Shankar
g.shankar@pearson.com
9003130680

Jayaraj V.S
vs.jayaraj@pearson.com
9994070570

A. Jerom Richerd
jerom.richerd@pearson.com
9842593027

Robert Tim Wilton
robert.wilton@pearson.com
9566918567

Coimbatore

S. Gopinath
s.gopinath@pearson.com
9655627617

Natesa Deepan
natesa.deepan@pearson.com
8220015269

Madurai

D. Satheesh
satheesh.d@pearson.com
9677666014

ANDHRA PRADESH & TELANGANA

Hyderabad

Santosh Thadakamadla
t.santosh@pearson.com
9959444413

Kadiam Mallikharjun
k.mallikarjun@pearson.com
9603877224

G.V. Kishore
gv.kishore@pearson.com
8897667666

Naveen Bojja
naveen.bojja@pearson.com
9966685001

Vijayawada

Vuppanapalli Jayaprakash Narayana
jayaprakash.vuppanapalli@pearson.com
9603109934

KARNATAKA

Bangalore

Vishal Bajpai
vishal.bajpai@pearson.com
9663526715

Ramesh Shankaran
ramesh.shankaran@pearson.com
9845537670

Arun Kumar R
arun.kumar1@pearson.com
9538100777

K.J. Vinay Kumar
vinay.kumar@pearson.com
9538239890

Mohan Kumar
mohan.nagappa@pearson.com
9739731924

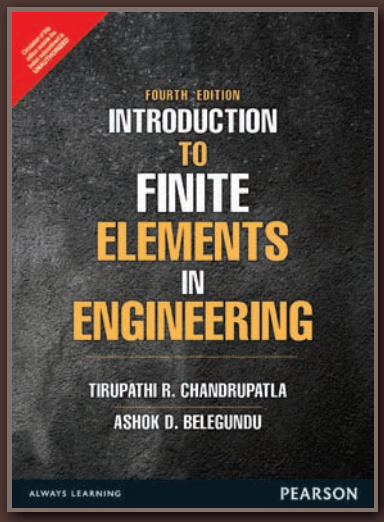
KERALA

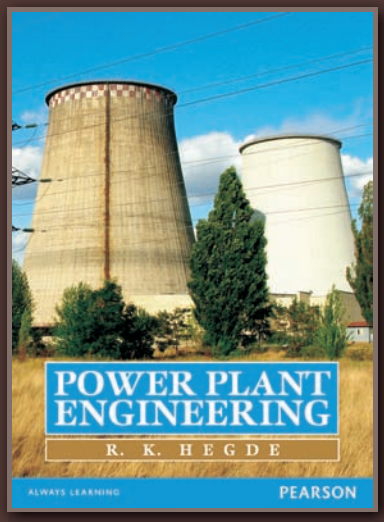
B Muneer
b.muneer@pearson.com
9847505010

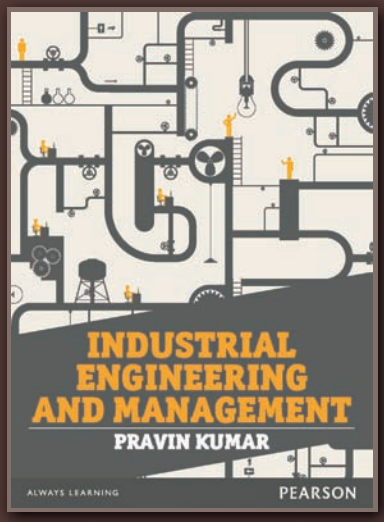
Jijo Gratius
jijo.gratius@pearson.com
9947722275

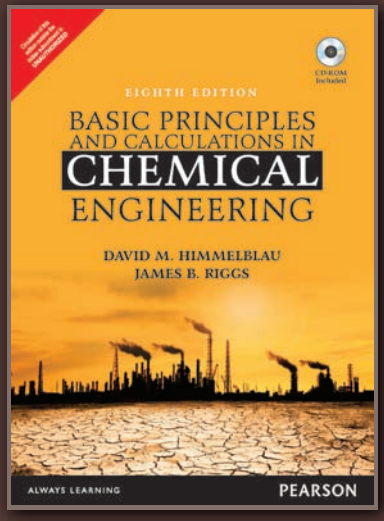
MECHANICAL, CIVIL, CHEMICAL AND CORE ENGINEERING

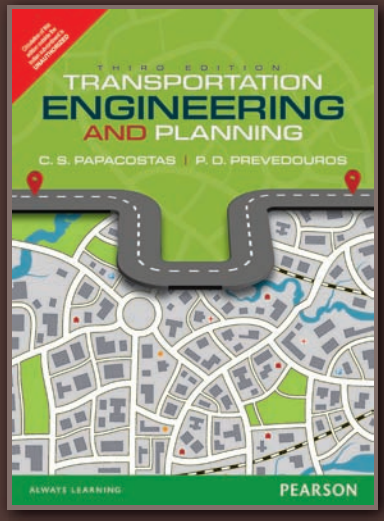
CATALOGUE 2016











7th Floor, Knowledge Boulevard, A-8 (A), Sector 62, NOIDA 201 309
T: (91-120) 7110 100 | F: (91-120) 7110 350
www.pearson.co.in
infoindia@pearson.com

Pearson India Education Services Private Limited (Formerly TutorVista Global Private Limited) Regd Off: Module G4, Ground Floor, Elnet Software City, TS-140, Block 2 & 9, Rajiv Gandhi Salai, Taramani, Chennai, Tamil Nadu 600113, CIN: U72200TN2005PTC057128