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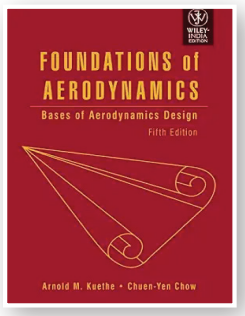


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AEROSPACE ENGINEERING



Foundations of Aerodynamics: Bases of Aerodynamics Design, 5ed

Arnold M. Kuethe, Chuen-Yen Chow

ABOUT THE BOOK

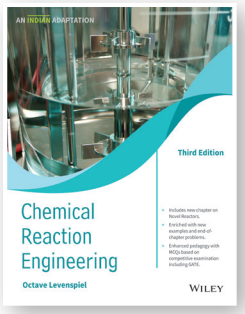
Like previous editions, this text has retained it's excellent coverage of basic concepts and broad coverage of the major aspects of aerodynamics. Numerical techniques are described for computing invicid incompressible flow about airfoils and finite wings. Plus, the design of devices and aircraft components that were constructed from theoretical considerations are shown so readers can see the realistic applications of mathematical analyses.

TABLE OF CONTENTS

• The Fluid Medium. • Kinematics of a Flow Field. • Dynamics of Flow Fields. • Irrotational Incompressible Flow About Two-Dimensional Bodies. • Aerodynamic Characteristics of Airfoils. • The Finite Wing. • Introduction to Compressible Fluids. • Energy Relations. • Some Applications of One-Dimensional Compressible Flow. • Waves. • Linearized Compressible Flow. • Airfoils in Compressible Flows. • Wings and Wing-Body Combinations in Compressible Flow. • The Dynamics of Viscous Fluids. • Incompressible Laminar Flow in Tubes and Boundary Layers. • Laminar Boundary Layers in Compressible Flow. • Flow Instabilities and Transition from Laminar to Turbulent Flow. • Turbulent Flows. • Airfoil Design, Multiple Surfaces, Vortex Lift, Secondary Flows, Viscous Effects.

9788126523986 | Pages: 592 | (Exclusive)

CHEMICAL ENGINEERING



Chemical Reaction Engineering, 3ed, (An Indian Adaptation) | e | IM

Octave Levenspiel

ABOUT THE AUTHOR

Octave Levenspiel was a professor of chemical engineering at Oregon State University. His principal interest was chemical reaction engineering, and he was the author of a major textbook Chemical Reaction Engineering as well as numerous research publications.

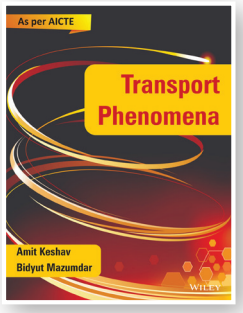
ABOUT THE BOOK

Levenspiels' Chemical Reaction Engineering has been designed as an introductory textbook for the undergraduate course in the domain. The text written in student-friendly style, helps students learn how to answer reactor design questions and develop a strong intuitive sense for good design. It builds on concepts progressively, with appropriate emphasis on assumptions made, why an alternative approach is not used, and to indicate the limitations of the treatment when applied to real situations. The Indian Adaptation of Chemical Reaction Engineering, Third Edition, is restructured at places and offers new and updated material to provide complete coverage of the course as per Indian curriculum.

TABLE OF CONTENTS

• Homogeneous Reactions in Ideal Reactors • Flow Pattern, Contacting, and Non-Ideal Flow • Reactions Catalyzed by Solids • Non-Catalytic Systems • Biochemical Reaction Systems • Novel Reactors

9789354244605 | Pages: 860 | ₹ 1139



Transport Phenomena, As per AICTE | e | IM

Amit Keshav, Bidyut Mazumdar

ABOUT THE AUTHOR

"Amit Keshav is working as an Associate Professor in the Department of Chemical Engineering, National Institute of Technology, Raipur, Chhattisgarh, India, since last 11 years. He worked as a lecturer in Seth Jai Parkash Mukand Lal Institute of Engineering and Technology (JMIT), Radaur, for more than 3 years. He had also worked as the Head of Department, Chemical Engineering, at JMIT Radaur for more than a year. He had set up various labs at both JMIT Radaur and NIT Raipur.

Bidyut Mazumdar started his teaching career from Government Engineering College, Ujjain, and is presently working as an Associate Professor in the Department of Chemical Engineering, National Institute of Technology Raipur, Raipur, Chhattisgarh. He has spent 30 years of teaching to undergraduate and postgraduate students in the area of Chemical Engineering. He has published more than 40 research papers in national/international journals and has attended more than 30 national and international conferences

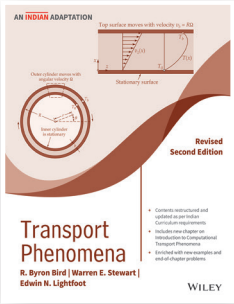
ABOUT THE BOOK

Transport Phenomena is a subject of key importance and has its roots soiled in the basics of fluid flow, heat transfer, mass transfer, and numerical analysis. Its stems spread to the advanced subjects of modeling simulation and computational fluid dynamics. Developing a model for any physical process on the core areas of fluid mechanics, heat transfer, and mass transfer is necessary before the model is simulated for large-scale design. This book introduces various methods with examples to develop transport models. This book finds its usefulness in both UG and PG courses in Chemical, Mechanical, and Biotechnology Engineering.

TABLE OF CONTENTS

• Introduction to Transport Phenomena • Approach of Transport Phenomena for Solution of Flow Equations: Shell Balance Approach • Approach of Transport Phenomena for Solution of Flow Equations: Equations of Change • Fluid Flow: Introduction and Basics • Solution to Laminar External Flows • Solution of Internal Flows: Pipes and Annulus • Solution of Fluid Flow Problems: Radial Flows and Moving Bodies • Transport Phenomena for Heat Transfer Problems • Transport Equation in Mass Transfer

9789388991001 | Pages: 304 | ₹ 799



Transport Phenomena, Revised 2ed, An Indian Adaptation | e | IM

R. Byron Bird , Warren E. Stewart , Edwin N. Lightfoot

ABOUT THE AUTHOR

R. Byron Bird ("Bob") was born in Bryan, Texas, on 5 February 1924. After finishing high school in Washington, DC, he started chemical engineering at the University of Maryland in 1941. In mid-1943 he was inducted into the army, went through basic training in Alabama, and to Officer Candidate School in Edgewood Arsenal, Maryland. He was then assigned to the 90th Chemical Mortar Battalion, which soon sailed for Europe.

Warren E. Stewart was born on 3 July 1924 in Whitewater, Wisconsin. He became famous as the first student in the history of the College of Engineering to graduate with a straight-A academic record. His MIT experience introduced him to numerical analysis and computational techniques, which proved to be essential at the dawn of the electronic computer age. In World War II, Warren enlisted in the U.S. Naval Reserve (1944–1946). He returned to Wisconsin as a Navy engineering trainee under the V-12 program, and after graduation served as a communications officer on the aircraft carrier USS Midway.

Edwin N. Lightfoot ("Ed") was born in Milwaukee, Wisconsin, on 25 September 1925.. The next three years he spent as a chemical engineer with the Charles Pfizer pharmaceutical company in Brooklyn, New York. He was invited to the University of Wisconsin as an assistant professor in 1953, with the idea of establishing an undergraduate curriculum in biochemical engineering. This curriculum was ahead of its time and was abandoned within a few years. Nonetheless Ed taught biochemical engineering in courses for seniors and graduate students and maintained a lively graduate research program.

ABOUT THE BOOK

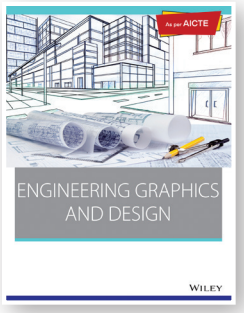
Transport Phenomena is a well-established textbook that presents the three topics momentum, heat, and mass transport; and provides an analogous approach to studying these three topics. It is specifically designed for undergraduate and postgraduate level in the Chemical Engineering curriculum. The textbook is centered around these topics covering the basics mechanisms, shell balance approach to develop governing equations, development, and application of equation of change to find the velocity and/or temperature and/or concentration profile, and macroscopic approach of transport phenomena.

TABLE OF CONTENTS

• Momentum Transport • Energy Transport • Mass Transport • Computational Transport Phenomena

9789354244452 | Pages: 932 | ₹ 1099

CIVIL ENGINEERING



Engineering Graphics and Design : As per AICTE | e

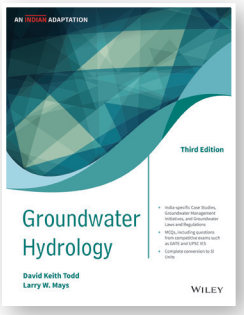
ABOUT THE BOOK

This book is designed as an introductory course in Engineering Drawing with complete coverage of topics as per the requirements of new AICTE syllabus. It aims to create awareness of the subject and develop the skills needed for documenting designs using drawings. The book covers the basic concepts and conventions of engineering drawing, introduces free-hand sketching and highlights the usage of CAD software (including AutoCAD 2017 and Solid Edge) for drafting. It extends the basics to drawing orthographic projections of points, lines, planes and solids as per prevalent BIS convention. It further covers techniques for orthographic projections of sections of solids, intersecting solids and development of surfaces.

TABLE OF CONTENTS

• Concepts and Conventions • Plane Curves • Geometrical Constructions • Theory of Projections • Projection of Points • Projections of Lines • Projections of Planes • Projections of Solids • Section of Solids • Development of Surfaces • Intersection of Surfaces of Solids • Isometric Projections • Orthographic Projections • Introduction to AutoCAD 2017 • Introduction to Solid Edge Software

9788126507740 | Pages: 340 | ₹ 799



Groundwater Hydrology, 3ed (An Indian Adaptation) | e | IM

David Keith Todd, Larry W. Mays

ABOUT THE AUTHOR

David Keith Todd, worldwide authority on groundwater, retired from the University of California and became professor emeritus on December 30, 1980. Dr. Todd's work appeared in 123 articles, books, papers, reports, and other publications. His book Groundwater Hydrology was published in 1959, the second edition in 1980. It has been used in more than 50 US universities, and translated into Spanish, Portuguese, Turkish, Persian, Hindi, and Malaysian.

Larry W. Mays has been a professor at the School of Sustainable Engineering and the Built Environment at Arizona State University since 1989. He served as chair from 1989-1996. Prior to that he was director of the Center for Research in Water Resources and holder of an Engineering Foundation Endowed Professorship at the University of Texas at Austin, where he was on the faculty since 1976.

ABOUT THE BOOK

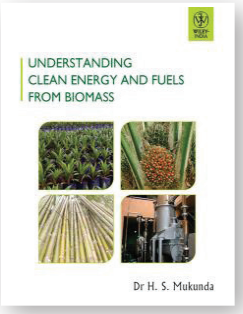
Groundwater Hydrology is a classic textbook that provides a unified presentation of groundwater hydrology, treating fundamental principles, methods, and problems encountered in the field as a whole. Continuing its forty-year history of providing students and professionals with a thorough grounding in the science and technology of groundwater hydrology, the book explores the many new

developments that have occurred in the groundwater field in recent years, concerns and competition for water supplies, contamination of groundwater, and enhanced regulation of water resources. The book also focuses on modern groundwater modeling tools, including a detailed description of MODFLOW.

TABLE OF CONTENTS

• Introduction • Occurrence Of Groundwater • Groundwater Movement • Groundwater And Well Hydraulics • Water Wells • Groundwater Levels And Environmental Influences • Quality Of Groundwater • Pollution Of Groundwater • Groundwater Flow Modeling Techniques • Management Of Groundwater • Surface Investigations Of Groundwater • Subsurface Investigations Of Groundwater • Artificial Recharge Of Groundwater • Saline Water Intrusion In Aquifers

9788194726333 | Pages: 560 | (Exclusive)



Understanding Clean Energy and Fuels from Biomass | e

Dr. H.S. Mukunda

ABOUT THE AUTHOR

Professor H. S. Mukunda is recognized as one of the foremost combustion scientists in India. His work spans combustion processes in aerospace and industrial fields. With the same rigor, he has researched thermo-chemical conversion processes of solid fuels like biomass and wastes. Research and development efforts led to technologies on gasification of biomass; these have been implemented and systems are being built in service of industry and society. He has taught and researched at IISc for over 35 years, published extensively and spoken at numerous national and international conferences. He is recognized by many distinctions and awards. This work follows two earlier books: "Understanding combustion" that is currently in its second edition, and "Understanding Aerospace Chemical Propulsion".

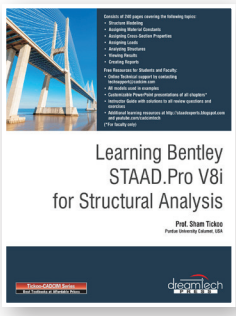
ABOUT THE BOOK

This book is an authoritative source for understanding the subject of the clean conversion of biomass to energy and upgraded fuels - gases and liquids for heat, electricity and transportation from the vantage point of developing countries like India and other oil importing nations bestowed with bio-resource.

TABLE OF CONTENTS

• Introduction • What Biomass? Production, Magnitude and Location • Routes for Conversion of Biowastes • Chapter 4: Principles of Combustion • Biomethanation or Anaerobic Digestion • Gasification • Power from Producer Gas • Gasifier Stoves • Torrefaction and Pyrolytic Oils • Biorefinery • Urban Solid Waste • Other Technologies • Historical Notes • Index

9788126529698 | Pages: 300 | ₹ 1099



Learning Bentley Staad.Pro V8I for Structural Analysis

Sham Tickoo

ABOUT THE AUTHOR

Prof. Sham Tickoo is professor of Manufacturing Engineering at Purdue University Calumet, USA where he has taught design, drafting, CAD and other engineering courses for over nineteen years. Before joining Purdue University, Prof. Tickoo has worked as a machinist, quality control engineer, design engineer, engineering consultant and software developer.

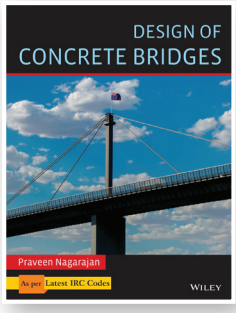
ABOUT THE BOOK

Learning Bentley STAAD.Pro V8i for Structural Analysis textbook introduces the readers to one of the world's leading structural analysis software, STAAD.Pro V8i. This software is specifically designed to analyze different types of structures for different loadings. In this textbook, the author emphasizes on the tools, options and functions that allow users to perform, analyze and export complex analysis results easily and effectively. In addition, the chapters in this textbook are arranged in pedagogical sequence that makes it very effective in learning the features and capabilities of the software.

TABLE OF CONTENTS

• Introduction to STAAD.Pro V8i • Structural Modeling in STAAD.Pro • Structural Modeling Using Tools • Defining Material Constants and Section Properties • Specifications and Supports • Loads • Performing Analysis, Viewing Results and Preparing Report

9789351198093 | Pages: 238 | (Exclusive)



Design of Concrete Bridges : As per Latest IRC Codes | e

Praveen Nagarajan

ABOUT THE AUTHOR

Dr. Praveen Nagarajan had his Civil Engineering education from NIT Calicut and IIT Madras. He was a top-ranking student throughout. After a brief stint as a Bridge Design Engineer at L&T Ramboll, Chennai, he took to academics. His areas of interest are Reinforced and Prestressed Concrete, Bridge Engineering and Structural Reliability. He has published more than 90 technical papers in these areas and has authored the books Prestressed Concrete Design (published by Pearson) and Matrix Methods of Structural Analysis (published by CRC).

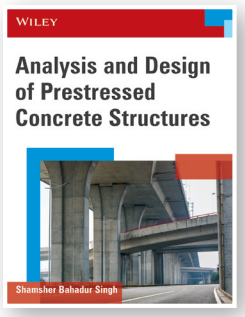
ABOUT THE BOOK

Design of Concrete Bridges deals with the design of concrete bridges as per the Indian standard IRC:112-2011. This easy-to-read textbook targets undergraduate students of Civil Engineering and postgraduate students of Structural Engineering. Practicing Engineers would also get to understand the background behind design provisions in IRC:112 from this book. Throughout the book, great emphasis is laid on developing a good understanding of the behaviour of different components of concrete bridges.

TABLE OF CONTENTS

• Introduction to Bridges • Road Bridges • Slab Bridges • Box Culvert • Tee Beam Bridges • Box Girder Bridges • Prestressed Concrete Bridges • Bearings and Substructures

9788126599905 | Pages: 280 | ₹ 799



Analysis and Design of Prestressed Concrete Structures | e

Shamsher Bahadur Singh

ABOUT THE AUTHOR

Dr. Shamsher Bahadur Singh is P.E. (Civil) license holder from the state of Michigan, USA and Postdoctorate (LTU), USA, Fellow of American Society of Civil Engineers (F.ASCE), Fellow of Structural Engineering Institute (F.SEI), Fellow of Coalition Disaster Resilience Infrastructure (F.CDRI), Fellow of Indian Association of Structural Engineers (FIAStructE), Chartered Engineer (INDIA), Fellow of Institution of Engineers (F.IE), PhD (IIT Kanpur), and currently Senior Professor of Civil Engineering Department at Birla Institute of Technology and Science (BITS), Pilani. His current areas of research are development of design guidelines for Functionally Graded Composite materials and Fiber Reinforced Polymer (FRP) reinforced prestressed concrete structures in particular and composite materials and structures in general including nonlinear finite element modeling.

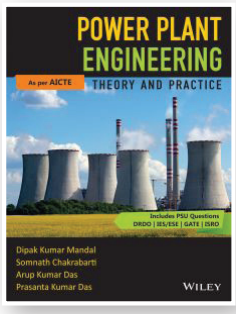
ABOUT THE BOOK

This book on analysis and design of prestressed concrete structural elements is an advance design course for undergraduate and post-graduate students, research scholars, and practitioners. Analysis and design of prestressed concrete elements using both the pre-tensioning and post-tensioning systems are discussed in detail for determinate as well as indeterminate framed structures with detailed design examples.

TABLE OF CONTENTS

• Materials and Systems for Prestressing • Loss of Prestress • Analysis of Prestressed Concrete Sections for Flexural Loadings • Flexural Strength of Prestressed Concrete Sections • Shear and Torsional Strength of Prestressed Concrete Members • Indeterminate Prestressed Concrete Structural Elements • Deflection, Camber, and Crack Control of Prestressed Concrete Members • Design of Prestressed Concrete Sections • Design of Transfer and Anchorage Zones • Design of Prestressed Concrete Flexural Members • Design of Prestressed Slabs • Design of Tension Members and Circumferential Prestressing • Design of Compression Members

9789354644153 | Pages: 724 | ₹ 1129



Power Plant Engineering, As per AICTE : Theory and Practice | e

Dipak Kumar Mandal, Somnath Chakrabarti, Arup Kumar Das, Prasanta Kumar Das

ABOUT THE AUTHOR

Dipak Kumar Mandal Associate Professor, Department of Mechanical Engineering, College of Engineering & Management, Kolaghat, West Bengal, India

Somnath Chakrabarti Professor ,Department of Mechanical Engineering, Indian Institute of Engineering Science and Technology, Shibpur, West Bengal, India

Arup Kumar Das Assistant Professor, Department of Mechanical and Industrial Engineering, Indian Institute of Technology, Roorkee, Uttarakhand, India

Prasanta Kumar Das Professor, Department of Mechanical Engineering ,Indian Institute of Technology, Kharagpur, West Bengal, India

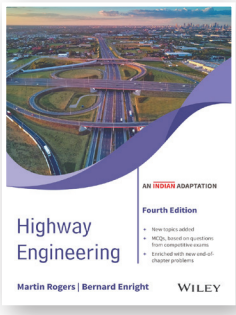
ABOUT THE BOOK

Power Plant Engineering: Theory and Practice presents a comprehensive coverage mainly on thermal power plant engineering along with basic ideas on nuclear power generation systems, diesel engine and gas turbine power plant, and hydroelectric power plant, respectively. The topic, as prescribed in the syllabi of almost all engineering colleges and Indian universities either as a core subject or as an elective subject, is written in simple and lucid manner for undergraduate and postgraduate Mechanical and Electrical Engineering students, and for practicing engineers in power stations.

TABLE OF CONTENTS

• Thermodynamic Vapour Power Cycles • Practical Power Plant Cycle • Fuel and Combustion • Steam Generator, Feed Cycle, Air and Flue Gas Path • Boiler Performance and Draught Systems • Steam Nozzles • Steam Turbine • Condenser, Circulating Water Systems and Water Treatment • Turbogenerator • Mechanical Control System • Basic Nuclear Power Generation • Basic Diesel Engine and Gas Turbine Power Plant • Basic Hydro-Electric (Hydel) Power Plant • Nonconventional Energy Systems • Power Plant and Its Economics

9788126579754 | Pages: 584 | ₹ 950



Highway Engineering, 4ed (An Indian Adaptation) | e | IM

Martin Rogers, Bernard Enright

ABOUT THE BOOK

Highway Engineering" a comprehensive book that serves as an essential resource for undergraduate students of civil engineering. This edition has been thoughtfully adapted to align with the specific educational and infrastructural context of India, ensuring relevance and applicability for students, educators, and practitioners in the field of highway engineering.

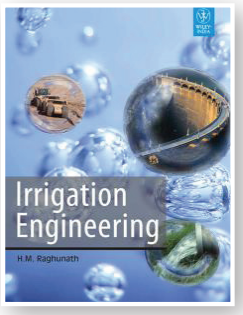
This comprehensive text covers a wide array of essential topics, from highway planning and traffic demand modeling to geometric design and pavement materials. One of the standout features of this edition

is its incorporation of the latest updates from authoritative manuals such as the Indian Roads Congress (IRC) codes, standards, and guidelines. This adapted edition has been developed based on the detailed feedback obtained from long-standing users of the book about how the book should be revised. The focus of this adaptation has been on strengthening the coverage and updating the problems.

TABLE OF CONTENTS

• Preface to the Indian Adaptation • About the Companion Website • 1 The Transportation Planning Process • 2 Urban Transport and System Planning • 3 Scheme Appraisal for Highway Projects • 4 Basic Elements of Highway Traffic Analysis • 5 Highway Capacity and Level-of-Service • 6 The Design of Highway Intersections • 7 Geometric Alignment and Design • 8 Highway Pavement Materials • 9 Design and Construction of Highway Pavements • 10 Pavement Maintenance • 11 The Highway Engineer and the Development Process • 12 Defining Sustainability in Transportation Engineering

9789363866126 | Pages: 456 | ₹ 999



Irrigation Engineering | e

H.M. Raghunath

ABOUT THE AUTHOR

H.M. Raghunath is a formerly professor of civil engineering at Jawaharlal Nehru Agricultural University, G.B. Pant University of Agriculture and Technology and Manipal Institute of Technology. Professor Raghunath also worked as a research engineer at Mysore Engineering Research Station, Krishnaraja Sagar, and as a water resources specialist for the southern region in AFPRO and participant in UNDP. Besides being a member of many expert committees on water resources evaluation with the World Bank (ARC-AFC) team, Prof. Raghunath has published several bestselling books on groundwater and hydrology. He is an M.Sc. in Engineering (specialization in Hydraulics, Irrigation and Flood Control) from the University of Kerala, B.E. (Civil) from the University of Mysore and has a postgraduate certificate in computer programming from Indian Institute of Science (IISc), Bangalore.

ABOUT THE AUTHOR

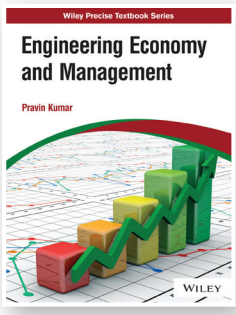
Irrigation Engineering is designed for the undergraduate students of civil engineering at major Indian universities and engineering colleges. The text is also useful to the experts and professionals in the field of irrigation and agriculture. The content is divided into two parts: Part A and Part B. Part A contain 21 chapters. In this part, the author has discussed various irrigation systems usually adopted in different agro-climatic regions in India. With neatly-drawn sketches, the design of irrigation structures for storage, diversion, distribution and control are illustrated with exam-oriented worked-out examples. Part B of the book comprises 27 irrigation/hydraulic structures (called plates), presenting sketches with usual three-views to scale of dams, spillways, canals and cross-drainage works. These sketches are furnished with all details and dimensions (workable drawings) with lucid and complete designs.

TABLE OF CONTENTS

• Part A: Irrigation Systems • Part B: Irrigation Structures: Design and Drawing • Model Question Papers • References • Index

9788126528813 | Pages: 536 | ₹ 999

INDUSTRIAL ENGINEERING



Engineering Economy and Management | e

Pravin Kumar

ABOUT THE AUTHOR

Pravin Kumar is working as an Associate Professor in the Department of Mechanical Engineering, Delhi Technological University, Delhi. He obtained his PhD in Supply Chain Management from IIT Delhi and M. Tech. in Industrial Management from IIT (BHU) Varanasi. He has more than 19 years of teaching and research experience. His research area is supply chain and operations management. He has published more than 50 research papers in international journals.

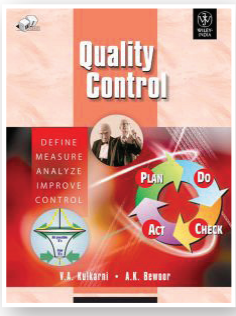
ABOUT THE BOOK

Engineering Economy and Management highlights the importance of economics and management in engineering and helps engineers in managerial decision making. It provides comprehensive coverage of the subject from basic principles to state-of-the-art concepts and applications. This book is common to all students in engineering discipline and is very useful in evaluating the economic merits and demerits of various solutions to engineering problems. Engineering problems may involve the decisions related to resources and their allocation. Engineering economics is closely associated with conventional microeconomics; but here, its focus is on problem solving at operational levels.

TABLE OF CONTENTS

• Introduction to Engineering Economics • Managerial Economics • Money, National Income, and Goods and Services Tax • Poverty, Unemployment, and Inflation • Banking Systems • Market Structures • Marketing Management • Concepts in Management • Human Resource Management • Corporate Social Responsibility and Business Ethics • Production and Operations Management • Demand Forecasting and Cost Estimation • Time Value of Money • Project Evaluation • Comparison Among Alternatives • Depreciation and Taxes • Replacement Analysis • Concept of Financial Statement • Financial Ratios • Capital Budgeting • Decision Making

9788126579921 | Pages: 516 | ₹ 999



Quality Control | e

V.A. Kulkarni, A.K. Bewoor

ABOUT THE AUTHOR

Vinay A. Kulkarni is a lecturer, and teaches at the Department of Production Engineering, D.Y. Patil College of Engineering, Pune. He was awarded a gold medal for completing his M.Tech. in Production Engineering (with specialization in Production Management). Besides publishing several technical research papers in national and international journals, he has presented at several national and international conferences. He is a member of

various professional bodies and has worked as a resource person at Indian Institute of Production Engineers, Pune.
Anand K. Bewoor is an assistant professor, and teaches at the Department of Mechanical Engineering, Vishwakarma Institute of Information Technology, Pune. Earlier, he worked as vendor development and quality control engineer in industry, and a faculty in several engineering colleges in Pune University and Shivaji Universities. With ME (Mechanical-Production Engineering) and pursuing Ph.D. in Mechanical Engineering, Prof. Bewoor has authored several books: Metrology and Measurement, Production Planning and Control, Industrial Engineering and Management, Manufacturing Processes and Industrial Fluid Power. Besides several technical research papers presented at national and international conferences, he has published in several national and international journals. In addition, he has filed two patents. Prof. Bewoor is a member of various professional bodies and has worked as a resource person at Indian Institute of Production Engineers, Pune.

ABOUT THE BOOK

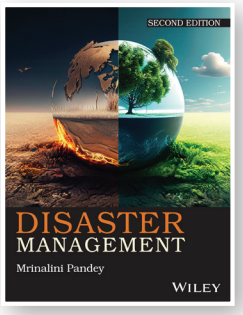
Quality Control is designed with an integrated approach for the interdisciplinary courses on Quality Control and Total Quality Management. The book serves as a textbook for the core course on Statistical Quality Control and is aimed at undergraduate students of engineering at all Indian universities. The text provides a comprehensive coverage of the subject from basic principles to state-of-the-art concepts and applications. With a strong engineering and management orientation, the book explores the modern use of statistical methods in quality control and improvement

TABLE OF CONTENTS

• Quality Concepts • Quality Milestones • Juran's Trilogy • Cost of Quality and Value of Quality • Total Quality Management • Statistical Quality Control and Acceptance Sampling • Taguchi's Quality Engineering • Six Sigma • Reliability, Availability and Maintainability • Quality Culture: A Global Paradigm Shift

9788126519071 | Pages: 392 | ₹ 902

ENVIRONMENTAL/EARTH SCIENCE & ENGINEERING SCIENCES



Disaster Management, 2ed | e

Mrinalini Pandey

ABOUT THE AUTHOR

Dr. Mrinalini Pandey is presently working as a Professor in Department of Management Studies, Indian School of Mines, Dhanbad. She has more than a decade of academic experience in teaching various courses on management both at PG and UG levels. She is a member of leading professional bodies of management, she has contributed many articles in management journals and presented papers in international and national conferences in India and abroad. She is also on the review board of a number of International Journals.

ABOUT THE BOOK

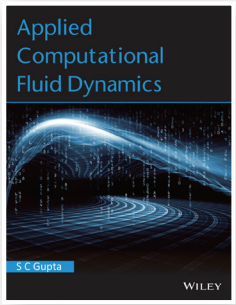
Disasters bring with them desolation, destruction, and gloom. Knowledge about various disasters and methods to overcome them is essential for their effective management. There is a phenomenal increase in the number of disasters but still, we are far behind in tackling them effectively. The old methods of disaster management encompassing just response and recovery aspects have to be replaced with more systematic and scientifically proven methods. This book, Disaster Management, is an attempt to systematically arrange the learnings and experiences to manage disasters.

TABLE OF CONTENTS

• Disaster Management: A Prologue • Disaster Management Cycle: Practical Applications • Contemporary Issues and Challenges in Disaster Management

9789357461610 | Pages: 272 | ₹ 975

MECHANICAL ENGINEERING



Applied Computational Fluid Dynamics | e

S C Gupta

ABOUT THE AUTHOR

Prof. S C Gupta is presently teaching at MVJ College of Engineering, Bangalore. He Graduated in Aeronautical Engineering from Punjab Engineering College, Chandigarh in the year 1969 with Distinction of Hons and a Gold Medal and subsequently obtained M.Tech from Indian Institute of Technology, Kanpur in the Year 1971. He has over 47 years of experience in the field of Aeronautics, mainly at R&D sector and teaching at postgraduate level. He worked for several years with Defence Research and Development Organisation (DRDO) from where he retired as Air Commodore.

ABOUT THE BOOK

This book is intended for undergraduate and postgraduate students studying computational techniques. The book is application oriented as well as code-development oriented. It is focused towards inverse design and optimization methods. Emphasis is placed on efficient algorithms development and parallel computing. While Chapter 1 is introductory about the flow physics, Chapter 2 is about discretization of domains and stability of marching schemes. Chapter 3 describes the finite difference discretization, numerical features of schemes including issues related to conservative smoothing and implicit nature of unsteady problems. Chapter 4 is about structured and unstructured grid generation methodologies including surface grid generation.

TABLE OF CONTENTS

• Mathematical Behavior of Partial Differential Equations and Its Impact on Computational Fluid Dynamics • Solution Methods of Finite-Difference Equations • Grid Generation • Adaptive Grid Methods and Appropriate Transformation • Finite Volume Methods • Computational Fluid Dynamics: Some Applications

9788126577538 | Pages: 316 | ₹ 899



Mechatronics, As per AICTE : Integrated Mechanical Electronic Systems | e

K.P. Ramachandran, G.K. Vijayaraghavan, M.S.Balasundaram

ABOUT THE AUTHOR

Dr.K.P.Ramachandran is currently working as Associate Dean (Academic), Caledonian College of Engineering, Sultanate of Oman -Muscat. He has been working more than 23 years in engineering institutions and as a consultant to many industries. He joined Caledonian College of Engineering (A University College) in 1997 where he has had variety of roles. He has been instrumental in designing, developing and validating many new academic programmes, setting up many laboratory facilities including Mechatronics lab at Caledonian College of Engineering

G.K.Vijayaraghavan is working as a Senior lecturer in the department of mechanical engineering, Caledonian College of Engineering, Oman. He has obtained his M.Tech from IIT-Madras and currently doing PhD in the area of Thermography NDT. He has been in the teaching field for more than 11 years in various engineering colleges in India and abroad and has many research publications in his credit. He is a life member of Indian Society of Technical Education and Indian Society of Nondestructive Testing.

M.S.Balasundaram, a post graduate in Electrical Engineering from the regional Engineering College, Tiruchirapalli, is presently teaching at the Caledonian College of Engineering, Muscat. Before joining the Caledonian college he was at the M. S. Engineering College in Bangalore as professor and head of the department of Electrical Engineering. He is a consultant to NEXANT Inc USA and has done consultation work for USAID projects in Power sector reforms in India. He has a long experience in industry mainly with Bharat Heavy Electricals, India for more than two decades in the fields of power engineering systems, power electronics and industrial drives.

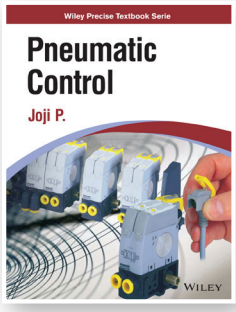
ABOUT THE BOOK

Mechatronics is a rapidly developing interdisciplinary field of engineering. The mechatronics deals with the synergistic integration of mechanical engineering, electronic engineering, computer technology and control engineering in the development of electromechanical products, through an integrated design approach. The utility of the microcomputer and other similar microprocessor-based devices have been employed in countless applications to the system monitoring, data handling, data presentation and control. The modern mechanical engineer must therefore, be competent in the application of microprocessor-based systems.

TABLE OF CONTENTS

• Mechatronics Systems • Sensors and Transducers • Solid-State Electronic Devices • Analog Signal Conditioning • Hydraulic and Pneumatic Actuating Systems • Mechanical Actuating Systems • Electrical Actuating Systems • Digital Electronics and Systems • System Interfacing and Data Acquisition • Dynamic Models • System Response • Process Controllers • Programmable Logic Controllers • Introduction to CNC Machines and Robotics • Design of Mechatronics Systems

9788126540402 | Pages: 852 | ₹ 1039



Pneumatic Controls | e

Joji P.

ABOUT THE AUTHOR

Joji P has 12 years' experience in teaching and training students from engineering colleges and polytechnics and professionals and technicians from industries in the area of pneumatic, electro-pneumatic controls and PLCs. Starting as Graduate Trainee in Mazagoan Dock Ltd., Bombay in 1985, he rose to the post of Deputy Director of Training, Foremen Training Institute, Bangalore. Presently, Joji is holding the same post. He got his B. Tech from the Calicut University and MCA from the Indira Gandhi National Open University. The organizations Joji served include Dalal Consultants, Bombay; J.M. Institute of Technology, Chitradurga, Karnataka; and Chief Quality Assurance Establishment (Warship Eqpt), Bangalore. Joji has also attended various training programmes including "Industrial Pneumatics" at Manipal Institute of Technology, Manipal (1996), "Programmable Controllers Siemens Step 7" at Elektro-Ausbildungszentrum, Aalen, Germany (2000) and "Advanced Pneumatics" at Festo Controls, Bangalore (2002).

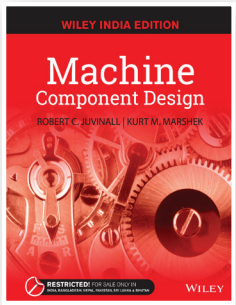
ABOUT THE BOOK

Pneumatic controls is an introductory textbook designed to provide technical information needed as a foundation for dealing with pneumatic components, circuit diagrams and systems. Educating people to properly use pneumatic power is vitally important as there is a widespread use of pneumatics in industry. Therefore, the book has been designed to teach students, engineers and technicians the 'why' and 'how' of various operating principles of pneumatic and electro-pneumatic equipment and their controls including computer based controls and maintenance aspects in a simple and powerful way. The aim is to integrate all information including circuit ideas and maintenance aspects of pneumatics at one place in a logical way for the step-by-step learning.

TABLE OF CONTENTS

• Industrial Prime Movers • Introduction to Pneumatics • Compressed Air Generation and Contamination Control • Pneumatic Actuators • Pneumatic Valves and Control Circuits • Multiple-Actuator Circuits • Electro-Pneumatics • Interfacing with PLC • Pneumatic Application Concepts • Maintenance

9788126515424 | Pages: 304 | ₹ 846



Machine Component Design | e

Robert C. Juvinall, Kurt M. Marshek

ABOUT THE BOOK

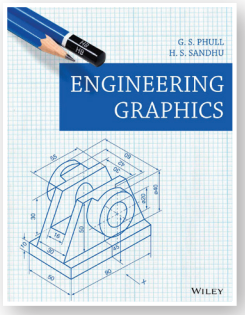
Considered a standard in the course, Juvinall and Marshek's Machine Component Design continues to focus on the fundamentals of component design -- free body diagrams, force flow concepts, failure theories and fatigue design, with applications to fasteners, springs, bearings, gears, clutches and brakes. Problem-solving skills are developed by the implementation of a proven methodology which provides a

structure for accurately formulating problems and clearly presenting solutions. The fifth edition includes additional coverage of composites, the material selection process and wear / wear theory, along with new and updated examples and homework problems.

TABLE OF CONTENTS

• Fundamentals • Applications

9788126559732 | Pages: 912 | (Exclusive)



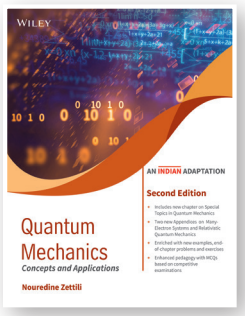
Engineering Graphics | e

G.S. Phull, H.S. Sandhu

ABOUT THE BOOK

The book offers ample illustrations of technical drawings along with step-by-step instructions for their development. The coverage of the topics is as per syllabus requirements of AICTE. The book covers the basic concepts and conventions of Engineering Graphics; describes methods for geometrical constructions and drawing engineering curves and extends the basics to drawing orthographic projections of points, lines, planes and solids as per prevalent BIS conventions. It further covers techniques for orthographic projections of sections of solids, intersecting solids and development of surfaces.

9788126549702 | Pages: 404 | ₹ 896



Quantum Mechanics, 2ed, (An Indian Adaptation) : Concepts and Applications | e

Nouredine Zettili

ABOUT THE AUTHOR

Professor Nouredine Zettili, Physical and Earth Sciences, Jacksonville State, University is currently Professor of Physics at Jacksonville State University, USA. His research interests include nuclear theory, the many-body problem, quantum mechanics and mathematical physics. He has also published two booklets designed to help students improve their study skills

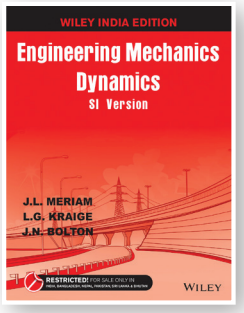
ABOUT THE BOOK

Quantum Mechanics: Concepts and Applications provides a clear, balanced, and modern introduction to the subject and is an authoritative text for senior undergraduate and graduate courses. The book takes an innovative approach to quantum mechanics by combining the essential elements of the theory with the practical applications. It starts with the experimental basis of quantum mechanics and then discusses its mathematical tools.

TABLE OF CONTENTS

• Origins of Quantum Physics • Mathematical Tools of Quantum Mechanics • Postulates of Quantum Mechanics • One-Dimensional Problems • Angular Momentum • Three-Dimensional Problems • Rotations and Addition of Angular Momenta • Identical Particles • Approximation Methods for Stationary States • Time-Dependent Perturbation Theory • Scattering Theory • Special Topics in Quantum Mechanics

9789354640773 | Pages: 852 | (Exclusive)



Engineering Mechanics: Dynamics, SI Version | e

J.L. Meriam, L.G. Kraige, J.N. Bolton

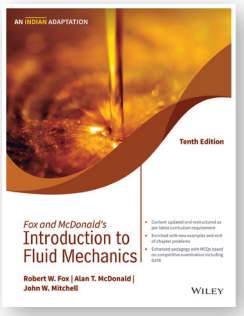
ABOUT THE AUTHOR

Glenn Kraige is Professor in the Department of Engineering Science and Mechanics at Virginia Tech. He is a fellow member of the American Society for Engineering Education,

ABOUT THE BOOK

Known for its accuracy, clarity, and dependability, Meriam, Kraige, and Bolton's Engineering Mechanics: Dynamics, 8th Edition SI Version has provided a solid foundation of mechanics principles to students for more than 60 years. Now in its eighth edition, the text continues to help students develop their problem-solving skills with an extensive variety of engaging problems related to engineering design. In addition to new homework problems, the text also includes a number of helpful sample problems. Students benefit from realistic applications that motivate their desire to learn and develop their skills.

9788126565375 | Pages: 732 | ₹ 1069



Fox and McDonald's Introduction to Fluid Mechanics, 10ed, (An Indian Adaptation) | e | IM

Robert W. Fox , Alan T. McDonald , John W. Mitchell

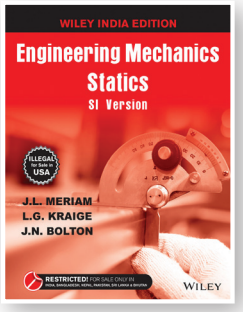
ABOUT THE BOOK

The Indian Adaptation of Fox and McDonald's Introduction to Fluid Mechanics, tenth edition comes with revised and enriched content, organized as per Indian curriculum requirements. The new concepts covered include The Orifice Meter, The Mouthpiece, and Free Jet Flow, Draft Tube, Trapezoidal Weir, Stepped Notch, Cippoletti Weir, Proportional Weir, and more. The book incorporates numerous pedagogical features that aid, reinforce and evaluate learning, and consistent problem-solving methodology that equips students to apply fluid mechanics principles to the design of devices and systems.

TABLE OF CONTENTS

• Fundamental Concepts • Fluid Statics • Basic Equations in Integral Form for a Control Volume • Introduction to Differential Analysis of Fluid Motion • Incompressible Inviscid Flow • Dimensional Analysis and Similitude • Internal Incompressible Viscous Flow • External Incompressible Viscous Flow • Fluid Machinery • Flow in Open Channels • Introduction to Compressible Flow

9789354641077 | Pages: 640 | ₹ 1179



Engineering Mechanics: Statics, SI Version | e | IM

J.L. Meriam, L.G. Kraige, J.N. Bolton

ABOUT THE AUTHOR

Dr. James L. Meriam has contributed to the field of engineering mechanics as one of the premier engineering educators during the second half of the twentieth century. He was a member of the faculty of the University of California-Berkeley, Dean of Engineering at Duke University, a faculty member at the California Polytechnic State University, and visiting professor at the University of California-Santa Barbara. He retired in 1990. Professor Meriam always placed great emphasis on teaching, and this trait was recognized by his students wherever he taught. At Berkeley in 1963, he was the first recipient of the Outstanding Faculty Award of Tau Beta Pi, given primarily for excellence in teaching.

Dr. L. G. Kraige, coauthor of the Engineering Mechanics series since the early 1980s, has also made significant contributions to mechanics education. Dr. Kraige currently serves as Professor of Engineering Science and Mechanics at Virginia Polytechnic Institute and State University. In addition to his widely recognized research and publications in the field of spacecraft dynamics. Professor Kraige has devoted his attention to the teaching of mechanics at both introductory and advanced levels. His outstanding teaching has been widely recognized and has earned him teaching awards at the departmental, college, university, state, regional, and national levels. These include the Francis J. Maher Award for excellence in education in the Department of Engineering Science and Mechanics, the Wine Award for excellence in university teaching, and the Outstanding Educator Award from the State Council of Higher Education for the Commonwealth of Virginia.

ABOUT THE BOOK

These exciting books use full-color, and interesting, realistic illustrations to enhance reader comprehension. Also include a large number of worked examples that provide a good balance between initial, confidence building problems and more advanced level problems. Fundamental principles for solving problems are emphasized throughout.

9788126564033 | Pages: 532 | ₹ 1079



Engineering Mechanics Statics and Dynamics, 9ed, (An Indian Adaptation) | e | IM

James L. Meriam , L. G. Kraige , J. N. Bolton

ABOUT THE AUTHOR

Dr. James L. Meriam has contributed to the field of engineering mechanics as one of the premier engineering educators during the second half of the twentieth century. He had early industrial experience with Pratt and Whitney Aircraft and the General Electric Company. During the Second World War, he served in the U.S. Coast Guard. He was a member of the faculty of the University of California-Berkeley, Dean of Engineering at Duke University, a faculty member at the California Polytechnic State University, and visiting professor at the University of California-Santa Barbara.

Dr. L. G. Kraige, coauthor of the Engineering Mechanics series since the early 1980s, has also made significant contributions to mechanics education. Dr. Kraige currently serves as Professor of Engineering Science and Mechanics at Virginia Polytechnic Institute and State University. In addition to his widely recognized research and publications in the field of spacecraft dynamics. Professor Kraige has devoted his attention to the teaching of mechanics at both introductory and advanced levels. His outstanding teaching has been widely recognized and has earned him teaching awards at the departmental, college, university, state, regional, and national levels.

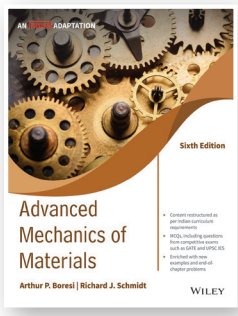
ABOUT THE BOOK

Meriam's Engineering Mechanics is a classic textbook for the first engineering course in mechanics that has provided a solid foundation of mechanics principles for more than 60 years. Known for its accuracy, clarity, and dependability, it is written in a style which is both concise and friendly, with major emphasis on basic principles and methods. This text continues to help students develop their problem-solving skills with an extensive variety of engaging problems related to engineering design. It effectively demonstrates both the cohesiveness of the relatively few fundamental ideas and the great variety of problems which these few ideas will solve.

TABLE OF CONTENTS

• Statics • Dynamics

9789354248566 | Pages: 1044 | ₹ 1319



Advanced Mechanics of Materials, 6ed, An Indian Adaptaion | e | IM

Arthur P. Boresi, Richard J. Schmidt

ABOUT THE AUTHOR

Arthur P. Boresi is Professor Emeritus in the Department of Civil and Architectural Engineering at the University of Wyoming in Laramie. He is the coauthor of a number of books, including Statics and Dynamics and Approximate Solution Methods in Engineering Mechanics. Richard J. Schimdt is Professor Emeritus in the Department of Civil and Architectural Engineering at the University of Wyoming in Laramie.

ABOUT THE BOOK

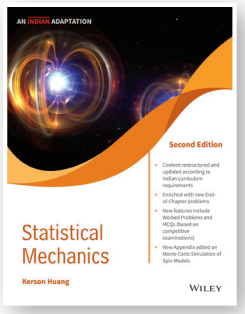
Advanced Mechanics of Materials is a well-established and comprehensive textbook written for the undergraduate and graduate students of aerospace, civil, and mechanical engineering and applied mechanics. The book presents a unified approach to the study of the behavior of structural members and the development of design and failure criteria. It explores analytical methods for determining the strength, stiffness (deformation characteristics), and stability of the various members in a structural system.

TABLE OF CONTENTS

• Theories of Stress and Strain • Linear Stress–Strain–Temperature Relations • Applications of Energy Methods • Torsion • Bending of Straight Beams • Shear Center for Thin-Wall Beam Cross Sections • Curved Beams • Beams on Elastic Foundations • The Thick-Wall

Cylinder • Elastic and Inelastic Stability of Columns • Flat Plates • Stress Concentrations • Contact Stresses

9788194726395 | Pages: 584 | ₹ 1035



Statistical Mechanics, 2ed, (An Indian Adaptation) | e

Kerson Huang

ABOUT THE AUTHOR

Kerson Huang : - Massachusetts Institute of Technology

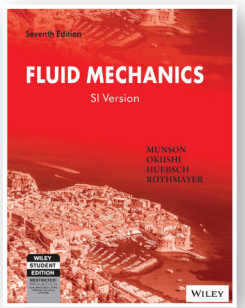
ABOUT THE BOOK

Statistical Mechanics by Kerson Huang is a comprehensive textbook on the framework of statistical mechanics, in which the macroscopic thermodynamic behavior of complex systems is explained by the application of probability and statistics to the dynamics of their microscopic constituents. The book is directed mainly at advanced undergraduate physics majors, graduate students in physics, as well as researchers in the field. This adaptation of the second edition of the textbook is a revision that has been developed from detailed feedback obtained from long-standing users in India.

TABLE OF CONTENTS

• Thermodynamics and Kinetic Theory • Statistical Mechanics • Special Topics in Statistical Mechanics

9789354247736 | Pages: 576 | ₹ 1009



Fluid Mechanics , SI Version, 7ed | e | IM

Munson, Okiishi, Huebsch, Rothmayer

ABOUT THE AUTHOR

Bruce R.Munson, Professor Emeritus of Engineering Mechanics, has been faculty member at Iowa State university since 1974. Dr. Munson's main professional activity has been in the area of fluid mechanics education and research. He has been responsible for the development of many fluid mechanics courses for studies in civil engineering, mechanical engineering, engineering science, and agricultural engineering and is the recipient of an Iowa State university Superior engineering Teacher Award and the Iowa State University Alumni Association Faculty Citation.

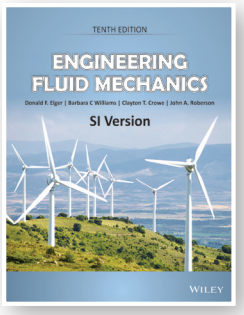
ABOUT THE BOOK

Fundamentals of Fluid Mechanics offer comprehensive topical coverage, with varied examples and problems, application of visual component of fluid mechanics and strong focus on effective learning. The text enables the gradual development of confidence in problem solving. The authors have designed their presentation to enable the gradual development of reader confidence in problem solving. Each important concept is introduced in easy-to-understand terms before more complicated examples are discussed.

TABLE OF CONTENTS

• Introduction • 2 Fluid Statics • 3 Elementary Fluid Dynamics--The Bernoulli Equation • 4 Fluid Kinematics • 5 Finite Control Volume Analysis • 6 Differential Analysis of Fluid Flow • 7 Dimensional Analyses, Similitude and Modeling • 8 Viscous Flow in Pipes • 9 Flow Over Immersed Bodies • 10 Open-Channel Flow • 11 Compressible Flow • 12 Turbomachines • References • Review Problems • Conceptual Questions • Problems • A Computational fluid dynamics • B Physical Properties of Fluids • C Properties of the U.S.Standard Atmosphere • D Compressible Flow graphsFor an Ideal Gas (k _ 1.4) • Answers ANS-Index IVideo Index

9788126553433 | Pages: 788 | (Exclusive)



Engineering Fluid Mechanics, 10ed, SI Version | e | IM

Donald F. Elger, Barbara C. Williams, Clayton T. Crowe, John A. Roberson

ABOUT THE AUTHOR

Clayton Crowe is a Professor Emeritus of the Mechanical and Materials Engineering Department of Washington State University.

Don Elger is a Professional Engineer, and Professor of Mechanical Engineering at the University of Idaho

Barbara Williams is a Professional Engineer, and Assistant Professor of Biological and Agricultural Engineering at the University of Idaho. She teaches the fluid mechanics course and has a background in biological and agricultural engineering.

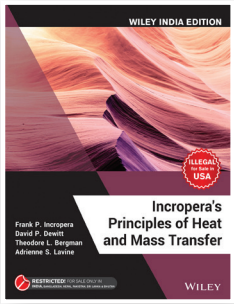
ABOUT THE BOOK

The 10th edition of Crowe's Engineering Fluid Mechanics will build upon the strengths and success of the 9th edition, including a focus on pedigogical support and providing considering deeper support for development of conceptual understanding and problem solving. This new edition retains the hallmark features of Crowe's distinguished history: clarity of coverage, strong examples and practice problems, and comprehensiveness of material, but expands coverage to Computational Fluid Dynamics-a topic missed in earlier editions.

TABLE OF CONTENTS

• Building a Solid Foundation • Fluid Properties • Fluid Statics • The Bernoulli Equation and Pressure Variation • Control Volume Approach and Continuity Equation • Momentum Equation • The Energy Equation • Dimensional Analysis and Similitude • Predicting Shear Force • Flow in Conduits • Drag and Lift • Compressible Flow • Flow Measurements • Turbomachinery • Flow in Open Channels • Modeling of Fluid Dynamics Problems

9788126564491 | Pages: 692 | (Exclusive)



Incropera's Principles of Heat and Mass Transfer, Wiley India Edition | e | IM

Frank P. Incropera, David P. Dewitt, Theodore L. Bergman, Adrienne S. Lavine

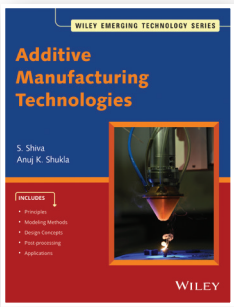
ABOUT THE BOOK

Incropera's Fundamentals of Heat and Mass Transfer has been the gold standard of heat transfer pedagogy for many decades, with a commitment to continuous improvement by four authors' with more than 150 years of combined experience in heat transfer education, research and practice. Applying the rigorous and systematic problem-solving methodology that this text pioneered an abundance of examples and problems reveal the richness and beauty of the discipline. This edition makes heat and mass transfer more approachable by giving additional emphasis to fundamental concepts, while highlighting the relevance of two of today's most critical issues: energy and the environment.

TABLE OF CONTENTS

• Introduction to Conduction • One-Dimensional, Steady-State Conduction • Two-Dimensional, Steady-State Conduction • Transient Conduction • Introduction to Convection • External Flow • Internal Flow • Free Convection • Boiling and Condensation • Heat Exchangers • Radiation: Processes and Properties • Radiation Exchange Between Surfaces • Diffusion Mass Transfer

9788126578245 | Pages: 1000 | ₹ 1179



Additive Manufacturing Technologies | e | IM

S. Shiva, Anuj K. Shukla

ABOUT THE AUTHOR

S. Shiva is heading the Laboratory for Advanced Manufacturing and Processing (LAMP) at the Indian Institute of Technology Jammu (IIT Jammu), Jammu and Kashmir, India. He has a decade of experience in additive manufacturing and laser surface processing.

Anuj K. Shukla is pursuing his research in the line of modeling and simulation in computational fluid dynamics (CFD), convective heat transfer, turbulence modeling, and heat exchanger simulation at the National Institute of Technology Raipur (NIT Raipur).

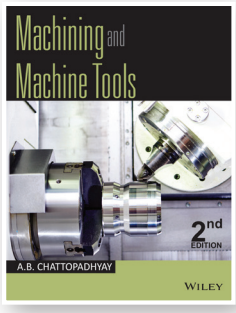
ABOUT THE BOOK

Unveiling the realm of additive manufacturing (AM) and 3D printing, this textbook delves into its concepts, principles, choice of materials, equipment, technologies, most recent innovations, and emerging applications in a variety of industries. The main aim of the book is to disseminate knowledge about creating and designing products from an industry point of view. The authors have explored various AM methods, alongside numerical modeling-based analyses to predict the performance of the chosen techniques. Furthermore, the book elaborates the various materials utilized for AM fabrication.

TABLE OF CONTENTS

• Additive Manufacturing: Basics and Principles • Numerical Modeling of Additive Manufacturing Processes • Systems and Subsystems of Additive Manufacturing • Additive Manufacturing Techniques • Materials and Design for Additive Manufacturing • Quality Assurance and Post-Processing Techniques • Applications of Additive Manufacturing

9789357462419 | Pages: 296 | ₹ 891



Machining and Machine Tools, 2ed | e

A. B. Chattopadhyay

ABOUT THE AUTHOR

Dr. A. B. Chattopadhyay has a vast teaching experience spanning nearly half a century, most of which he has spent in teaching and research at the prestigious IIT Kharagpur, of which he was a Professor as well as an Emeritus Professor. He has guided more than 150 academic projects including 20 PhDs and has published more than 150 national and international papers. He has designed and authored NPTEL web and video courses Manufacturing Processes-II. He has been selection board member for various universities, department head at IIT Kharagpur and a paper setter and examiner for 8 institutions.

ABOUT THE BOOK

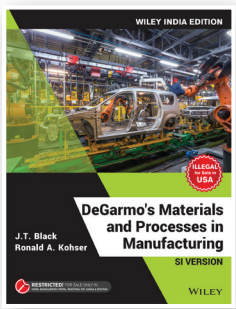
Machining and machine tools is a text targeted towards the students and teachers for the undergraduate Manufacturing Processes course in the Mechanical Engineering discipline. Postgraduate students in the production and manufacturing streams will also find this book a good reference.

This book brings a holistic approach to the understanding of machine tools and manufacturing processes, giving equal emphasis to historical background and chronological development, and to modern developments in manufacturing and contemporary machining processes.

TABLE OF CONTENTS

• Machining • Machine Tools

9788126564743 | Pages: 884 | ₹ 959



DeGarmo's Materials and Processes in Manufacturing, SI Version, Wiley India Edition | e | IM

J. T. Black, Ronald A. Kohser

ABOUT THE BOOK

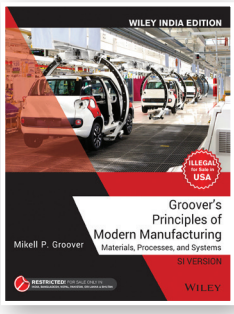
DeGarmo's Materials and Processes in Manufacturing has been a market-leading text on manufacturing and manufacturing processes courses for more than fifty years. Authors J T. Black and Ron Kohser have continued this book's long and distinguished tradition of exceedingly clear presentation and highly practical approach to materials and processes, presenting mathematical models and analytical equations only when they enhance the basic understanding of the material. Completely revised and updated to reflect all current practices, standards, and materials, the eleventh edition has new coverage of additive manufacturing,

lean engineering, and processes related to ceramics, polymers, and plastics.

TABLE OF CONTENTS

• 1 Introduction to DeGarmo's Materials and Processes in Manufacturing • 2 Properties of Materials • 3 Nature of Materials • 4 Equilibrium Phase Diagrams and the Iron--Carbon System • 5 Heat Treatment • 6 Ferrous Metals and Alloys • 7 Nonferrous Metals and Alloys • 8 Nonmetallic Materials: Plastics, Elastomers, Ceramics, and Composites • 9 Material Selection • 10 Fundamentals of Casting • 11 Expendable-Mold Casting Processes • 12 Multiple-Use-Mold Casting Processes • 13 Fabrication of Plastics, Ceramics, and Composites • 14 Fundamentals of Metal Forming • 15 Bulk Forming Processes • 16 Sheet-Forming Processes • 17 Powder Metallurgy (Particulate Processing) • 18 Additive Processes--Including • 19 Fundamentals of Machining/ Orthogonal Machining • 20 Cutting Tool Materials • 21 Turning and Boring Processes • 22 Milling • 23 Drilling and Related Hole-Making Processes • 24 Sawing, Broaching, Shaping, and Filing Machining Processes • 25 Abrasive Machining Processes • 26 CNC Processes and Adaptive Control: A(4) and A(5) Levels of Automation • 27 JIG and Fixture Design • 28 Nontraditional Manufacturing Processes • 29 Fundamentals of Joining • 30 Gas Flame and Arc Processes • 31 Resistance and Solid-State Welding Processes • 32 Other Welding Processes, Brazing, and Soldering • 33 Adhesive Bonding, Mechanical Fastening, and Joining of Non-Metals • 34 Surface Integrity and Finishing Processes • 35 Nano and Micro-Manufacturing Processes • 36 Measurement and Inspection (online at www.wiley.com/college/black) • 37 Nondestructive Examination (NDE) / Nondestructive Testing (NDT) (online at www.wiley.com/college/black) • 38 Manufacturing Automation and Industrial Robots (online at www.wiley.com/college/black) Advanced

9788126572632 | Pages: 804 | (Exclusive)



Groover's Principles of Modern Manufacturing SI Version, Wiley India Edition | e | IM

Mikell P. Groover

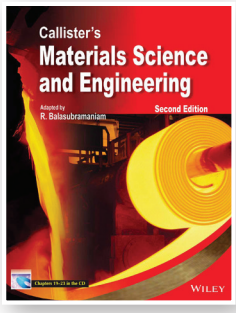
ABOUT THE BOOK

Groover's Principles of Modern Manufacturing, is designed for a first course or two-course sequence in Manufacturing at the junior level in Mechanical, Industrial, and Manufacturing Engineering curricula. As in preceding editions, the author's objective is to provide a treatment of manufacturing that is modern and quantitative. The book's modern approach is based on balanced coverage of the basic engineering materials, the inclusion of recently developed manufacturing processes and comprehensive coverage of electronics manufacturing technologies. The quantitative focus of the text is displayed in its emphasis on manufacturing science and its greater use of mathematical models and quantitative end-of-chapter problems.

TABLE OF CONTENTS

• Engineering Materials and Product Attributes • Solidification Processes • Particulate Processing of Metals and Ceramics • Metal Forming and Sheet Metalworking • Material Removal Processes • Property-Enhancing and Surface Processing Operations • Joining and Assembly Processes • Special Processing and Assembly Technologies • Manufacturing Systems • Manufacturing Support Systems

9788126573059 | Pages: 864 | (Exclusive)



Callister's Materials Science and Engineering, 2ed | e | IM

R. Balasubramaniam

ABOUT THE AUTHOR

William D. Callister is currently an adjunct professor in the Department of Engineering at the University of Utah. His teaching interests include writing and revising introductory materials science and engineering textbooks, in both print and electronic formats. He also enjoys developing ancillary resources, including instructional software and on-line testing/evaluation tools.

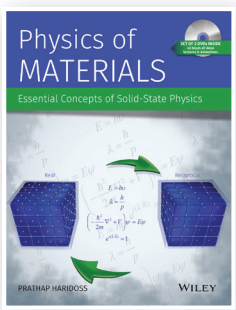
ABOUT THE BOOK

This book continues to provide engineers with a strong understanding of the three primary types of materials and composites, as well as the relationships that exist between the structural elements of materials and their properties. The relationships among processing, structure, properties and performance components for steels, glass-ceramics, polymer fibers and silicon semiconductors are explored throughout the chapters. The discussion of the construction of crystallographic directions in hexagonal unit cells is expanded. At the end of each chapter, engineers will also find revised summaries and new equation summaries to reexamine key concepts.

TABLE OF CONTENTS

• Atomic Structure and Interatomic Bonding • The Structure of Crystalline Solids • Imperfections in Solids • Diffusion • Mechanical Properties of Metals • Dislocations and Strengthening Mechanisms • Failure • Phase Diagrams • Phase Transformations: Development of Microstructure and Alteration of Mechanical Properties • Applications and Processing of Metal Alloys • Structures and Properties of Ceramics • Applications and Processing of Ceramics • Polymer Structures • Characteristics, Applications, and Processing of Polymers • Composites • Corrosion and Degradation of Materials • Electrical Properties • Thermal Properties • Magnetic Properties • Optical Properties • Economic, Environmental and Societal Issues in Materials Science and Engineering"

9788126541607 | Pages: 838 | ₹ 1159



Physics of Materials: Essential Concepts of Solid-State Physics | e | IM

Prathap Haridoss

ABOUT THE AUTHOR

Dr Prathap Haridoss is Professor in the Department of Metallurgical and Materials Engineering at IIT, Madras. His research interests include PEM Fuel Cells, Carbon Nanomaterials including Carbon Nanotubes, Semiconducting Nanomaterials, and recycling printed

circuit boards. He has developed a communication device for the speech impaired and a footwear-based device to enable gait analysis by timed mapping of foot contact points. He is also working on developing an exoskeleton to assist differently-abled as well as elderly people.

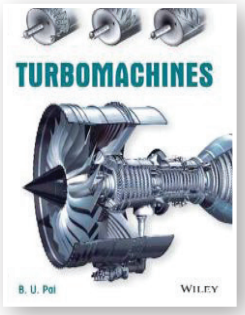
ABOUT THE BOOK

This book examines essential concepts in Solid-State Physics. The accompanying DVD, containing 40 lectures of approximately an hour each, provides the student with the classroom experience. Animations are also included in the DVD to enable a more visual experience to understand the discussed concepts. Significant effort has been put in to present the material at the right level of detail such that it can be accessed and utilized by undergraduate and postgraduate students with a wide range of backgrounds. A conscious effort has been made to ensure that the level of detail used in the presentation enables students to stay with the content throughout.

TABLE OF CONTENTS

• Introduction – Use and Study of Materials • Properties of Materials • Thermal Expansion • Electrical Conductivity • Free Electron Gas and The Ideal Gas • The Drude Model • Large Systems, Statistical Mechanics and The Maxwell–Boltzmann Statistics • A Brief History of Quantum Mechanics; Its Use in the Drude–Sommerfeld Model • Fermi–Dirac Statistics • Anisotropy, Periodic Potential, Confinement and Quantization • Density of States, Fermi Energy and The Electronic Contribution to Specific Heat at Constant Volume • The Reciprocal Space • Wigner–Seitz Cell, Brillouin Zones and The Origin of Bands • Bands, Band Gaps, Free Electron Approximation and Tight Binding Approximation • Material Phenomena Explained using Theories Developed • Superconductivity and The Bose–Einstein Statistics • Physics of Nano-Scale Materials

9788126557875 | Pages: 268 | ₹ 758



Turbomachines | e | IM

B.U. Pai

ABOUT THE AUTHOR

Prof. B. U. Pai is well known as a popular teacher of the course Turbomachines. His 39 years of vast teaching and administrative experience is an amalgam of distinctions based on imparting quality education as a Professor & Head (Deptt. of Mech. Engg.) and Principal of various engineering colleges. Over the years, he has taught subjects such as Thermodynamics, Heat Transfer, IC Engines, R&AC, etc. he has many reputed national and international publications to his credit.

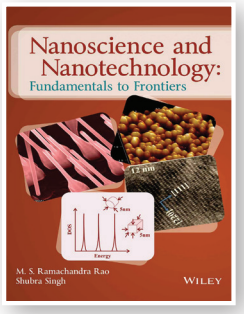
ABOUT THE BOOK

This book covers the basic principles of turbo machinery and provides a firm foundation for the understanding of the basic concepts with absolute clarity. The contents of the book have been designed keeping in mind the requirements of undergraduate and postgraduate students of Mechanical Engineering. The book combines theory and applications to show how gas turbines, pumps and compressors function.

TABLE OF CONTENTS

• Basics of Turbomachines • Thermodynamics of Fluid Flow • Energy Exchange in Turbomachines • General Analyses of Turbomachines • Steam Turbines • Hydraulic Turbines • Centrifugal Pumps • Fans, Blowers, and Compressors • Power-Transmitting Turbomachines

9788126539550 | Pages: 404 | ₹ 870



Nanoscience and Nanotechnology: Fundamentals of Frontiers | e

M.S. Ramachandra Rao, Shubra Singh

ABOUT THE AUTHOR

Dr. M.S. Ramachandra Rao is a professor in the Department of Physics and head of the "Nanostructured Thin Films and Advanced Materials" group at IIT Madras. His research activities are primarily focused on Physics and applications of nanostructures and nanomaterial.

Dr. Shubra Singh is a DST-INSPIRE faculty at the Crystal Growth Centre, Anna University, Chennai. She has been a CEFIPRA post doctorate fellow in France and a faculty at IIT Kharagpur before moving to Anna University after receiving the INSPIRE Faculty Award in 2012.

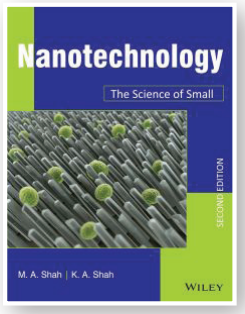
ABOUT THE BOOK

Nanoscience and nanotechnology are evolving at a rapid pace and there have been a number of scientific and technological advancements in these fields in recent times. This book explains scientific foundations governing the functionality of nanostructures and makes the reader familiar with several basic and application aspects of nano-structured systems. This book is designed as a Nanoscience and Nanotechnology course text book that could be offered by Physics, Materials Science and Nanoscience streams in various core departments and nanotechnology centers and other related departments in universities, institutes and colleges.

TABLE OF CONTENTS

• 1. The Science behind Nanotechnology • 2. Concepts of Solid-State Physics Relevant to Low-Dimensional Systems • 3. Quantum Mechanics of Low-Dimensional Systems and Its Application to Nanoscience • 4. Basic Aspects of Synthesis of Nanomaterial and Device Fabrication • 5. Different Types of Nanostructures • 6. Diffusion Kinetics • 7. Nanostructured Thin Films and Nano composites • 8. Nano scale Characterization Techniques • 9. Recent Advances in Nanotechnology • 10. New Trends in Nanoscience and Applications of Nanotechnology in Various Fields • Appendix A - Useful Lab Experiments • Appendix B - Useful Tables • Index

9788126542017 | Pages: 288 | ₹ 885



Nanotechnology, 2ed : The Science of Small | e

M.A. Shah, K.A. Shah

ABOUT THE AUTHOR

Dr. M. A. Shah embarked upon new research programmes, pioneered the synthesis of broad range of nanomaterials, established the World Bank Funded Research Centre (Special Centre for Nanosciences) and laid the foundation to learn the new science – nanotechnology – in the early 2000s. In 2009, Dr. Shah moved to the Middle East on deputation for a short period of two years and published the book Principles of Nanoscience & Nanotechnology with Dr. T. Ahmad, an eminent Chemist.

Dr. K. A. Shah is working as an Assistant Professor, Department of Physics, S. P. College, Cluster University Srinagar. Dr. Shah has co-authored three books and published numerous research papers in national and international peer-reviewed journals, including Elsevier and Springer journals. He has also presented his research work in many national and international conferences. Moreover, Dr. Shah is an editorial board member and reviewer of many scientific journals; he is also a member of many scientific and academic associations. He has handled three major research projects as Principal Investigator funded by the University Grants Commission (UGC), Delhi, and the Science and Engineering Research Board (SERB), Govt. of India

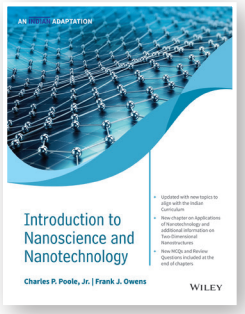
ABOUT THE BOOK

The discovery of nanomaterials is widely acknowledged as a major triumph of human ingenuity in modern times. This has led to the emerging field of nanotechnology, paving way for a new technological revolution across the globe. Such developments may usher in a new Industrial Revolution, capable of radically transforming almost all industrial sectors in the coming years. Nanotechnology – The Science of Small systematically discusses the basic science behind nanotechnology, nanomaterials synthesis, nanomaterials characterization techniques, nanotechnology applications, breakthroughs, initiatives, challenges and opportunities.

TABLE OF CONTENTS

• Overview of Carbon Materials • Fundamentals of Nanoscience • Techniques for Synthesis of Nanomaterials • Nanomaterials Characterization Techniques • Prime Materials in Nanotechnology • Nanotechnology Applications and Recent Breakthroughs • Nanotechnology Initiatives and Future Prospectives

9788126579976 | Pages: 200 | ₹ 815



Introduction to Nanoscience and Nanotechnology, An Indian Adaptation | e

Charles P. Poole, Jr., Frank J. Owens

ABOUT THE AUTHOR

"Charles P. Poole Jr., PhD, is a professor emeritus in the Department of Physics and Astronomy at the University of South Carolina is a member of the USC nanotechnology center.

Frank J. Owens, PhD, is a senior research scientist of the U.S. Army's Armament Research, Development, and Engineering Center, and a professor of physics in the graduate school of Hunter College of the City University of New York.

Both authors are Fellows of the American Physical Society.

ABOUT THE BOOK

This book is a comprehensive text and a ready reckoner on the theory and applications of nanotechnology. It provides an insight into the history of nanoscience and nanotechnology. It discusses in-depth the optical, mechanical, electrical, magnetic, and catalytic properties of materials at nanoscale. It is a comprehensive discourse on nanostructured ferromagnetism, optical and vibrational spectroscopy, quantum wells, self-assembly, and biological materials at nanoscale.

TABLE OF CONTENTS

• Introduction to Solid State Physics • Methods of Measuring Properties • Properties and Synthesis of Nanoparticles • Carbon-Based Nanostructures • Nanostructured Materials • Nanostructured Ferromagnetism • Optical and Vibrational Spectroscopy • Quantum Wells, Wires, and Dots • Self-Assembly and Catalysis • Organic Compounds and Polymers • Biological Materials • Nanomachines and Nanodevices • Applications of Nanotechnology

9789354240201 | Pages: 508 | ₹ 1009



Engineering Optimization, 5ed (An Indian Adaptation) : Theory and Practice | e | IM

Singiresu S. Rao, Nitin Kumar, D. Sumitha

ABOUT THE AUTHOR

Singiresu S. Rao is a Professor in the Mechanical and Aerospace Engineering Department at the University of Miami. His main areas of research include multi objective optimization and uncertainty models in engineering analysis, design and optimization.

ABOUT THE BOOK

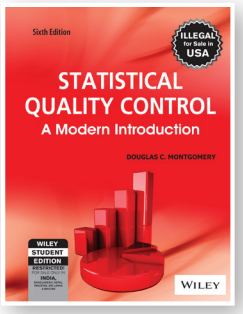
This Indian adaptation of Engineering Optimization: Theory and Practice, offers new and updated material relevant to the Indian context. Two new appendices on Simulation and Network Analysis and Methods have been included. In line with the ethos of the original work, the text continues to provide a significant number of examples and problems that help illustrate the importance of the results presented in the text. More than a third of these examples and problems have been newly added or revised.

TABLE OF CONTENTS

• Introduction to Optimization • Classical Optimization Techniques • Linear Programming I: Graphical and Simplex Method • Linear Programming II: Additional Topics and Extensions • Nonlinear Programming I: One-Dimensional Minimization Methods • Nonlinear Programming II: Unconstrained Optimization Techniques • Nonlinear Programming III: Constrained Optimization Techniques • Geometric Programming • Dynamic Programming • Integer Programming • Stochastic Programming • Optimal Control and Optimality Criteria Methods • Methods of Optimization using Algorithm • Metaheuristic Optimization Methods • Practical Aspects of

Optimization • Multilevel and Multiobjective Optimization • Solution of Optimization Problems Using MATLAB

9789357461238 | Pages: 840 | ₹ 1399



Statistical Quality Control: A Modern Introduction, 6ed | IM

Douglas C. Montgomery

ABOUT THE AUTHOR

Dr. Douglas C. Montgomery Professor of Engineering and Statistics at Arizona State University, received his B.S., M.S., and Ph.D. degrees from Virginia Polytechnic Institute, all in engineering.

Dr. Montgomery has research and teaching interests in industrial statistics including statistical quality control techniques, design of experiments, regression analysis and empirical model building, and the application of operations research methodology to problems in manufacturing systems. He is a Stewart Medallist of the American Society for Quality, and has also received the Brumbaugh Award, the William G. Hunter Award, and the Shewell Award(twice) from the ASQ. He is a recipient of the Ellis R. Ott Award. He is a former editor of the Journal of Quality Technology, the current editor of Quality and Reliability Engineering International, and serves on the editorial boards of several journals.

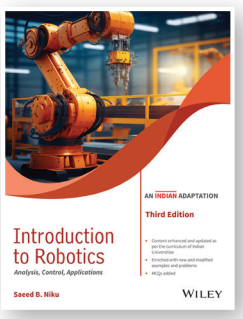
ABOUT THE BOOK

Covering everything from basic principles to state-of-the-art concepts and applications, this book arms readers with a comprehensive understanding of modern statistical methods for quality control and improvement. The author covers basic and advanced methods of statistical process control (SPC), show how statistically designed experiments can be used for process design, development and improvement, and explore acceptance sampling. Throughout the pages, guidelines are provided for selecting the correct statistical technique to use in a variety of situations.

TABLE OF CONTENTS

• Part I: Introduction • Part II: Statistical Methods Useful in Quality Control and Improvement • Part III: Basic Methods of Statistical Process Control and Capability Analysis • Part IV: Other Statistical Process-Monitoring and Control Techniques • Part V: Process Design and Improvement with Designed Experiments • Part VI: Acceptance Sampling • Appendix

9788126525065 | Pages: 756 | (Exclusive)



Introduction to Robotics, 3ed (An Indian Adaptation) : Analysis, Control, Applications | e

Saeed B. Niku

ABOUT THE AUTHOR

Saeed Benjamin Niku is a professor of mechanical engineering at California Polytechnic State University, San Luis Obispo, California. He has taught courses in mechanics, robotics, design, and creativity.

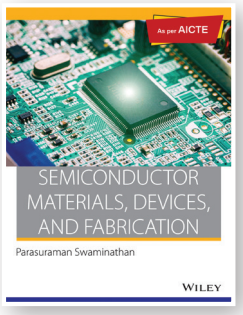
ABOUT THE BOOK

Introduction to Robotics: Analysis, Control, Applications, third edition offers a guide to the fundamentals of robotics, robot components, and subsystems and applications. The author—a noted expert on the topic—covers the mechanics and kinematics of serial and parallel robots, both with the Denavit–Hartenberg approach and screw-based mechanics.

TABLE OF CONTENTS

• Fundamentals • Kinematics of Serial Robots: Position Analysis • Robot Kinematics with Screw-Based Mechanics • Kinematics Analysis of Parallel Robots • Differential Motions and Velocities • Dynamic and Force Analysis • Trajectory Planning • Motion Control Systems • Actuators and Drive Systems • Sensors • Image Processing and Analysis with Vision Systems • Fuzzy Logic Control

9789357461306 | Pages: 520 | ₹ 1059



Semiconductor Materials, Devices, and Fabrication, As per AICTE | e

Parasuraman Swaminathan

ABOUT THE AUTHOR

Parasuraman Swaminathan is an Assistant Professor in the Department of Metallurgical and Materials Engineering at the Indian Institute of Technology, Madras (IITM). He has been a faculty at the institute since July 2013. worked, as a Process and Yield Engineer, in Portland Technology Development division of Intel Corp. USA, where he worked on silicon oxidation. Dr. Parasuraman's research group in IITM works on printed electronics and physical vapor deposition of thin films and nanoparticles. They are developing low-cost electronic devices by adapting conventional printing techniques to metals and semiconductors.

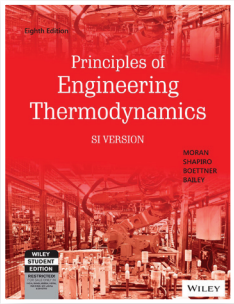
ABOUT THE BOOK

Semiconductor Materials, Devices, and Fabrication and the associated media content in the DVDs provide an understanding of the materials, devices, and processing techniques used in the current microelectronics industry. The 2 DVDs include 32 lectures, approximately an hour each. The lectures map onto the individual chapters in the book. The content is divided into three parts. Part I explains the basic physics behind semiconductor materials. Part II introduces electronic devices including optical devices. Part III discusses current manufacturing processes in the semiconductor industry, starting from wafer production to final integrated circuit development. The focus in this part is on industry challenges during miniaturization and methods to overcome these challenges.

TABLE OF CONTENTS

• Semiconductor Materials • Devices • Fabrication

9788126508624 | Pages: 380 | ₹ 758



Principles of Engineering Thermodynamics, SI Version, 8ed | e | IM

Moran, Shapiro, Boettner, Bailey

ABOUT THE AUTHOR

Dr. Michael J. Moran, is Professor of Mechanical Engineering at the Ohio State University. He is a specialist in engineering thermodynamics and thermoeconomics. He also works in the area of thermal design and optimization.

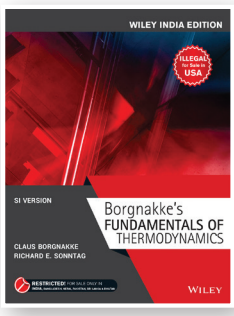
ABOUT THE BOOK

This new edition provides a student-friendly approach that emphasizes the relevance of thermodynamics principles to some of the most critical issues of today and coming decades, including a wealth of integrated coverage of energy and the environment, biomedical / bioengineering, as well as emerging technologies. Visualization skills are developed and basic principles demonstrated through a complete set of animations that have been interwoven throughout. It also introduces co-authors Daisie Boettner and Margaret Bailey, who bring their rich backgrounds of success in teaching and research in thermodynamics to the text.

TABLE OF CONTENTS

• Getting Started: Introductory Concepts and Definitions • Energy and the First Law of Thermodynamics • Evaluating Properties • Control Volume Analysis Using Energy • The Second Law of Thermodynamics • Using Entropy • Exergy Analysis • Vapor Power Systems • Gas Power Systems • Refrigeration and Heat Pump Systems • Thermodynamic Relations • Ideal Gas Mixture and Psychrometric Applications • Reacting Mixtures and Combustion • Chemical and Phase Equilibrium

9788126556724 | Pages: 888 | (Exclusive)



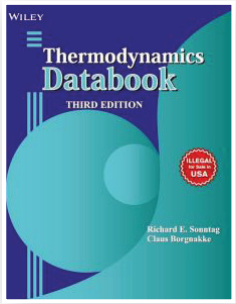
Borgnakke's Fundamentals of Thermodynamics, SI Version, Wiley India Edition | e | IM

Claus Borgnakke, Richard E. Sonntag

ABOUT THE BOOK

This new edition of Borgnakke's Fundamentals of Thermodynamics continues to offer a comprehensive and rigorous treatment of classical thermodynamics, while retaining an engineering perspective. With concise, applications-oriented discussion of topics and self-test problems, this text encourages students to monitor their own learning. This classic text provides a solid foundation for subsequent studies in fields such as fluid mechanics, heat transfer and statistical thermodynamics, and prepares students to effectively apply thermodynamics in the practice of engineering.

9788126598199 | Pages: 728 | ₹ 969



Thermodynamics Databook, 3ed | e

Claus Borgnakke, Richard E. Sonntag

ABOUT THE AUTHOR

Richard E. Sonntag is a Professor of mechanical engineering at the University of Michigan and served as the department chair for eleven years. Claus Borgnakke is an Associate Professor at the University of Michigan where he received the Excellence in Teaching Award as well as other awards and recognitions including the Ralph E. Teetor.

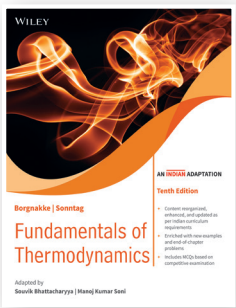
ABOUT THE BOOK

This book is based on the classical text of Borgnakke's fundamentals of Thermodynamics. It offers various data in the form of tables, graphs and figures which can be used to solve a wide range of thermodynamics problem. It systematically covers all essential components in the order Single State Properties, Thermodynamics tables, Ideal-gas specific heat, equation of state, figures, and additional thermodynamics tables.

TABLE OF CONTENTS

• Single-State Properties • Thermodynamic Tables • Ideal-Gas Specific Heat • Equations Of State • Figures • Addtional Thermodynamic Tables

9788126589203 | Pages: 100 | ₹ 399



Fundamentals of Thermodynamics, 10ed (An Indian Adaptation) | e | IM

Claus Borgnakke , Richard E. Sonntag, Souvik Bhattacharyya, Manoj Kumar Soni

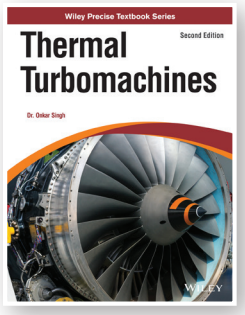
ABOUT THE BOOK

Borgnakke's Fundamentals of Engineering Thermodynamics offers an in-depth introduction to essential principles of thermodynamics with a focus on their practical applications across a variety of engineering fields. It lays the foundation for subsequent studies in such fields as fluid mechanics, heat transfer, and statistical thermodynamics. The Tenth Edition of the book retains its characteristic rigor and systematic approach to thermodynamics with enhanced pedagogical features that aid in student comprehension.

TABLE OF CONTENTS

• Introduction and Preliminaries • Properties of a Pure Substance • Energy Equation and First Law of Thermodynamics • Energy Analysis for a Control Volume • The Second Law of Thermodynamics • Entropy • Entropy Analysis for a Control Volume • Exergy • Gas Power and Refrigeration Systems • Vapor Power and Refrigeration Systems • Gas Mixtures • Thermodynamic Relations • Chemical Reactions • Introduction to Phase and Chemical Equilibrium • Compressible Flow

9789354642210 | Pages: 800 | ₹ 1139



Thermal Turbomachines, 2ed | e

Dr. Onkar Singh

ABOUT THE AUTHOR

Dr. Onkar Singh, formerly Founder Vice Chancellor of Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh, is the Professor of Mechanical Engineering at Harcourt Butler Technical University, Kanpur, Uttar Pradesh. He has vast teaching experience of more than 27 years at undergraduate and postgraduate level in different institutions. Dr. Singh has published large number of research papers in national/international journals and conference proceedings.

ABOUT THE BOOK

The book Thermal Turbomachines presents a systematic account of the concepts and principles of thermal turbomachines. It covers the requirements of undergraduate course on turbomachinery including Thermal Turbomachines and Pumps for students of Mechanical and Aerospace Engineering. It is aimed at building the basics for advanced courses in turbomachines at postgraduate level. Topics are presented in simple and lucid style and provided with sufficient number of illustrations and numerical problems – both solved and unsolved – along with numerous review questions. The book is written in SI system of units.

TABLE OF CONTENTS

• Fundamental Concepts of Turbomachines • Centrifugal Compressors • Axial Flow Compressors • Turbines • Steam Turbines • Pumps • Design Considerations of Thermal Turbomachines

9788126579235 | Pages: 304 | ₹ 868

ISBN	Author	Title	Price (₹)	Qty
		AEROSPACE ENGINEERING		
9788126523986	Kuethe	Foundations of Aerodynamics: Bases of Aerodynamics Design, 5ed **(Pg. 2)**		
		CHEMICAL ENGINEERING		
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