

Chapter 1 Fundamental Concepts Of Thermodynamics

Many beginners find physics to be a challenging subject to learn, and the difficulty extends to each branch of physics. It would be preferable for beginners to learn about different branches of physics as quickly as possible with a simplified understanding of the relevant mathematical relationships. After learning the position of each field in physics, it becomes easier to learn details of each field. In this book, special functions are not used to explain the solutions of equations. Fundamentals of Analysis In Physics summarizes the analytical methods in different fields of physics The book covers several known fields of physics and is a useful text for beginners in physics, college and university students, and working professionals who may not have a background in mathematics or physics. Key features - Summarizes information about different fields in physics in 150 pages - Covers 7 different fields of physics (classical mechanics, electromagnetism, quantum mechanics, relativistic quantum mechanics, statistical mechanics and more) in 7 separate chapters -Contains simple explanations without the use of special functions

Sallet Features * **Mathematical Logic, Fundamental Concepts, Proofs And Mathematical Induction (Chapter 1)** * **Set Theory, Fundamental Concepts, Theorems, Proofs, Venn Diagrams, Product Of Sets, Application Of Set Theory And Fundamental Products (Chapter 2)** * **An Introduction To Binary Relations And Concepts, Graphs, Arrow Diagrams, Relation Matrix, Composition Of Relations, Types Of Relation, Partial Order Relations, Total Order Relation, Closure Of Relations, Poset, Equivalence Classes And Partitions. (Chapter 3)** * **An Introduction To Functions And Basic Concepts, Graphs, Composition Of Functions, Floor And Ceiling Function, Characteristic Function, Remainder Function, Signum Function And Introduction To Hash Function. (Chapter 4)** * **The Algebraic Structure Includes Group Theory And Ring Theory. Group Theory Includes Group, Subgroups, Cyclic Group, Cosets, Homomorphism, Introduction To Codes And Group Codes And Error Correction For Block Code. The Ring Theory Includes General Definition, Fundamental Concepts, Integral Domain, Division Ring, Subring, Homomorphism, An Isomorphism And Pigeonhole Principle (Chapters 5, 6 And 7)** * **A Treatment Of Boolean Algebras To Combinatorial Circuits. (Chapter 8)** * **An Introduction To Lattices And Basic Concepts (Chapter 9)** * **A Brief Introduction To Graph Theory Is Discussed. Elements Of Graph Theory Are Indispensable In Almost All Computer Science Areas. Examples Are Given Of Its Use In: Finding A Minimum Spanning Tree, Shortest Path Problem, Dijkstra'S Algorithm And Floyd-Warshall Algorithm, Travelling Salesman Problem, The Computer Representation And Manipulation Of Graphs Are Also Discussed. So That Certain Important Algorithms Can Be Included.(Chapters 10 And 11)** * **A Strong Emphasis Is Given On Understanding The Theorems And Its Applications** * **Numbers Of Illustrations Are Used Throughout The Book For Explaining The Concepts And Its Applications.** * **Figures And Tables Are Used To Illustrate Concepts, To Elucidate Proofs And To Motivate The Material. The Captions Of These Figures Provide Additional Explanation. Besides This, A Number Of Exercises Are Given For Practice**

Principles of Database Management The Practical Guide to Storing, Managing and Analyzing Big and Small DataCambridge University Press

In a time of high educational expectations and professional accountability, today's educational leaders need to possess a broad variety of skills that enable them to function comfortably and effectively in changing environments and under highly politicized conditions. Under these circumstances, change is the only constant. The mission of this book is to foster understanding of this reality among those preparing for administrative and managerial careers in pre-collegiate educational institutions and to help them develop skills necessary for working competently within those institutions. This text is eclectic: In approach, not ideological, and emphasizes an action-research perspective that compels readers to consider critically the theoretical underpinnings of current educational practice and motivates them to seek practical alternative approaches to solving both common and unique problems. This book addresses general principles underlying the knowledge base of leadership and management as specifically applied to educational institutions. It stirs learners' thoughts through the review of scholarship in a wide range of areas, encouraging them to critically consider the theoretical underpinnings of administrative practice.

Fundamental Concepts of Geometry

Statistics in a Nutshell

Fundamentals of Management, Loose-leaf Version

Fundamentals of Engineering Thermodynamics

Fundamentals of Road Design

Reinforce your understanding of basic nursing concepts and skills! Corresponding to the chapters in Fundamental Concepts and Skills for Nursing, 6th Edition, this study guide provides the review and practice you need to master essential LPN/LVN knowledge. Engaging exercises and questions help you learn to apply the nursing process, set priorities, practice critical thinking, make good decisions, and communicate effectively. With this practical review, you will get more out of your textbook and prepare for success on the Next Generation NCLEX-PN® exam. Review Questions for the NCLEX-PN® Examination let you practice for the exam with multiple-choice and alternate item format questions based on real-life situations. Word Attack Skills offer practice in pronouncing difficult terms and phrases, with emphasis on stress and intonation. Clinical Situations use realistic sample practice situations to stimulate critical thinking, clinical judgment, and practical application of nursing concepts. Critical Thinking Activities provide nursing scenarios and questions to help build your problem-solving skills. Developing Clinical Judgment activities help you meet the clinical practice objectives of the corresponding chapter. Communication Exercises let you practice using realistic nurse-patient dialogues, and are especially useful when paired with a partner. Cultural Points summarize issues and ask questions about customs that may differ across the cultures found in patient communities. Grammar Points exercises offer a refresher on common grammatical errors, such as the use of the past tense in taking case histories. Completion exercises boost your vocabulary by offering more opportunities to use key terms. Priority Setting questions ask you to rank tasks in order of importance. Short answer, identification, multiple-choice, and matching questions test and reinforce your knowledge of concepts conveyed in the text. Application of the Nursing Process questions ask you to use critical thinking skills and apply the steps of the nursing process to real-life patient care. Review of structure and function of the human body helps you remember what you learned in previous classes and how it applies to nursing. NEW! Updated exercises reflect content in the new edition of the Fundamental Concepts and Skills for Nursing textbook. NEW! UNIQUE! Next Generation NCLEX-Exam-style questions are included in every chapter, reflecting the Clinical Judgment Measurement Model, and include each of the five new approved question types: enhanced hotspot, cloze (drop down), matrix, extended multiple-response, and extended drag-and-drop question types.

This reference book communicates the basic theoretical knowledge, the practical requirements and experience for designing, mapping, calculating and checking roads and the planning process overall and at the same time reveals important development trends. The book is guided by the current rules and regulations in Germany, it universalizes this knowledge and also integrates important current research results in road design processes. In order to restrict the scope of the book, it only deals with the theoretical principles and knowledge, and the practical experience for designing rural roads, i.e. the special features of urban roads are not mentioned here. This clear separation primarily results from the different principles and rules and regulations. The terms, definitions, abbreviations and formula symbols are based on German usage, but can be transferred to an international framework without any difficulties. The book is particularly designed to be a course book for students of road design. As a reference book, it supports the ongoing training process for road transportation engineers in planning offices and public bodies. Any specialist working in the transportation sector can use it as a reference book.

Turbulence, turbulent combustion, and multiphase reacting flows have become major research topics in recent decades due to their application across diverse fields, including energy, environment, propulsion, transportation, industrial safety, and nanotechnology. Most of the knowledge accumulated from this research has never been published in book form—until now. Fundamentals of Turbulent and Multiphase Combustion presents up-to-date, integrated coverage of these topics in a concise, readable format. The book is divided into two parts: Fundamentals of Turbulence and Fundamentals of Multiphase Combustion. The first part covers the fundamentals of turbulence, including laminar premixed and non-premixed flames, theory of turbulence, turbulent premixed and non-premixed flames, and multiphase flows. Covers spray atomization and combustion, solid-propellant combustion, homogeneous propellants, nitramines, reacting boundary-layer flows, single energetic particle combustion, and granular bed combustion. Provides experimental setups and results whenever appropriate. Supported with a large number of examples and problems as well as a solutions manual. Fundamentals of Turbulent and Multiphase Combustion is an important resource for professional engineers and researchers as well as graduate students in mechanical, chemical, and aerospace engineering.

Since the publication of the bestselling first edition, there have been numerous advances in the field of nuclear science. In medicine, accelerator based teletherapy and electron-beam therapy have become standard. New demands in national security have stimulated major advances in nuclear instrumentation. An ideal introduction to the fundamentals of nuclear science and engineering, this book presents the basic nuclear science needed to understand and quantify an extensive range of nuclear phenomena. New to the Second Edition— A chapter on radiation detection by Douglas McGregor. Up-to-date coverage of radiation hazards, reactor designs, and medical applications. Flexible organization of material that allows for quick reference. This edition also takes an in-depth look at particle accelerators, nuclear fusion reactions and devices, and nuclear technology in medical diagnostics and treatment. In addition, the author discusses applications such as the direct conversion of nuclear energy into electricity. The breadth of coverage is unparalleled, ranging from the theory and design characteristics of nuclear reactors to the identification of biological risks associated with ionizing radiation. All topics are supplemented with extensive nuclear data compilations to perform a wealth of calculations. Providing extensive coverage of physics, nuclear science, and nuclear technology of all types, this second edition of Fundamentals of Nuclear Science and Engineering is a key reference for any physicist or engineer.

Fundamental Concepts of Educational Leadership and Management

Fundamentals of Management

Fundamental Concepts of MATLAB Programming

Fundamentals of Electrocardiografia (ECG) With Arduino Uno

Fundamentals of Financial Management

Fundamentals of Digital Logic and Microcomputer Design, has long been hailed for its clear and simple presentation of the principles and basic tools required to design typical digital systems such as microcomputers. In this Fifth Edition, the author focuses on computer design at three levels: the device level, the logic level, and the system level. Basic topics are covered, such as number systems and Boolean algebra, combinational and sequential logic design, as well as more advanced subjects such as assembly language programming and microprocessor-based system design. Numerous examples are provided throughout the text. Coverage includes: Digital circuits at the gate and flip-flop levels. Analysis and design of combinational and sequential circuits. Microcomputer organization, architecture, and programming concepts. Design of computer instruction sets, CPU, memory, and I/O. System design features associated with popular microprocessors from Intel and Motorola. Future plans in microprocessor development. An instructor's manual, available upon request. Additionally, the accompanying CD-ROM, contains step-by-step procedures for installing and using Altera Quartus II software, MASM 6.11 (8086), and 68asmsim (68000), provides valuable simulation results via screen shots. Fundamentals of Digital Logic and Microcomputer Design is an essential reference that will provide you with the fundamental tools you need to design typical digital systems.

The main purpose of developing stability theory is to examine dynamic responses of a system to disturbances as the time approaches infinity. It has been and still is the object of intense investigations due to its intrinsic interest and its relevance to all practical systems in engineering, finance, natural science and social science. This monograph provides some state-of-the-art expositions of major advances in fundamental stability theories and methods for dynamic systems of ODE and DDE types and in limit cycle, normal form and Hopf bifurcation control of nonlinear dynamic systems. Presents comprehensive theory and methodology of stability analysis. Can be used as textbook for graduate students in applied mathematics, mechanics, control theory, theoretical physics, mathematical biology, information theory, scientific computation. Serves as a comprehensive handbook of stability theory for practicing aerospace, control, mechanical, structural, naval and civil engineers.

A clear and concise introduction and reference for anyone new to the subject of statistics.

This book is intended for students and engineers who design and develop liquid-propellant rocket engines, offering them a guide to the theory and practice alike. It first presents the fundamental concepts (the generation of thrust, the gas flow through the combustion chamber and the nozzle, the liquid propellants used, and the combustion process) and then qualitatively and quantitatively describes the principal components involved (the combustion chamber, nozzle, feed systems, control systems, valves, propellant tanks, and interconnecting elements). The book includes extensive data on existing engines, typical values for design parameters, and worked-out examples of how the concepts discussed can be applied, helping readers integrate them in their own work. Detailed bibliographical references (including books, articles, and items from the "gray literature") are provided at the end of each chapter, together with information on valuable resources that can be found online. Given its scope, the book will be of particular interest to undergraduate and graduate students of aerospace engineering.

Fundamentals of Physics, Volume 1 (Chapters 1 - 20)

Fundamentals of Turbulent and Multiphase Combustion

An Integrated Approach

Fundamental Approach To Discrete Mathematics

Electric Power System Fundamentals

Ricky Griffin's FUNDAMENTALS OF MANAGEMENT, 9th Edition invites you into the study of management with a dynamic approach organized around the functions of management. You will strengthen your management skills with a proven balance of theory and practice as well as engaging learning features. Student-oriented skill applications and cases keep you focused and actively learning. A variety of exercises equip future managers to handle critical business situations. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

The title of the book reflects very well its content. This text would be useful to all those who are interested in learning mathematics well.

Going beyond the theoretical foundation, this step-by-step book gives you the technical knowledge and problem-solving skills that you need to perform real-world multivariate data analysis. --

The informal tone of these ten lectures by Roberto Harari reflects their original character as classes held at El Centro de Extension Psicoanalitica del Centro Cultural General, San Martin Buenos Aires. Destined for a wider audience than just the psychoanalytical camp, Harari's work presents the Lacanian endeavor without presupposition of specialized knowledge—and yet without conceding intellectual subtlety. Harari provides an introductory display of essential themes developed in Lacan's Four Fundamental Concepts of Psychoanalysis, and offers his own insightful reading of the text's central ideas. These ten classes, sparked by the crucial Seminar XI within the teaching of Lacan, reframe a wide range of questions in psychoanalysis for the professional in the field, scholars and students across disciplines, and interested lay readers. Harari is so at ease with Lacan's oeuvre that he can dismantle and rebuild its structure so that order and logic suddenly appear inherent to Lacan's way of thinking. The unconscious, transference, repetition, and the drive are here reintroduced, not only to do justice to Freud's insights, but also to link these concepts to the larger question of the complex relationships between psychoanalysis, religion, and science. Harari's didactic approach and his analytic style come together to bring us one step closer to understanding Lacan and one step closer to understanding ourselves.

Fundamental Concepts in Modern Analysis

Basic Concepts in Digital Electronics and Logic Design

Fundamentals of Interfacial Engineering

Fundamentals of Financial Management: Concise

Stability of Dynamical Systems

This market-leading textbook offers an engaging format and clear writing style that make it easy to master the basic nursing concepts and skills you need to practice in a variety of care settings. Its nursing process framework, health promotion focus, emphasis on critical thinking, and thorough coverage of communication and patient teaching provide a strong foundation for your nursing education. Full-color illustrations, critical thinking exercises, and practical examples help you strengthen and apply your knowledge of essential nursing concepts.

This text is an unbound, three hole punched version. Fundamentals of Materials Science and Engineering: An Integrated Approach, Binder Ready Version, 5th Edition takes an integrated approach to the sequence of topics – one specific structure, characteristic, or property type is covered in turn for all three basic material types: metals, ceramics, and polymeric materials. This presentation permits the early introduction of non-metals and supports the engineer's role in choosing materials based upon their characteristics. Using clear, concise terminology that is familiar to students, Fundamentals presents material at an appropriate level for both student comprehension and instructors who may not have a materials background. This text is an unbound, three hole punched version. Access to WileyPLUS sold separately.

Updated to reflect the latest advances in the field, the Sixth Edition of Fundamentals of Digital Logic and Microcontrollers further enhances its reputation as the most accessible introduction to the basic principles and tools required in the design of digital systems. Features updates and revision to more than half of the material from the previous edition Offers an all-encompassing focus on the areas of computer design, digital logic, and digital systems, unlike other texts in the marketplace Written with clear and concise explanations of fundamental topics such as number system and Boolean algebra, and simplified examples and tutorials utilizing the PIC18F4321 microcontroller Covers an enhanced version of both combinational and sequential logic design, basics of computer organization, and microcontrollers

Using easy-to-follow mathematics, this textbook provides comprehensive coverage of block codes and techniques for reliable communications and data storage. It covers major code designs and constructions from geometric, algebraic, and graph-theoretic points of view, decoding algorithms, error control additive white Gaussian noise (AWGN) and erasure, and dataless recovery. It simplifies a highly mathematical subject to a level that can be understood and applied with a minimum background in mathematics, provides step-by-step explanation of all covered topics, both fundamental and advanced, and includes plenty of practical illustrative examples to assist understanding. Numerous homework problems are included to strengthen student comprehension of new and abstract concepts, and a solutions manual is available online for instructors.

Modern developments, including polar codes, are also covered. An essential textbook for senior undergraduates and graduates taking introductory coding courses, students taking advanced full-year graduate coding courses, and professionals working on coding for communications and data storage.

Principles of Database Management

Fundamentals of Thermodynamics

Fundamental Concepts and Skills for Nursing

From Learning the Basics to Solving a Problem with MATLAB

Demonstrates relationships between different types of geometry. Provides excellent overview of the foundations and historical evolution of geometrical concepts. Exercises (no solutions). Includes 98 illustrations.

Gain a solid understanding of real-world corporate finance and financial management with a unique balance of contemporary theory and practical applications found in the leading FUNDAMENTALS OF FINANCIAL MANAGEMENT, CONCISE EDITION 9E by Brigham/Houston. Engaging and easy to understand, this complete introduction to corporate finance emphasizes the concept of valuation throughout and Time Value of Money (TVM) early, giving you time to absorb the concepts fully. Numerous examples, end-of-chapter applications, and Integrated Cases give you a better understanding of the concepts and reasons behind corporate budgeting, financing, and working capital decision making. In addition, Excel Spreadsheet Models help you master this critical software tool. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Fundamentals of Matrix-Analytic Methods targets advanced-level students in mathematics, engineering and computer science. It focuses on the fundamental parts of Matrix-Analytic Methods, Phase-Type Distributions, Markovian arrival processes and Structured Markov chains and matrix geometric solutions. New materials and techniques are presented for the first time in research and engineering design. This book emphasizes stochastic modeling by offering probabilistic interpretation and constructive proofs for Matrix-Analytic Methods. Such an approach is especially useful for engineering analysis and design. Exercises and examples are provided throughout the book.

Many advanced mathematical disciplines, such as dynamical systems, calculus of variations, differential geometry and the theory of Lie groups, have a common foundation in general topology and calculus in normed vector spaces. In this book, mathematically inclined engineering students are offered an opportunity to go into some depth with fundamental notions from mathematical analysis that are not only important from a mathematical point of view but also occur frequently in the more theoretical parts of the engineering sciences. The book should also appeal to university students in mathematics and in the physical sciences. Contents:Basic Concepts in Topology;Differentiation in Normed Vector Spaces;The Inverse Function Theorem;Differentiable Manifolds;An Introduction to Singularity Theory;An Introduction to Geometric Variational Problems; Variational Problems; Readership: Lecturers and students in pure mathematics, theoretical engineering and the physical sciences. Keywords:Pointset Topology;General Topology;Normed Vector Spaces;Differentiability in Normed Vector Spaces;Inverse Function Theorem in Banach Spaces;Differentiable Manifolds;Transversality Theory;Singularity Theory;Variational Problems;More Theorems. "It is written in a dense but very deep and conceptual style. Its evident instructive character is also one of the advantages of this textbook." Mathematics Abstracts

Fundamentals of Classical and Modern Error-Correcting Codes

Fundamentals of Digital Logic and Microcomputer Design

Fundamentals of Nuclear Science and Engineering Second Edition

Fundamentals of Remote Sensing

Fundamentals of Modeling and Analyzing Engineering Systems

With the same contemporary approach and dynamic examples that made previous editions so popular, FUNDAMENTALS OF FINANCIAL MANAGEMENT, 14e continues to provide students with a focused understanding of today's corporate finance and financial management. This market-leading text offers a unique balance of clear concepts, contemporary theory, and practical applications in order to help students understand the concepts and reasons behind corporate budgeting, financing, working capital decision making, forecasting, valuation, and Time Value of Money (TVM). Offering the most cutting-edge coverage available, the Fourteenth Edition includes discussions of the federal debt, the ongoing recovery of financial markets, and the European debt crisis. Numerous practical examples, Quick Questions, and Integrated Cases demonstrate theory in action. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

"This book is fast becoming the standard text in its field", wrote a reviewer in the Journal of Canadian Petroleum Technology soon after the first appearance of Duke's book. This prediction quickly came true: it has become the standard text and has been reprinted many times. The author's aim - to provide students and teachers with a coherent account of the basic physics of reservoir engineering - has been most successfully achieved. No prior knowledge of reservoir engineering is necessary. The materials dealt with in a concise, unified and applied manner, and only the simplest and most straightforward mathematical techniques are used. This low-priced paperback edition will continue to be an invaluable teaching aid for years to come. The concept of this book is ECG signals. Electrocardiography is connected with Arduino UNO - microcontroller. This book demonstrates how our heart waves can be connected to a microcontroller. What kind of obstruction or change occurs in the wave according to the different changes of the atmosphere can be known from this book. The ECG Signal plays an important role in the diagnosis of heart diseases and disorders. An ECG is a significant physiological signal for diagnosis of cardiac disease. Modern usage of monitoring devices with electrocardiogram is increasing. Huge storage space and large quantities of data are that, and ECG connection is required for efficient storage and it has been extracted from a medical database. An interesting research line focuses on transforming the original one-dimensional waveforms of the ECG into two-dimensional information, followed by a processing stage using image processing tools. Many cardiac abnormalities can be observed with the aid of an ECG interpretation including inadequate blood flow, heart muscle death due to coronary thrombosis and heart muscle enlargement. Arduino can be used to for the development of interactive objects, taking inputs to control outputs. It is connected to the Arduino hardware to communicate and upload sketches. Arduino can read information from input devices such as Trimmer(potentiometer), Antenna, Sensors, e.t.c. and can also send data to the output devices such as Speakers, LED, DC motor, LCD Screen, e.t.c. User communities are groups of people using a given product, the Arduino in this case. So, the design has been enhanced, and it helps drive the Arduino board for direction to future.

This book presents the fundamental concepts covering various stages of remote sensing from data collection to end utilization, so that it can be appreciated irrespective of the discipline in which the reader has graduated. The physical principles on which remote sensing are based has been explained without getting into complicated mathematical equations.

Fundamentals of Digital Logic and Microcontrollers

Study Guide for Fundamental Concepts and Skills for Nursing -E-Book

The Practical Guide to Storing, Managing and Analyzing Big and Small Data

Fundamental Concepts of Mathematics

Fundamental Concepts of Liquid-Propellant Rocket Engines

This leading text in the field maintains its engaging, readable style while presenting a broader range of applications that motivate engineers to learn the core thermodynamics concepts. Two new coauthors help update the material and integrate engaging, new problems. Throughout the chapters, they focus on the relevance of thermodynamics to modern engineering problems. Many relevant engineering based situations are also presented to help engineers model and solve their problems.

A concise treatment of the fundamentals of thermodynamics is presented in this book. In particular, emphasis is placed on discussions of the second law, a unique feature of thermodynamics, which states the limitations of converting thermal energy into mechanical energy. The entropy function that permits the loss in the potential of a real thermodynamic process to be assessed, the maximum possible work in a process, and irreversibility and equilibrium are deduced from the law through physical and intuitive considerations. They are applicable in mitigating waste heat and are useful for solving energy, power, propulsion and climate-related issues. The treatment is not restricted to properties and functions of ideal gases. The ideal gas assumption is invoked as a limiting case. Reversible paths between equilibrium states are obtained using reversible heat engines and reversible heat pumps between environment and systems to determine the entropy changes and the maximum work. The conditions of thermodynamic equilibrium comprising mechanical, thermal, chemical and phase equilibrium are addressed and the species formed at equilibrium in a chemical reaction at a given temperature and pressure are obtained. The molecular basis for the laws of thermodynamics, temperature, internal energy changes, entropy, reversibility and equilibrium are briefly discussed. The book serves as a reference for undergraduate and graduate students alongside thermodynamics textbooks.

Broad-based introduction to engineering systems, presenting a unified treatment of disparate physical systems.

Introductory, theory-practice balanced text teaching the fundamentals of databases to advanced undergraduates or graduate students in information systems or computer science.

Fundamentals of Materials Science and Engineering

Fundamentals of Industrial Hygiene

Fundamentals of Reservoir Engineering

Fundamentals of Analysis in Physics

Fundamentals of Predictive Analytics with JMP, Second Edition

Fundamentals of Physics, 10th Edition, Volume 1 contains Chapters 1 - 20. Access to WileyPLUS is not included with this textbook. The 10th edition of Halliday, Resnick and Walkers Fundamentals of Physics provides the perfect solution for teaching a 2 or 3 semester calc-based physics course, providing instructors with a tool by which they can teach students how to effectively read scientific material, identify fundamental concepts, reason through scientific questions, and solve quantitative problems. The 10th edition builds upon previous editions by offering new features designed to better engage students and support critical thinking. These include NEW Video Illustrations that bring the subject matter to life, NEW Vector Drawing Questions that test student's conceptual understanding, and additional multimedia resources (videos and animations) that provide an alternative pathway through the material for those who struggle with reading scientific exposition. Master the process of management with the skills-based, functional approach in Griffin's FUNDAMENTALS OF MANAGEMENT, 10E. Timely content focuses on active planning, leading, organizing and controlling as you examine emerging management topics and the latest trends. New discussions explore the impact of technology, the importance of a green business environment, the need to adapt in changing times, ethical challenges and the increasing importance of diversity. This is one of the first management books to examine the impact of the COVID-19 pandemic and resulting economic turmoil. New cases and updated learning features support a balance of classic theory and contemporary practice. You learn to think and act like a successful manager as hundreds of well-researched, contemporary examples demonstrate the importance of strong management in any type of organization, from Starbucks and Hilton Hotels to Quicken Loans.

Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version. Gain the understanding of today's financial markets and corporate financial management you need to propel you toward your goals with the contemporary insights and innovative learning tools found in Brigham/Houston's popular FUNDAMENTALS OF FINANCIAL MANAGEMENT: CONCISE, 11E. This market leader offers intriguing insights into the social responsibility of business, the significant effects of recent changes in corporate tax code, the ongoing multiple effects related to the economic impact of the coronavirus pandemic and other emerging issues straight from today's headlines. Clear explanations and real, meaningful examples help you understand the what and the why of corporate budgeting, financing, working capital decision making, forecasting, valuation and Time Value of Money. Hands-on exercises, cases and activities guide you in putting the theory you learn into action. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

"Fundamentals of Interfacial Engineering" provides chemical, electronic, mechanical, and biomedical engineers with a coherent, integrated introduction to the fundamental concepts that relate to interfacial phenomena with applications to different processes and product situations. This book emphasizes the importance of intermolecular forces in holding materials together within a bulk phase or across an interface. It outlines the fundamental intermolecular interactions that occur in all interfacial systems. The work also describes the properties, processing, and behavior of fluid interfacial systems and treats solid surfaces and interfaces. In addition to being of direct industrial relevance, this book will provide engineering instructors with an excellent starting point for planning curriculum development in this important area.

Fundamentals of Financial Management, Concise Edition

Lacan's Four Fundamental Concepts of Psychoanalysis

Fundamentals of Matrix-Analytic Methods

This comprehensive resource presents the fundamentals of power systems, including the theory, practical steps, and methods used in the design and management of energy systems. Readers are provided with a uniquely comprehensive derivation of power electronics and will find practical advice based on actual occurrences in the field using real life scenarios. This book offers a direct mathematical approach for models of the main components in an electrical power system. This resource gives insight into power transformer modeling, transmission line and cable modeling, transmission line load ability, power flows, and real and reactive power and frequency control. General fault studies in electrical power systems and state estimation in electrical power systems are also explored.

Learn how to use MATLAB commands and functions in an efficient and effective manner KEY FEATURES ? Get familiar and work with the in-built functions in MATLAB ? Learn how to solve algebraic equations in MATLAB ? Explore various techniques for plotting numerical data ? Learn how to preprocess data to ensure accurate, efficient, and meaningful analysis ? Learn how to issue commands to create variables and call functions DESCRIPTION MATLAB has been an essential platform for data computation. There are various types of technologies that are going on, but it requires a tool for data handling. MATLAB provides better computing power for a massive amount of data. This book will be your comprehensive guide to creating applications, simulation, computation measures. The book begins with an introduction MATLAB and quickly goes on to teach you the usage of MATLAB. After this, we will explore the various commands and essential concepts and topics about MATLAB. Moving forward, we'll explore importing and exporting data, handling data, and visualization of data through different ways to plot a graph. Towards the end, we will explore the basic algebraic functions used in MATLAB. WHAT WILL YOU LEARN ? Learn how to build and run MATLAB statements ? Execute a block of code repeatedly using the Loop Control Statements ? Create a user-defined function by using MATLAB ? Create, Concatenate, and Expand the most basic MATLAB data structure; Matrix ? Understand how to plot a 2D and 3D graph WHO THIS BOOK IS FOR This book is for everyone from the Engineering and Sciences background. It is also for PGDCA, B.Tech. B.E., BCA, BSC, M.Tech. .M.E., MCA, M.Com., MSc., Ph.D. other UG, and PG degree students. TABLE OF CONTENTS 1. Basics of MATLAB 2. Expressions and Basic Commands of MATLAB 3. Data Types, Variables and Operators 4. Decision Control Statements 5. Loops Control Statements 6. Vectors 7. Matrix 8. Arrays 9. Strings 10. Functions 11. Data Import and Export 12. Plotting a Graph 13. Graphics 14. Basic Algebra in MATLAB

Fundamental Concepts of Mathematics, 2nd Edition provides an account of some basic concepts in modern mathematics. The book is primarily intended for mathematics teachers and lay people who wants to improve their skills in mathematics. Among the concepts and problems presented in the book include the determination of which integral polynomials have integral solutions; sentence logic and informal set theory; and why four colors is enough to color a map. Unlike in the first edition, the second edition provides detailed solutions to exercises contained in the text. Mathematics teachers and people who want to gain a thorough understanding of the fundamental concepts of mathematics will find this book a good reference.