

Electric Circuits 1st Edition Cengage

MODERN MOTORCYCLE TECHNOLOGY, Second Edition takes your students on an in-depth exploration of the internal and external workings of today's motorcycles. The book begins with an overview of motorcycle technology, from a history of the vehicle to the current state of the industry. Coverage then progresses to safety measures, engine operation, internal combustion engines (2-stroke and 4-stroke), electrical fundamentals, and overall motorcycle maintenance, as well as a special chapter devoted to troubleshooting. Throughout the book, the author's straightforward writing style and extensive, full-color photos and illustrations help engage readers and bring the material to life. The Second Edition has been thoroughly updated, and includes new content on the latest motorcycle models and technology from today's top manufacturers. The new edition also features additional material on key topics such as fuel injection, suspension systems, and V-engine technology, as well as an expanded suite of separately available supplementary teaching and learning tools including a hands-on student workbook and electronic instructor's resources. Modern Motorcycle Technology is a valuable resource for anyone seeking the knowledge and skills to succeed in today's motorcycle technology field. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

The Complete Laboratory Manual for Electricity, 2E is the ultimate preparation resource for any curriculum dedicated to training electricians. From basic electricity through AC theory, transformers, and motor controls, all aspects of a typical electrical curriculum are explored in a single volume. Hands-on experiments that acquaint students with the theory and application of electrical concepts offer valuable experience in constructing a multitude of circuits such as series, parallel, combination, RL series and parallel, RC series and parallel, and RLC series and parallel circuits. Each lab features an explanation of the circuit to be connected, with examples of the calculations necessary to complete the exercise and step-by-step procedures for conducting the experiment. Labs use generic equipment and devices commonly found in most hardware stores and electrical supply houses, and a materials list details the components necessary to perform all of the exercises.

This well-respected text gives an introduction to the theory and application of modern numerical approximation techniques for students taking a one- or two-semester course in numerical analysis. With an accessible treatment that only requires a calculus prerequisite, Burden and Faires explain how, why, and when approximation techniques can be expected to work, and why, in some situations, they fail. A wealth of examples and exercises develop students' intuition, and demonstrate the subject's practical applications to important everyday problems in math, computing, engineering, and physical science disciplines. The first book of its kind built from the ground up to serve a diverse undergraduate audience, three decades later Burden and Faires remains the definitive introduction to a vital and practical subject. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

DIGITAL ELECTRONICS offers a comprehensive, computer-supported introduction to digital electronics, from basic electrical theory and digital logic to hands-on, high-tech applications. Designed to support Project Lead the Way's (PLTW) innovative Digital Electronics (DE) curriculum, this dynamic text prepares students for college and career success in STEM (Science, Technology, Engineering, and Math). The text introduces core concepts such as electrical shop practices and electrical theory, enables students to gain confidence by exploring key principles and applying their knowledge, and helps develop sophisticated skills in circuit analysis, design, and troubleshooting. Many of the text's abundant examples and exercises support the use of Multisim, allowing students to visualize and analyze circuits including combinational and sequential circuits before constructing them. In addition, a variety of proven learning tools make mastering the material easier, including self-check problems in every chapter, Bring it Home questions to solidify core concepts, and challenging Extra Mile problems to help students deepen their understanding and hone their skills. As an integrated part of your PLTW program or a stand-alone classroom resource, DIGITAL ELECTRONICS is an ideal choice to support your students' STEM success. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

The Complete Laboratory Manual for Electricity

A First Course in Differential Equations with Modeling Applications

Fundamentals of Mechatronics

Engineering Fundamentals: An Introduction to Engineering, SI Edition

Theory and Practice

This book covers all important, new, and conventional aspects of building electrical systems, power distribution, lighting, transformers and rotating electric machines, wiring, and building installations. Solved examples, end-of-chapter questions and problems, case studies, and design considerations are included in each chapter, highlighting the concepts, and diverse and critical features of building and industrial electrical systems, such as electric or thermal load calculations; wiring and wiring devices; conduits and raceways; lighting analysis, calculation, selection, and design; lighting equipment and luminaires; power quality; building monitoring; noise control; building energy envelope; air-conditioning and ventilation; and safety. Two chapters are dedicated to distributed energy generation, building integrated renewable energy systems, microgrids, DC nanogrids, power electronics, energy management, and energy audit methods, topics which are not often included in building energy textbooks. Support materials are included for interested instructors. Readers are encouraged to write their own solutions while solving the problems, and then refer to the solved examples for more complete understanding of the solutions, concepts, and theory. Designed to help students learn fundamental electrical concepts and explore their practical applications, this trusted text provides a solid foundation in electron theory and movement, direct-current series circuits, parallel circuits, series-parallel circuits, voltage line drops, rotating machinery fundamentals, and more.

ELECTRICITY 1: DEVICES, CIRCUITS AND MATERIALS, Tenth Edition, maintains the user-friendly style and proven instructional approach that are so effective, all while incorporating new material and updates based on the 2011 National Electrical Code. Featuring current industry terminology, photographs of commonly used electrical equipment, and sample problems with solutions, this convenient, affordable text is an ideal choice for your class formastering basic electricity, house wiring, or commercial installations. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

DIGITAL SYSTEMS DESIGN USING VERILOG integrates coverage of logic design principles, Verilog as a hardware design language, and FPGA implementation to help electrical and computer engineering students master the process of designing and testing new hardware configurations. A Verilog equivalent of authors Roth and John's previous successful text using VHDL, this practical book presents Verilog constructs side-by-side with hardware, encouraging students to think in terms of desired hardware while writing synthesizable Verilog. Following a review of the basic concepts of logic design, the authors introduce the basics of Verilog using simple combinational circuit examples, followed by models for simple sequential circuits. Subsequent chapters ask readers to tackle more and more complex designs. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

The objective of **FUNDAMENTALS OF MECHATRONICS** is to cover both hardware and software aspects of mechatronics systems in a single text, giving a complete treatment to the subject matter. The text focuses on application considerations and relevant practical issues that arise in the selection and design of mechatronics components and systems. The text uses several programming languages to illustrate the key topics. Different programming platforms are presented to give instructors the choice to select the programming language most suited to their course objectives. A separate laboratory book, with additional exercises is provided to give guided hands-on experience with many of the topics covered in the text. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

Understanding Motor Controls

The Basics of Communication Research

Electrical Principles

Electrical Installation and Inspection

LEARNING AND BEHAVIOR, Seventh Edition, is stimulating and filled with high-interest queries and examples. Based on the theme that learning is a biological mechanism that aids survival, this book embraces a scientific approach to behavior but is written in clear, engaging, and easy-to-understand language. Available with InfoTrac Student Collections <http://goengage.com/infotrac>. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

Supports learning and delivery in: - UEE30811 Certificate III in Electrotechnology Electrician - UEE22011 Certificate II in Electrotechnology (Career Start) Phillips, Electrical Principles uses a student-friendly writing style, a range of fully worked examples and full-colour illustrations to make the basic principles easier to understand. Covering the core knowledge components of the current UEE11

Electrotechnology Training Package and referencing the new AS/NZS 3000:2018 Wiring Rules, this textbook is structured, written and illustrated to present the information in a way that is accessible to students. With a new focus on sustainable energy, brushless DC motors and the inclusion of student ancillaries, as well as structuring more closely to the knowledge and skills requirements for each competency unit covered, Electrical Principles, 4e is the ideal text for students enrolled in Certificate II and III Electrotechnology qualifications. With more than 800 diagrams, hundreds of worked examples, practice questions and self-check questions, this edition is the most up-to-date text in the market. The writing style is aimed at Certificate III students while retaining the terminology typically used in the Electrical Trades. Additionally, the technical content does not break into a level above that of Certificate III. At all times the book uses illustrations integrated with the text to explain a topic.

Your students will be able to install, troubleshoot, and test electrical motors like the pros! **UNDERSTANDING MOTOR CONTROLS, 2ND Edition** uses a real-world systems approach to learning motor control devices. Starting with basic control circuits and components, this book covers all must-know applications and procedures to ensure reader success in the more complex topics. From development and installation to testing and troubleshooting, **UNDERSTANDING MOTOR CONTROLS, 2ND Edition** prepares future industrial electricians with a solid foundation in basic control circuits, sensing devices, solid-state controls, variable speed drives, programmable logic controllers (PLCs), and more. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

A FIRST COURSE IN DIFFERENTIAL EQUATIONS WITH MODELING APPLICATIONS, 10th Edition strikes a balance between the analytical, qualitative, and quantitative approaches to the study of differential equations. This proven and accessible text speaks to beginning engineering and math students through a wealth of pedagogical aids, including an abundance of examples, explanations, Remarks boxes, definitions, and group projects. Written in a straightforward, readable, and helpful style, this book provides a thorough treatment of boundary-value problems and partial differential equations. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

Industrial Automated Systems: Instrumentation and Motion Control

An Introduction

Circuit Analysis

The Guidebook for Linemen and Cablemen

Analysis and Design

The Sixth Edition of BASIC AUTOMOTIVE SERVICE & SYSTEMS includes a Classroom Manual and a Shop Manual to provide a comprehensive, accessible overview of automotive systems to prepare readers for all aspects of work in the field. Updated to align with Task Lists for the latest ASE Education Foundation requirements, the Sixth Edition covers emerging technologies such as hybrid vehicles and electronic engine controls, as well as current information on the global automotive industry and the role of the technician within it. The Classroom Manual explores the theories of operation behind each automotive system, while the Shop Manual covers relevant diagnostic, testing, and repair procedures. Assuming no prior knowledge of automotive technology, these clear and engaging resources combine to provide a thorough introduction to both fundamental theory and its real-world applications in specific skills and maintenance procedures. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

CIRCUIT ANALYSIS: THEORY AND PRACTICE, 5E, International Edition provides a thorough, engaging introduction to the theory, design, and analysis of electrical circuits. Comprehensive without being overwhelming, this reader-friendly book combines a detailed exploration of key electrical principles with an innovative, practical approach to the tools and techniques of modern circuit analysis. Coverage includes topics such as direct and alternating current, capacitance, inductance, magnetism, simple transients, transformers, Fourier series, methods of analysis, and more. Conceptual material is supported by abundant illustrations and diagrams throughout the book, as well as hundreds of step-by-step examples, thought-provoking exercises, and hands-on activities, making it easy to master and apply even complex material.Now thoroughly updated with new and revised content, illustrations, examples, and activities, the Fifth Edition also features powerful new interactive learning resources. Nearly 200 files for use in MultiSim 11 allow you to learn in a full-featured virtual workshop, complete with switches, multimeters, oscilloscopes, signal generators, and more. Designed to provide the knowledge, skills, critical thinking ability, and hands-on experience you need to confidently analyze and optimize circuits, this proven book provides ideal preparation for career success in electricity, electronics, or engineering fields.

Updated with modern coverage, a streamlined presentation, and an excellent CD-ROM, this fifth edition achieves a balance between theory and application. Author Charles H. Roth, Jr. carefully presents the theory that is necessary for understanding the fundamental concepts of logic design while not overwhelming students with the mathematics of switching theory. Divided into 20 easy-to-grasp study units, the book covers such fundamental concepts as Boolean algebra, logic gates design, flip-flops, and state machines. By combining flip-flops with networks of logic gates, students will learn to design counters, adders, sequence detectors, and simple digital systems. After covering the basics, this text presents modern design techniques using programmable logic devices and the VHDL hardware description language.

"Industrial Electrical Troubleshooting demonstrates the efficient use of certain electrical meters to troubleshoot relay-logic circuits with a single setting. Today, a generation of electronic meters is available to test voltage and continuity without changing the setting of the meter or de-energizing the circuit. Careful attention has been given to safety procedures throughout the book. Traditional troubleshooting techniques have not kept pace with this equipment though. Instructors and students will find comprehensive and up-to-date information for safely and efficiently locating problems and then troubleshooting online. Multimeters, clamp-on meters, ammeters, megohmmeters, proximity voltage meters, hand-held oscilloscopes and other meters are thoroughly discussed as plant electrical troubleshooting tools.

Hybrid, Electric, and Fuel-Cell Vehicles

Computerized Engine Controls

Introduction to PSpice Manual for Electric Circuits

Radiologic Technology at a Glance (Book Only)

Glossary and Sample Exams for DeVore's Probability and Statistics for Engineering and the Sciences, 7th

One of the newest additions to Delmar's best-selling electrical line, Electrical Installation and Inspection uses comparative examples and step-by-step instructions to teach readers how to design and inspect electrical installations in a manner consistent the 2002 National Electrical Code (NEC). The book begins with an introduction to basic electricity and proceeds, in logical order, through basic circuits and formulas to an examination of different types of electrical equipment and materials. Articles in the 2002 NEC provide the framework for studying residential, commercial, and industrial electrical design applications. However, readers are urged to remember that an understanding of, and appreciation for, Code provisions is but a minimum requirement for a safe installation. Beyond meeting Code, the author stresses the importance of electrical designs that meet end-user needs while also minimizing hazards inherent in the use of electrical energy.

Providing thorough coverage of both fundamental electrical concepts and current automotive electronic systems, **COMPUTERIZED ENGINE CONTROLS, Eleventh Edition**, equips readers with the essential knowledge they need to successfully diagnose and repair modern automotive systems. Reflecting the latest technological advances from the field, the Eleventh Edition offers updated and expanded coverage of diagnostic concepts, equipment, and approaches used by today's professionals. All photos and illustrations are now printed in full, vibrant color, making it easier for today's visual learners to engage with the material and connect chapter concepts to real-world applications. Drawing on abundant, firsthand industry experience, the author provides in-depth insights into cutting-edge topics such as hybrid and fuel cell vehicles, automotive multiplexing systems, and advanced driver assist systems. In addition, key concepts are reinforced with ASE-style end-of-chapter questions to help prepare readers for certification and career success. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

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Electric CircuitsCengage Learning

Microelectronic Circuits

Digital Electronics

Electricity 1: Devices, Circuits, and Materials

Electric Circuits

Using Orcad Release 9.2

Learn to maintain and repair the high tech hospital equipment with this practical, straightforward, and thorough new book. Biomedical Instrumentation Systems uses practical medical scenarios to illustrate effective equipment maintenance and repair procedures. Additional coverage includes basic electronics principles, as well as medical device and safety standards. Designed to provide readers with the most current industry information, the latest medical websites are referenced, and today's most popular software simulation packages like MATLAB and MultiSIM are utilized. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

The Guidebook for Linemen and Cablemen, 2nd Edition is the much needed solution for anyone working on or training to work on electrical utility circuits. Packaged as a convenient, single-volume reference guide on the operation of electrical utility systems, this book will give you what other resources won't: practical coverage of the equipment and situations that power line workers are exposed to on a daily basis, with a focus on ensuring concepts are meaningful and applicable. This book also pays special attention to the order in which topics are addressed; simple concepts are explained first, and the book then builds upon these fundamentals to explain more complex theories, thereby setting a strong foundation for clearly understanding key rules and regulations. This text been updated to include the most current industry information available, including applications of recent technology. This book also contains in-depth exploration of the mechanical aspects of the job, such as working with rigging, trucks, stringing wire, and tree felling. The need for safety and training is highlighted throughout the book, resulting in a powerful resource for linemen, cable men, foremen, and others associated with the transmission and distribution departments of electric utility companies. Check out our app, DEWALT® Mobile Pro(tm). This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

Ideal for aspiring and active automotive professionals, **TODAY'S TECHNICIAN: AUTOMOTIVE ELECTRICITY & ELECTRONICS, Seventh Edition**, equips readers to confidently understand, diagnose, and repair electrical and electronic systems in today's automobiles. Using a unique two-volume approach to optimize learning in both the classroom and the auto shop, the first volume (Classroom Manual) covers the theory and application of electricity, electronics, and circuitry in modern automobiles, while the second (Shop Manual) focuses on real-world symptoms, diagnostics, and repair information. Known for its comprehensive coverage, accurate and up-to-date technical information, and hundreds of detailed color illustrations and photographs, the text is an ideal resource to prepare for success as an automotive technician or pursue ASE certification. Now updated with extensive information on new and emerging technology and techniques—including telematic systems, LED and adaptive lighting, hybrid and electric vehicles, stop/start technology, lane departure warning, self-park systems, Wi-Fi connectivity, and other modern accessory systems--the Seventh Edition also aligns with the ASE Education Foundation 2017 accreditation model and includes job sheets correlated to all MLR, AST, and MAST tasks. **Important Notice:** Media content referenced within the product description or the product text may not be available in the ebook version.

INDUSTRIAL AUTOMATED SYSTEMS: INSTRUMENTATION AND MOTION CONTROL, is the ideal book to provide readers with state-of-the art coverage of the full spectrum of industrial maintenance and control, from servomechanisms to instrumentation. Readers will learn about components, circuits, instruments, control techniques, calibration, tuning and programming associated with industrial automated systems. INDUSTRIAL AUTOMATED SYSTEMS: INSTRUMENTATION AND MOTION CONTROL, focuses on operation, rather than mathematical design concepts. It is formatted into sections so that it can be used for a variety of courses, such as electrical motors, sensors, variable speed drives, programmable logic controllers, servomechanisms, and various instrumentation and process classes. This book also offers readers a broader coverage of industrial maintenance and automation information than other books and provides them with a more extensive collection of supplements, including a lab manual and two hundred animated multimedia lessons on a CD. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Biomedical Instrumentation Systems

DC Circuits: Basic electricity and circuit concepts

Industrial Electrical Troubleshooting Iml

Electrical Theory for Renewable Energy

Cengage Advantage Books: Introduction to Sociology

ELECTRICAL WIRING RESIDENTIAL, 17E, updated to comply with the 2011 National Electrical Code, is a bestselling book that has already helped many students learn the basics of residential wiring in both new and existing homes This text uses a practical approach and comprehensive coverage to guide your students step-by-step through the critical tasks and responsibilities that face today's professional residential electricians. With coverage of energy conservation laws like Title 24, as well as today's important concepts such as ground fault circuit interrupters, smoke, heat, and carbon monoxide alarms. 2011 NEC requirements for house wiring, and Solar Photovoltaic Systems, your students can feel confident they are getting the very latest in industry standards and procedures. A unique feature of ELECTRICAL WIRING RESIDENTIAL, 17E is the sets of plans in the back of the book that offer your students opportunities for hands-on practice in interpreting and applying Code requirements, making this an ideal resource for your students who will work in the residential electrical industry. This book also contains updated Illustrations coordinated with the latest NEC regulations. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Mastering the theory and application of electrical concepts is necessary for a successful career in the electrical installation or industrial maintenance fields, and this new fifth edition of DELMAR'S STANDARD TEXTBOOK OF ELECTRICITY delivers! Designed to train aspiring electricians, this text blends concepts relating to electrical theory and principles with practical 'how to' information that prepares students for situations commonly encountered on the job. Topics span all the major aspects of the electrical field including atomic structure and basic electricity, direct and alternating current, basic circuit theory, three-phase circuits, single phase, transformers, generators, and motors. This revision retains all the hallmarks of our market-leading prior editions and includes enhancements such as updates to the 2011 NEC, a CourseMate homework lab option, and a new chapter on industry orientation as well as tips on energy efficiency throughout the tex. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Combining the time tested classical work of Earl Babbie with the insights of one of the most recognized and respected names in speech communication research, THE BASICS OF COMMUNICATION RESEARCH is the book for the Communication research methods course. With the authors' collective experience teaching research methods and as active researchers themselves you will find this text to be the authoritative text for your course. The authors frame research as a way of knowing, and provide balanced treatment to both quantitative and qualitative research traditions in communication research and present it in a student friendly and engaging format. It provides in-depth treatment of the role of reasoning in the research enterprise and how this reasoning process plays itself out in planning and writing a research proposal and report. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Now in its fourth edition, Introduction to Electronics continues to offer its readers a complete introduction to basic electricity/electronics principles with emphasis on hands-on application of theory. Expanded discussion of Capacitive AC, Inductive AC, and Resonance Circuits is just the beginning! For the first time, MultiSIM® problems have been integrated into Introduction to Electronics, providing even greater opportunities to apply basic electronics principles and develop critical thinking skills by building, analyzing, and troubleshooting DC and AC circuits. In addition, this electron flow, algebra-based electricity/electronics primer now includes coverage of topics such as surface mount components, Karnaugh maps, and microcontrollers that are becoming increasingly important in today's world. Introduction to Electronics is the ideal choice for readers with no prior electronics experience who seek a basic background in DC and AC circuits that aligns closely with today's business and industry requirements. Objectives are clearly stated at the beginning of each brief, yet highly focused chapter to focus attention on key points. In addition, all-new photographs are used throughout the book and detailed, step-by-step examples are included to show how math and formulas are used. Chapter-end review questions and summaries ensure mastery, while careers are profiled throughout Introduction to Electronics, 4th Edition to stimulate the reader's interest in further study and/or potential employment in electronics or related fields.

Process Technology Systems

Digital Systems Design Using Verilog

Introduction to Electronics

Today's Technician: Automotive Electricity and Electronics, Classroom and Shop Manual Pack, Spiral bound Version

Introduction to Basic Electricity and Electronics Technology

Packed with current examples you can easily relate to, Tischler's INTRODUCTION TO SOCIOLOGY, 11E delivers comprehensive, up-to-date coverage in a succinct and affordable format. The author begins by equipping you with tools for success, including tips for how to read, study, and take tests more effectively. A built-in study guide and practice tests ensure thorough understanding. The text threads two basic ideas throughout: sociology is a rigorous, scientific discipline, and basic knowledge of sociology is essential for understanding social interaction in many work and social settings. With its streamlined 16 chapters, INTRODUCTION TO SOCIOLOGY, 11E delivers cutting-edge coverage that is concise yet thorough--and makes sociology completely accessible. Available with InfoTrac Student Collections <http://goengage.com/infotrac>. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

The new edition of POWER SYSTEM ANALYSIS AND DESIGN provides students with an introduction to the basic concepts of power systems along with tools to aid them in applying these skills to real world situations. Physical concepts are highlighted while also giving necessary attention to mathematical techniques. Both theory and modeling are developed from simple beginnings so that they can be readily extended to new and complex situations. The authors incorporate new tools and material to aid students with design issues and reflect recent trends in the field. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

The fourth edition of this work continues to provide a thorough perspective of the subject, communicated through a clear explanation of the concepts and techniques of electric circuits. This edition was developed with keen attention to the learning needs of students. It includes illustrations that have been redesigned for clarity, new problems and new worked examples. Margin notes in the text point out the option of integrating PSpice with the provided Introduction to PSpice; and an instructor's roadmap (for instructors only) serves to classify homework problems by approach. The author has also given greater attention to the importance of circuit memory in electrical engineering, and to the role of electronics in the electrical engineering curriculum.

HYBRID, ELECTRIC AND FUEL-CELL VEHICLES, Second Edition, covers the cutting-edge technology and technology that are revolutionizing today's automotive industry. Author Jack Erjavec combines in-depth industry expertise with an engaging, reader-friendly style, providing extensive detail on new and upcoming electric vehicles, including hybrids in production today and the fuel cell vehicles of tomorrow. Expansive coverage ranges from basic theory related to vehicle construction, electricity, batteries, and motors, to the political and social impact of these high-profile vehicles. In addition to up-to-date, highly accurate technical information on vehicles available today—including service procedures and safe shop practices—the text provides an informed look into the future with material on vehicles currently under development. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Today's Technician: Basic Automotive Service and Systems, Classroom Manual and Shop Manual

Power System Analysis and Design

Delmar's Standard Textbook of Electricity

Building Electrical Systems and Distribution Networks

Learning and Behavior

Now readers can master the fundamentals of electric circuits with Kang's ELECTRIC CIRCUITS. Readers learn the basics of electric circuits with common design practices and simulations as the book presents clear step-by-step examples, practical exercises, and problems. Each chapter includes several examples and problems related to circuit design, with answers for odd-numbered questions so learners can further prepare themselves with self-guided study and practice. ELECTRIC CIRCUITS covers everything from DC circuits and AC circuits to Laplace transformed circuits. MATLAB scripts for certain examples give readers an alternate method to solve circuit problems, check answers, and reduce laborious derivations and calculations. This edition also provides PSpice and Simulink examples to demonstrate electric circuit simulations. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Specifically designed as an introduction to the exciting world of engineering, ENGINEERING FUNDAMENTALS: AN INTRODUCTION TO ENGINEERING encourages students to become engineers and prepares them with a solid foundation in the fundamental principles and physical laws. The book begins with a discovery of what engineers do as well as an inside look into the various areas of specialization. An explanation on good study habits and what it takes to succeed is included as well as an introduction to design and problem solving, communication, and ethics. Once this foundation is established, the book moves on to the basic physical concepts and laws that students will encounter regularly. The framework of this text teaches students that engineers apply physical and chemical laws and principles as well as mathematics to design, test, and supervise the production of millions of parts, products, and services that people use every day. By gaining problem solving skills and an understanding of fundamental principles, students are on their way to becoming analytical, detail-oriented, and creative engineers. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Essential for anyone interested in a career in renewable energy, ELECTRICAL THEORY FOR RENEWABLE ENERGY presents a solid foundation of electrical theory and applications for both photovoltaic (PV) power and wind power in one engaging book. Designed to apply to electricians as well as individuals specializing in PV and wind turbines, each chapter provides a common technical language and knowledge base for all renewable energy practitioners so that all members of the team (i.e., practitioners, designers, installers and engineers) are able to work together effectively in the field. With multiple examples and opportunities for practice, this book covers the basic electrical theory that is required for you to understand any renewable energy source that generates electricity. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Get energized about your future with INTRODUCTION TO BASIC ELECTRICITY AND ELECTRONICS TECHNOLOGY, 1st Edition, the easy-to-read resource on electricity and electronics! Emphasizing teamwork and critical thinking, this entry-level book helps you understand technical vocabulary and technologies while imparting the skills necessary to read schematic diagrams, apply problem-solving formulas, and follow troubleshooting processes. Topics address all key fundamentals, including direct and alternating current, semiconductor devices, linear circuits, digital circuits, printed circuit board fabrication, test equipment, and more.

Practical, job-based discussions delve into calculator applications, hazardous materials handling, general safety protocols, using power and hand tools, electronics software, professional certifications, and the many career options for technicians. Accompanied by a Lab Manual for hands-on practice, INTRODUCTION TO BASIC ELECTRICITY AND ELECTRONICS TECHNOLOGY, 1st Edition is available in a convenient eBook format and with a variety of interactive supplements designed to make learning easier. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Electrical Wiring Residential

Fundamentals of Logic Design

Modern Motorcycle Technology

Numerical Analysis

Process Technology Systems uses a straightforward approach to address the various systems in the processing industry, starting with the most common, such as cooling water, wastewater, and steam, and then progressing to less common concepts such as crystallization and extraction. Each chapter has a small line drawing or P&ID (Piping and Instrumentation Diagram) of the system under discussion and photos of some of the equipment, providing readers with visual references as they go. Each topic is covered in-depth, and features important information on its safety implications, as well as troubleshooting. With completely up-to-date information and technology, this book will help readers grasp the fundamentals of all the main process technology systems, as well as the importance of each system for meeting production schedules and determining quality of products and efficiency. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.