

## Engineering Mcgraw Hill

This highly effective study guide offers 100% coverage of every subject on the FE Civil exam. This self-study resource contains all of the information you need to prepare for and pass the FE Civil exam on the first try. The book features clear explanations of every topic on the exam as well as hands-on exam strategies and accurate practice problems with fully worked solutions. Organized to follow the order of the official exam syllabus, the book includes references to the official FE Reference Handbook along with tips on how to utilize that resource during the exam. Written by a leading civil engineering educator and exam coach, Fundamentals of Engineering FE Civil All-in-One Exam Guide helps you pass the exam with ease. •Contains complete objectives for the FE Civil exam •Follows the exact order of the official exam syllabus •Written by an experienced educator and researcher

McGraw-Hill Concise Encyclopedia of Engineering McGraw-Hill Concise Encyclopedia

An Up-to-Date Guide to the Latest LEED-New Construction Guidelines Fully revised for version 3.0 of the LEED-New Construction rating system (LEED-2009), this GreenSource book helps you acquire the skills needed to apply LEED-NC to sustainable construction projects. The Engineering Guide to LEED-New Construction, second edition, offers comprehensive coverage of environmental systems and impacts on which many of the LEED-NC subcategories are based. Detailed equations and exercises in the book can be used to perform the calculations required for LEED-NC. Valuable information on real-world applications of LEED-NC in military, low-impact development (LID), and other sectors is included in this practical resource. THE ENGINEERING GUIDE TO LEED-NEW CONSTRUCTION COVERS: Introduction to the U.S. Green Building Council's LEED-NC rating system Sustainable sites Water efficiency Energy and atmosphere Materials resources Indoor environmental quality Innovation in design and regional priorities A systematic view of green and minimum program requirements Department of Defense sustainable design and indoor air quality (IAQ) Low-impact development

Hundreds of well-illustrated articles explore the most important fields of science. Based on content from the McGraw-Hill Concise Encyclopedia of Science & Technology, Fifth Edition, a widely used and respected science reference of its kind in print, each of these subject-specific quick-reference guides features: \* Detailed, well-illustrated explanations, not just definitions of concise yet authoritative articles in each volume \* An easy-to-understand presentation, accessible and interesting to non-specialists \* A portable, convenient format \* Bibliographies and other information supplement the articles

The Engineering Guide to LEED-New Construction: Sustainable Construction for Engineers (GreenSource)

Handbook of Civil Engineering Calculations

Foundations of Engineering

Shigley's Mechanical Engineering Design

McGraw-Hill's Engineering Companion

The focus of this text is to teach engineering students the skill of technical writing. The book is unique in that it gets to the point, uses practical outlines throughout, and actually shows students how to produce the most common technical documents step-by-step. It also employs a laid-back approach that is focused on providing real-world information in a straightforward, easy-to-understand way. This book is part of McGraw-Hill's Best (Basic Engineering Series and Tools) Series, which consists of modularized textbooks covering virtually every topic and speciality likely to be presented in an introductory engineering course. These affordable Best modules are easily combined with each other to construct the ideal first-year course. Best texts are also easily customized to create a single text via both traditional and online customization options.

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. Offers preparation for the two-part Professional Engineering Exam. This book and CD-ROM package comprises of exam-passing tips and techniques; sample work problems; and chapters on the exams five depth fields, and is useful for civil engineers who want to become a registered Professional Engineers (PE).

If YOU COULD BUY ONLY ONE DESKTOP REFERENCE— THIS WOULD BE IT ! Here are the tables, formulas, charts, diagrams, figures, key methods and worked-out problems engineers in design, product development, operation, production, analysis, and economic evaluation must have for successful day-to-day problem solving. This dynamic one-volume database provides reliable, ready-to-apply solutions to literally hundreds of engineering problems — formatted for convenient instant access and carefully culled from McGraw-Hill's most popular and respected handbooks, textbooks, and specialized technical books. McGraw-Hill's Engineering Companion contains sections on the basics of engineering science and key methods and tools in every branch of engineering: \* mechanical engineering \* civil engineering \* electrical engineering \* electronic engineering \* metallurgical engineering \* architectural and building engineering \* bioengineering \* and more Covering all major engineering fields and extensively updated for maximum usability, this is the perfect working tool for today's new breed of engineer.

Pre-Engineering

Corrosion Engineering

Principles of Electrical Engineering

Energy Systems Engineering: Evaluation and Implementation

Sustainable Construction for Engineers

Intended for students beginning the study of mechanical engineering design, this book helps students find that the text inherently directs them into familiarity with both the basics of design decisions and the standards of industrial components.

The majority of professors have never had a formal course in education, and the most common method for learning how to teach is on-the-job training. This represents a challenge for disciplines with ever more complex subject matter, and a lost opportunity when new active learning approaches to education are yielding dramatic improvements in student learning and retention. This book aims to cover all aspects of teaching engineering and other technical subjects. It presents both practical matters and educational theories in a format useful for both new and experienced teachers. It is organized to start with specific, practical teaching applications and then leads to psychological and educational theories. The "practical orientation" section explains how to develop objectives and then use them to enhance student learning, and the "theoretical orientation" section discusses the theoretical basis for learning/teaching and its impact on students. Written mainly for PhD students and professors in all areas of engineering, the book may be used as a text for graduate-level classes and professional workshops or by professionals who wish to read it on their own. Although the focus is engineering education, most of this book will be useful to teachers in other disciplines. Teaching is a complex human activity, so it is impossible to develop a formula that guarantees it will be excellent. However, the methods in this book will help all professors become good teachers while spending less time preparing for the classroom. This is a new edition of the well-received volume published by McGraw-Hill in 1993. It includes an entirely revised section on the Accreditation Board for Engineering and Technology (ABET) and new sections on the characteristics of great teachers, different active learning methods, the application of technology in the classroom (from clickers to intelligent tutorial systems), and how people learn.

The focus of this text is to teach engineering students the skill of technical writing. The book is unique in that it gets to the point, uses practical outlines throughout, and shows students how to produce the most common technical documents step-by-step, in a manner that is fun and interesting to students. Each chapter has an end-of-chapter critique which allows students to implement what they have learned in the chapter. With ABET increasing the emphasis on technical writing, this affordable, straightforward, easy-to-understand text with flexible coverage, would be a perfect fit for your technical writing course.

Handle every day-to-day calculation instantly and accurately. Now, a single authoritative reference offers you a surefire way to save time handling routine and non-routine calculations in the design, construction, rehab and maintenance of all types of structures. Edited by Tyler G. Hicks, Handbook of Civil Engineering Calculations explains and illustrates over 500 key calculations covering the entire field: structural steel engineering and design; reinforced and prestressed concrete; timber engineering; soil mechanics; surveying, route design, and highway bridges; fluid mechanics; pumps, piping, and hydro power; water supply and stormwater; sanitary wastewater treatment and control; and engineering economics. Using both customary and SI units, each calculation procedure includes a worked-out example with numbered steps. You see exactly how to compute the desired values for a particular design, and go quickly from data to finished design.

Transportation Engineering: A Practical Approach to Highway Design, Traffic Analysis, and Systems Operation

Biochemical Engineering Fundamentals

Introduction to Electromagnetic Fields

Handbook of Mechanical Engineering Calculations, Second Edition

Elements of Hydraulic Engineering

**This student-friendly text on the current economic issues particular to engineering covers the topics needed to analyze engineering alternatives. Students use both hand-worked and spreadsheet solutions of examples, problems and case studies. In this edition the options have been increased with an expanded spreadsheet analysis component, twice the number of case studies, and virtually all new end-of-chapter problems. The chapters on factor derivation and usage, cost estimation, replacement studies, and after-tax evaluation have been heavily revised. New material is included on public sector projects and cost estimation. A reordering of chapters puts the fundamental topics up front in the text. Many chapters include a special set of problems that prepare the students for the Fundamentals of Engineering (FE) exam. This text provides students and practicing professionals with a solid preparation in the financial understanding of engineering problems and projects, as well as the techniques needed for evaluating and making sound economic decisions. Distinguishing characteristics include learning objectives for each chapter, an easy-to-read writing style, many solved examples, integrated spreadsheets, and case studies throughout the text. Graphical cross-referencing between topics and quick-solve spreadsheet solutions are indicated in the margin throughout the text. While the chapters are progressive, over three-quarters can stand alone, allowing instructors flexibility for meeting course needs. A complete online learning center (OLC) offers supplemental practice problems, spreadsheet exercises, and review questions for the the Fundamentals of Engineering (FE) exam.**

**Discusses the mechanical advantages of Jeeps, Land Rovers, and other rigs and describes optional equipment, driving techniques, and on-the-road repair procedures**

**Derived from the content of the respected McGraw-Hill Dictionary of Scientific and Technical Terms, Sixth Edition, each title provides thousands of definitions of words and phrases encountered in a specific discipline. All include: \* Pronunciation guide for every term \* Acronyms, cross-references, and abbreviations \* Appendices with conversion tables; listings of scientific, technical, and mathematical notation; tables of relevant data; and more \* A convenient, quick-find format**

**It's the year 2039, and Lake Michigan is mysteriously emptied of water. The planet's atmosphere and magnetic field are failing, and fires burn ominously throughout the empty lake bed. In this seemingly endless desert east of Chicago, three factions are locked in conflict: the original end-of-times cultist settlers who follow religious visionary Fulcrum Maneuvers and worship a giant World Worm they deem responsible for the drained lake; the megacorporation Quadrilateral, a mega-consumerist, planned-community combine of bourgeois city planners developing what is now called the Wildland-Urban Interface; and the Blackout Angels, landlocked punk pirates raised in Quadrilateral cities, who oppose everything and everyone. In Davis Schneiderman's shocking novel, Drain, freedom, creativity, and transgression wage war with forces of control, censorship, and conformity. The wordscapes of William S. Burroughs and Thomas Pynchon, the dystopic nightmares of Philip K. Dick, and the transgressive punch of Chuck Palahniuk and Georges Bataille together convene in this stunning and thrilling work.**

**McGraw-Hill Dictionary of Engineering**

**Breadth and Depth**

**The McGraw-Hill Engineering Reference Guide Series**  
**Engineering Fundamentals: An Introduction to Engineering, SI Edition**  
**Engineering Economy**

*A practical, concise guide to chemical engineering principles and applications* *Chemical Engineering: The Essential Reference* is the condensed but authoritative chemical engineering reference, boiled down to principles and hands-on skills needed to solve real-world problems. Emphasizing a pragmatic approach, the book delivers critical content in a convenient format and presents on-the-job topics of importance to the chemical engineer of tomorrow—OM&I (operation, maintenance, and inspection) procedures, nanotechnology, how to purchase equipment, legal considerations, the need for a second language and for oral and written communication skills, and ABET (Accreditation Board for Engineering and Technology) topics for practicing engineers. This is an indispensable resource for anyone working as a chemical engineer or planning to enter the field. Praise for *Chemical Engineering: The Essential Reference*: "Current and relevant...over a dozen topics not normally addressed...invaluable to my work as a consultant and educator." —Kumar Ganesan, Professor and Department Head, Department of Environmental Engineering, Montana Tech of the University of Montana "A much-needed and unique book, tough not to like...loaded with numerous illustrative examples...a book that looks to the future and, for that reason alone, will be of great interest to practicing engineers." —Anthony Buonicore, Principal, Buonicore Partners Coverage includes: Basic calculations and key tables Process variables Numerical methods and optimization Oral and written communication Second language(s) Chemical engineering processes Stoichiometry Thermodynamics Fluid flow Heat transfer Mass transfer operations Membrane technology Chemical reactors Process control Process design Biochemical technology Medical applications Legal considerations Purchasing equipment Operation, maintenance, and inspection (OM&I) procedures Energy management Water management Nanotechnology Project management Environment management Health, safety, and accident management Probability and statistics Economics and finance Ethics Open-ended problems Compilation of terms and concepts in engineering from the McGraw-Hill dictionary of scientific and technical terms (1994), held by JOO, KEN, FLO, SPH, GIR, PJA.

The author is one of the world's foremost experts, with nearly 35 years as a consultant specializing in safety research and hazard analysis.

The "Classic Edition" of Shigley & Mischke, *Mechanical Engineering Design 5/e* provides readers the opportunity to use this well-respected version of the bestselling textbook in Machine Design. Originally published in 1989, MED 5/e provides a balanced overview of machine element design, and the background methods and mechanics principles needed to do proper analysis and design. Content-wise the book remains unchanged from the latest reprint of the original 5th edition. Instructors teaching a course and needing problem solutions can contact McGraw-Hill Account Management for a copy of the Instructor Solutions Manual.

McGraw-Hill Professional Engineering

Fundamentals of Engineering FE Civil All-in-One Exam Guide

Teaching Engineering, Second Edition

Engineering Mechanics

**Plesha, Gray, and Costanzo's "Engineering Mechanics: Dynamics" presents the fundamental concepts clearly, in a modern context, using applications and pedagogical devices that connect with today's students.**

**Market: energy professionals including analysts, system engineers, mechanical engineers, and electrical engineers Problems and worked-out equations use SI units**

**Solve any mechanical engineering problem quickly and easily This trusted compendium of calculation methods delivers fast, accurate solutions to the toughest day-to-day mechanical engineering problems. You will find numbered, step-by-step procedures for solving specific problems together with worked-out examples that give numerical results for the calculation. Covers: Power Generation; Plant and Facilities Engineering; Environmental Control; Design Engineering New Edition features methods for automatic and digital control; alternative and renewable energy sources; plastics in engineering design**

**This introductory text provides coverage of both static and dynamic fields. There are references to computer visualisation (Mathcad) and computation throughout the text, and there are Mathcad electronic books available free on the Internet to help students visualise electromagnetic fields. Important equations are highlighted in the text, and there are examples and problems throughout, with answers to the problems at the back of the book.**

**Pocket Book of Technical Writing for Engineers and Scientists**

**The Essential Reference**

**Mechanical Engineering Design**

**McGraw-Hill Concise Encyclopedia of Engineering**

**Dictionary of Engineering**

A Dictionary of Mechanical Engineering is one of the latest additions to the market leading Oxford Paperback Reference series. In over 8,500 clear and concise A to Z entries, it provides definitions and explanations for mechanical engineering terms in the core areas of design, stress analysis, dynamics and vibrations, thermodynamics, and fluid mechanics. Topics covered include heat transfer, combustion, control, lubrication, robotics, instrumentation, and measurement. Where relevant, the dictionary also touches on related subject areas such as acoustics, bioengineering, chemical engineering, civil engineering, aeronautical engineering, environmental engineering, and materials science. Useful entry-level web links are listed and regularly updated on a dedicated companion website to expand the coverage of the dictionary. Cross-referenced and including many line drawings, this excellent new volume is the most comprehensive and authoritative dictionary of its kind. It is an essential reference for students of mechanical engineering and for anyone with an interest in the subject.

Defines terms and phrases related to control systems, fluid mechanics, thermodynamics, and aerospace, design, and mechanical engineering

This book gives freshman engineering students a solid foundation for all their future coursework. It provides an overview to the engineering profession and of the skills they will need to develop, as well as an introduction to fundamental engineering topics such as thermodynamics, rate processes, and

Newton's laws. An important aspect of the book's approach is the method of Engineering Accounting, which casts the basic conservation laws (e.g., of energy or mass) as simple "accounting" procedures. This is a unifying concept that facilitates problem-solving across all engineering disciplines. Now revised and updated, the second edition of this book includes new topics including a look at pollution prevention, drinking water standards, volatile organic compounds, indoor air quality and emissions monitoring.

Chemical Engineers' Portable Handbook

McGraw-Hill Dictionary of Mechanical and Design Engineering

Construction Safety Engineering Principles (McGraw-Hill Construction Series)

Maintenance Engineering Handbook

Electric Vehicle Engineering

Biochemical Engineering Fundamentals, 2/e, combines contemporary engineering science with relevant biological concepts in a comprehensive introduction to biochemical engineering. The biological background provided enables students to comprehend the major problems in biochemical engineering and formulate effective solutions.

A presentation of the salient and important aspects of chemical engineering for practising professionals. While intended for chemical engineers, it should also be useful for chemists, mechanical engineers, materials engineers, environmental engineers and other engineers and scientists. Special features include chapters on process operations scale-up and environmental operations in addition to traditional areas of chemical engineers.

Traffic, highway, and transportation design principles and practical applications This comprehensive textbook clearly explains the many aspects of transportation systems planning, design, operation, and maintenance. Transportation Engineering: A Practical Approach to Highway Design, Traffic Analysis, and Systems Operations explores key topics, including geometric design for roadway alignment; traffic demand, flow, and control; and highway and intersection capacity. Emerging issues such as livable streets, automated vehicles, and smart cities are also discussed. You will get real-world case studies that highlight practical applications as well as valuable diagrams and tables that define transportation engineering terms and acronyms. Coverage includes: •An introduction to transportation engineering•Geometric design•Traffic flow theory•Traffic control•Capacity and level of service•Highway safety•Transportation demand•Transportation systems management and operations•Emerging topics

Stay Up to Date on the Latest Issues in Maintenance Engineering The most comprehensive resource of its kind, Maintenance Engineering Handbook has long been a staple for engineers, managers, and technicians seeking current advice on everything from tools and techniques to planning and scheduling. This brand-new edition brings you up to date on the most pertinent aspects of identifying and repairing faulty equipment; such dated subjects as sanitation and housekeeping have been removed. Maintenance Engineering Handbook has been advising plant and facility professionals for more than 50 years.

Whether you're new to the profession or a practiced veteran, this updated edition is an absolute necessity. New and updated sections include: Belt Drives, provided by the Gates Corporation Repair and Maintenance Cost Estimation Ventilation Fans and Exhaust Systems 10 New Chapters on Maintenance of Mechanical Equipment Inside: • Organization and Management of the Maintenance Function • Maintenance Practices • Engineering and Analysis Tools • Maintenance of Facilities and Equipment • Maintenance of Mechanical Equipment • Maintenance of Electrical Equipment • Instrumentation and Reliability Tools • Lubrication • Maintenance Welding • Chemical Corrosion Control and Cleaning

A Dictionary of Mechanical Engineering

Pocket Book of Technical Writing for Engineers & Scientists

Dynamics

Water-Resources Engineering

Standard Handbook of Environmental Engineering

**A complete guide to electric vehicle design, operation, and adoption This hands-on resource thoroughly explains the technologies and techniques involved in the design and operation of today's electric vehicles. Originally written for use in a course co-taught by the authors at Stanford University, Electric Vehicle Engineering discusses the physics of vehicle motion; the electrical principles on which motors rely; the chemistry, operation, and charging of lithium-ion batteries; the design and operation of motor controllers; the energy efficiency and environmental impact of electric vehicles; and the policy and economics affecting their adoption. After teaching you the theory, the authors will guide you through a hands-on project in which you will build a model electric car from the ground up with a hand-wound electric motor of your own design. Coverage includes: Introduction to electric vehicles Electric vehicle history Vehicle dynamics Electric motors Lithium-ion batteries Controllers Well-to-wheels energy and emissions analysis Electric vehicle policies and economics Future prospects**

Chemical Engineering

The McGraw-Hill Civil Engineering PE Exam Guide

McGraw-Hill Series in Mechanical Engineering

Designing and Managing Safer Job Sites