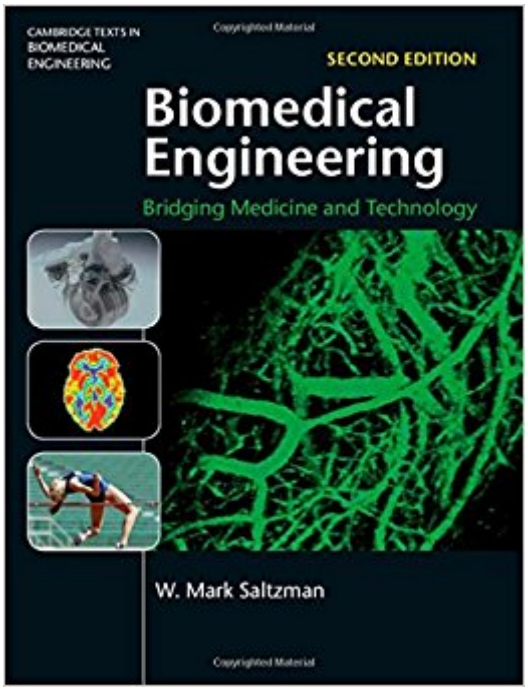
Biomedical Engineering: Bridging Medicine And Technology (Cambridge Texts In Biomedical Engineering)



Synopsis

The second edition of this popular introductory undergraduate textbook uses examples, applications, and profiles of biomedical engineers to show students the relevance of the theory and how it can be used to solve real problems in human medicine. The essential molecular biology, cellular biology, and human physiology background is included for students to understand the context in which biomedical engineers work. Updates throughout highlight important advances made over recent years, including iPS cells, microRNA, nanomedicine, imaging technology, biosensors, and drug delivery systems, giving students a modern description of the various subfields of biomedical engineering. Over two hundred quantitative and qualitative exercises, many new to this edition, help consolidate learning, whilst a solutions manual, password-protected for instructors, is available online. Finally, students can enjoy an expanded set of leader profiles in biomedical engineering within the book, showcasing the broad range of career paths open to students who make biomedical engineering their calling.

Book Information

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Customer Reviews

"This book sets a gold standard for textbooks in biomedical engineering. It is beautifully and clearly written, and explains all aspects, old and very new, of biomedical engineering in ways that are both exciting to the reader as well as easy to understand." Robert Langer, Massachusetts Institute of Technology"This textbook is a wonderful summary of the field of biomedical engineering - a must-have for any faculty member teaching an introductory BME course. As usual, Professor

Saltzman has provided rich context and broad examples; he does an excellent job of weaving in valuable scenarios that are realistic, yet interesting - a great tool for engaging students. There are many creative and useful features to the text: the figures and illustrations provide much value to understanding the material, the problem sets offer both conceptual and quantitative review of the material, and the 'Key Concepts and Definitions' and 'Useful Links' sections at the end of each chapter are very practical for a student new to the field of BME. Of particular note, the 'Profiles in BME' vignettes for each chapter add a personal touch and serve to connect students to role models who are real people (with real stories) making an impact on the world." Christine E. Schmidt, University of Florida"This is an excellent book that covers the fundamentals of a broad array of specific fields within biomedical engineering. This textbook will certainly be adopted by many introductory biomedical engineering courses due to its meaningful organization, clear writing, illuminative figures, and variety of problems for students to work through. Its breadth and scope will stimulate all readers. Once again, Mark Saltzman has accomplished a major achievement by providing such a comprehensive text for students and educators alike." Melissa Krebs, Colorado School of Mines"This is a truly exceptional textbook. It is completely up-to-date and comprehensive, yet it is so readable that you can dip in at any page and find something that grabs you. It is designed for undergraduate students, and is a tremendous resource for course development - but equally, it is one of those essential bookshelf books, the one you will turn to when you need 'to brush up on your biology', or 'get your head straight on the engineering stuff'. A must for anyone interested in the very far-reaching field of biomedical engineering." Quentin Pankhurst, University College London

The second edition of this popular introductory undergraduate textbook uses examples, applications, and a problem-solving approach to convey the impact of biomedical engineering. Updated throughout, the author has included more qualitative and quantitative questions and problems, highlighting recent advances in biomedical engineering to provide a modern overview of the field.

I bought the kindle edition because it saved me 30 dollars. The kindle application for my computer was super easy to load and is also really easy to use.However, this textbook electronically is al little frustrating. There are no page numbers and the picture (and therefore sometime lengthy descriptions) sometimes interupt your sentence of text for a few "pages" before starting up again. There is no way I can find to view by page and therefore have the picture and captions in the proper place (out of the way) or keep track of how many pages I have read.

Great for beginners. The perfect introduction for our career.

A very interesting textbook. It also describes all the science you need to know to understand the different aspects of Biomedical Engineering. I think I will keep this book after the class, it was very informative for such a petite thing. this finds a way to take a very difficult topic and describe it to sophomores in a way that makes us interested.

I feel smarter already

I loved this book. It is perfect to my study in biomedical engineering! It has all the important information for me.

THE book IS OK. THE problem I see is that the text in boxes in the printed edition is not easily distinguished in the electronic version

Great product!

Book was supposed to be new, but arrived with some minor water damage and scratches on the cover. I initiated a conversation about it with reps but the only option was to return it, and since I needed it for a class that wasn't a possibility. Fairly dissatisfied with this product

MATLAB (Cambridge Texts in Biomedical Engineering) Introductory Biomechanics: From Cells to Organisms (Cambridge Texts in Biomedical Engineering) Essential Biomaterials Science (Cambridge Texts in Biomedical Engineering) Biomedical Engineering Fundamentals (The Biomedical Engineering Handbook, Fourth Edition) (Volume 1) Books of Breathing and Related Texts -Late Egyptian Religious Texts in the British Museum Vol.1 (Catalogue of the Books of the Dead and Other Religious Texts in the British Museum) Foundations of Biomedical Ultrasound (Biomedical Engineering Series) Cambridge Global English Stage 9 Workbook: for Cambridge Secondary 1 English as a Second Language (Cambridge International Examinations) Mathematics and Technology (Springer Undergraduate Texts in Mathematics and Technology) Laser Technology in Biomimetics: Basics and Applications (Biological and Medical Physics, Biomedical Engineering) Principles of Biomedical Ethics (Principles of Biomedical Ethics (Beauchamp)) Environmental Engineering and Sanitation (Environmental Science and Technology: A Wiley-Interscience Series of Texts and Monographs) An Integrative Approach to Counseling: Bridging Chinese Thought, Evolutionary Theory, and Stress Management (Multicultural Aspects of Counseling And Psychotherapy)