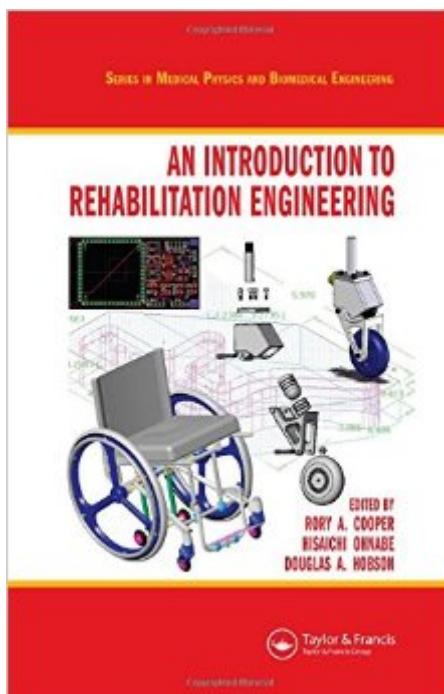


The book was found

# An Introduction To Rehabilitation Engineering (Series In Medical Physics And Biomedical Engineering)



## Synopsis

Answering the widespread demand for an introductory book on rehabilitation engineering (RE), Dr. Rory A. Cooper, a distinguished RE authority, and his esteemed colleagues present *An Introduction to Rehabilitation Engineering*. This resource introduces the fundamentals and applications of RE and assistive technologies (ATs). After providing a brief introduction, the book describes the models for AT service delivery, the design tools and principles of universal design, and various technology-transfer mechanisms, models, and principles. The text then explains the process for creating assistive device standards, followed by a review of seating biomechanics and soft tissue biomechanics. Subsequent chapters examine design and service delivery principles of wheelchairs and scooters, functional electrical stimulation and its applications, wheelchair-accessible transportation legislation, and the applications of robotics in medical rehabilitation. The book proceeds to discuss prosthetic and orthotic design and usage, visual and hearing impairment, Web-related AT, and augmentative and alternative communication (AAC) technology. It concludes with an introduction to adaptive sports and recreation. Incorporating the critical aspects of RE and AT, *An Introduction to Rehabilitation Engineering* focuses on the principles, modeling, standards, devices, and technologies of RE and AT. It presents a concise yet complete overview of RE to provide a solid foundation in the subject as well as to stimulate further study.

## Book Information

Series: Series in Medical Physics and Biomedical Engineering

Hardcover: 470 pages

Publisher: CRC Press; 1 edition (December 26, 2006)

Language: English

ISBN-10: 0849372224

ISBN-13: 978-0849372223

Product Dimensions: 6.1 x 1 x 9.2 inches

Shipping Weight: 1.7 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars See all reviews (1 customer review)

Best Sellers Rank: #806,949 in Books (See Top 100 in Books) #26 in Books > Science & Math > Chemistry > Physical & Theoretical > Electrochemistry #105 in Books > Textbooks > Medicine & Health Sciences > Medicine > Biotechnology #242 in Books > Engineering & Transportation > Engineering > Bioengineering > Biomedical Engineering

## Customer Reviews

I highly recommend this book as a great source of information regarding rehabilitation engineering. As a personal injury lawyer, I am handling a case for a 86 year old quadriplegic woman who, due to a malfunction in her wheelchair restraint system, slid out of her wheelchair while being transported in a van and sustain multiple fractures of both legs. Frankly, I had no great ideas on how to start researching the industry standards in this field. So, I bought this book and remarkably I learned everything I needed to know by reading its chapter on WHEELCHAIR TRANSPORTATION SAFETY. I even contacted one of the authors of that chapter and learned even more valuable information. This book was easy to understand (even for the layman) and contained everything I needed to know in this area.

[Download to continue reading...](#)

An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) Biomedical Ethics for Engineers: Ethics and Decision Making in Biomedical and Biosystem Engineering (Biomedical Engineering Series) Biomedical Engineering and Design Handbook, Volume 1: Volume I: Biomedical Engineering Fundamentals Medical Aspects of Proteases and Proteases Inhibitors (Biomedical and Health Research, Vol. 15) (Biomedical and Health Research, V. 15) Design of Pulse Oximeters (Series in Medical Physics and Biomedical Engineering) Quantitative Biomedical Optics: Theory, Methods, and Applications (Cambridge Texts in Biomedical Engineering) Laser-Tissue Interactions: Fundamentals and Applications (Biological and Medical Physics, Biomedical Engineering) Laser Technology in Biomimetics: Basics and Applications (Biological and Medical Physics, Biomedical Engineering) Photonics of Biopolymers (Biological and Medical Physics, Biomedical Engineering) The Solid State: An Introduction to the Physics of Crystals for Students of Physics, Materials Science, and Engineering (Oxford Physics Series) Dopamine Receptor Sub-Types: From Basic Sciences to Clinical Applications (Biomedical and Health Research, Vol. 19) (Biomedical and Health Research, V. 19) Rehabilitation: A Post-critical Approach (Rehabilitation Science in Practice Series) Medical Terminology: Medical Terminology Made Easy: Breakdown the Language of Medicine and Quickly Build Your Medical Vocabulary (Medical Terminology, Nursing School, Medical Books) Burn Care and Rehabilitation: Principles and Practice (Contemporary Perspectives in Rehabilitation) Certified Rehabilitation Counselor Examination Preparation: A Concise Guide to the Rehabilitation Counselor Test American Medical Association Complete Medical Encyclopedia (American Medical Association (Ama) Complete Medical Encyclopedia) Evolution and Vertebrate Immunity: The Antigen-Receptor and Mhc Gene Families (University of Texas Medical Branch Series in Biomedical Science) Introduction to Biomedical Engineering Introduction to Biomedical Engineering, Second Edition The

Physics of Medical Imaging (Medical Science Series)

[Dmca](#)