



# An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering)

From Brand: Taylor Francis

Download now

Read Online ➔

## An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis

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.

↓ [Download An Introduction to Rehabilitation Engineering \(Ser ...pdf](#)

📖 [Read Online An Introduction to Rehabilitation Engineering \(S ...pdf](#)



# An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering)

*From Brand: Taylor Francis*

## **An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis**

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.

## **An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis Bibliography**

- Sales Rank: #1161457 in Books
- Brand: Brand: Taylor Francis
- Published on: 2006-12-26
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x 1.00" w x 6.14" l, 1.72 pounds
- Binding: Hardcover
- 470 pages

 [Download An Introduction to Rehabilitation Engineering \(Ser ...pdf](#)

 [Read Online An Introduction to Rehabilitation Engineering \(S ...pdf](#)



## **Download and Read Free Online An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis**

---

### **Editorial Review**

#### **Review**

Finally, a text that allows engineers and graduate students from other healthcare professions understand and appreciate just how vast and exciting the contributions of rehabilitation engineering and assistive technology can be for people with disabilities. This text is perfect not only for engineering students but also for physical therapists and other professionals who want to know the science behind assistive technology. Understanding the language of rehabilitation and engineering is critical for the engineering student's introduction to the field of assistive technology or the rehabilitation professor who wants to better appreciate the science of a device that improves their patients' lives everyday. This text offers wonderfully straightforward insights into the very complex world of rehabilitation engineering. Dr. Cooper and associates have successfully written a text that offers engineers and rehabilitation professionals alike the blueprints for understanding the language, process, and science behind the product development associated with assistive technology. The rapidly emerging field of rehabilitation engineering will grow even faster now that Dr. Cooper and associates have provided the first text to offer the blueprints to product development and the science of assistive technology. -Robert Gailey, University of Miami Miller School of Medicine, Florida, USA

### **Users Review**

#### **From reader reviews:**

##### **Gloria Robey:**

Book is to be different per grade. Book for children until finally adult are different content. As it is known to us that book is very important for us. The book An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) has been making you to know about other expertise and of course you can take more information. It doesn't matter what advantages for you. The book An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) is not only giving you much more new information but also for being your friend when you really feel bored. You can spend your personal spend time to read your reserve. Try to make relationship together with the book An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering). You never experience lose out for everything if you read some books.

##### **Frank Anderson:**

Information is provisions for anyone to get better life, information these days can get by anyone at everywhere. The information can be a information or any news even a concern. What people must be consider any time those information which is inside the former life are hard to be find than now's taking seriously which one is suitable to believe or which one the particular resource are convinced. If you receive the unstable resource then you get it as your main information it will have huge disadvantage for you. All of those possibilities will not happen within you if you take An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) as your daily resource information.

**Sandra Earnhardt:**

People live in this new morning of lifestyle always try and must have the free time or they will get great deal of stress from both day to day life and work. So , whenever we ask do people have free time, we will say absolutely sure. People is human not a robot. Then we question again, what kind of activity do you have when the spare time coming to you actually of course your answer will unlimited right. Then do you try this one, reading ebooks. It can be your alternative in spending your spare time, often the book you have read is definitely An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering).

**Blair Gant:**

Playing with family in a very park, coming to see the ocean world or hanging out with good friends is thing that usually you could have done when you have spare time, then why you don't try matter that really opposite from that. One activity that make you not experience tired but still relaxing, trilling like on roller coaster you are ride on and with addition associated with. Even you love An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering), you may enjoy both. It is fine combination right, you still desire to miss it? What kind of hangout type is it? Oh seriously its mind hangout men. What? Still don't buy it, oh come on its named reading friends.

**Download and Read Online An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis #BIX9AYT8DNC**

# **Read An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis for online ebook**

An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis books to read online.

## **Online An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis ebook PDF download**

### **An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis Doc**

**An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis Mobipocket**

**An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis EPub**

**BIX9AYT8DNC: An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) From Brand: Taylor Francis**