

# IET Library Reading List: Healthcare Engineering



These ebooks and ejournals, available via [the IET Virtual Library](https://theiet.org/virtual-library), focus on the topic of healthcare engineering, covering biotechnology, robotics and telemedicine.

[theiet.org/virtual-library](https://theiet.org/virtual-library)

## Ebooks (provided by EBSCO)

**Telemedicine, Telehealth and Telepresence : Principles, Strategies, Applications, and New Directions, Latifi et al. (2021).** This book focuses on providing patients care from a distance using store and forward technology to live actual performance of operations at a distance. The aim of this book is to bring all aspects of telemedicine and e-health to the reader, in a simple, make-sense approach.

**Robotic Technologies in Biomedical and Healthcare Engineering, Gupta et al. (2021).** This book aims at exhibiting the latest research achievements, findings, and ideas in the field of robotics in biomedical and healthcare engineering, primarily focusing on the walking assistive robot, telerobotic surgery, upper/lower limb rehabilitation, and radiosurgery.

**AI in Healthcare : How Artificial Intelligence Is Changing IT Operations and Infrastructure Services, Robert Shimonski. (2021).** This book provides in-depth coverage of all the most important and central topics in the healthcare applications of artificial intelligence, written in an accessible and straightforward style.

**Smart Medical Data Sensing and IoT Systems Design in Healthcare, Chinmay Chakraborty. (2020).** This book is an essential reference source that focuses on robust and easy solutions for the delivery of medical information from patients to doctors and explores low-cost, high-performance, highly efficient, deployable IoT system options in healthcare systems.

**Modern Diagnostic X-Ray Sources : Technology, Manufacturing, Reliability, Rolf Behling. (2021).** The book covers the physics of X-ray generation, including the process of constructing X-ray source devices. The stand-alone chapters take you inside diagnostic X-ray tubes, illustrating their design, functions, metrics for validation, and interfaces.

**Machine Learning and AI for Healthcare : Big Data for Improved Health Outcomes, Arjun Panesar. (2021).** This updated second edition offers a guided tour of machine learning algorithms and architecture design. It provides real-world applications of intelligent systems in healthcare and covers the challenges of managing big data.

**Intelligent Pervasive Computing Systems for Smarter Healthcare, Sangaiah et al. (2019).** This book examines a wealth of topics such as the design and development of pervasive healthcare technologies, data modelling and information management, wearable biosensors and their systems, and more.

## Ejournals (provided by EBSCO)

**Biomedical Engineering Online.** Peer reviewed journal covering all aspects of biomedical engineering.

**Annals of biomedical engineering.** Provides coverage of the major fields of bioengineering and biomedical engineering.

**International journal of biomedical imaging.** Promotes research and development of biomedical imaging by publishing high-quality papers, reviews, and tutorials in this rapidly growing interdisciplinary field.

**Biomedical Engineering and Computational Biology.** A leading journal covering a wide range of topics in biomedical engineering, bioinformatics, systems biology, and computational biology.

**International Journal of Telemedicine and Applications.** Publishes original research on all areas of telemedicine and applications including computing, communications, and networking technologies.

**Modern Healthcare.** Focusing on innovation and modern techniques in health care.

**International Journal of Healthcare Management.** Covers research and key issues in the management and marketing of the healthcare industry.

**Health care management science.** Promotes systems thinking and provides a single forum for researchers and practitioners of health care services and management to exchange ideas.

### Further resources from the IET

- [Healthcare Technology Letter](#)
- [Communities and Networks](#)
- [Factfiles](#)
- [IET Digital Library](#)
- [Technical Webinars](#)

### Help and contacts

If you need any assistance on using library collections and resources you can contact us via email at: [libdesk@theiet.org](mailto:libdesk@theiet.org). You can also discover more resources and support provided by the IET Library and Archives at our [homepage](#).

IET members can access the Virtual Library via the single sign-on (SSO) service. If you are experiencing difficulties logging in via the SSO please contact the membership services team at [membership@theiet.org](mailto:membership@theiet.org).

Visit [theiet.org/virtual-library](http://theiet.org/virtual-library) to view more content.