

Collection Highlights: An online reading list from the IET Library



These ebooks and ejournals, available via the [IET Virtual Library](https://theiet.org/virtual-library), have been selected to highlight some of the most popular titles used by our members as well as new additions to the collection, covering a wide range of engineering topics.

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Ebooks (provided by EBSCO and Knovel)



[Wind and Solar Power Systems : Design, Analysis, and Operation, Mukund R. Patel and Omid Beik. \(2021\).](#)

This book provides technological and socio-economic coverage of renewable energy. It discusses wind power technologies, solar photovoltaic technologies, large-scale energy storage technologies, and ancillary power systems.



[AI for Healthcare Robotics, Eduard Fosch-Villaronga and Hadassah Drukarch. \(2022\).](#)

This book explains what healthcare robots are and how AI empowers them in achieving the goals of contemporary medicine.



[High Voltage Direct Current Transmission, Dragan Jovcic. \(2019\).](#) This new edition covers all HVDC transmission technologies including Line Commutated Converter (LCC) HVDC; Voltage Source Converter (VSC) HVDC, and the latest VSC HVDC based on Modular Multilevel Converters (MMC), as well as the principles of building DC transmission grids.



[Introduction to Python for Science and Engineering, David J. Pine. \(2019\).](#) This guide offers a quick and incisive introduction to Python programming for anyone. The author has carefully developed a concise approach to using Python in any discipline of science and engineering.



[Systems Approaches to Nuclear Fusion Reactors, Frederick B. Marcus. \(2022\).](#) This book offers an overall review, applying systems engineering and architecture approaches, of the design, optimization, operation and results of leading fusion experiments.



[IET Wiring Regulations: Inspection, Testing and Certification, Brian Scadden. \(2019\).](#) Simplifies the advice found in the Wiring Regulations, explaining how they apply to working practice for inspection, testing and certification.



[INCOSE Systems Engineering Handbook, INCOSE. \(2023\).](#) This book is a vital reference for systems engineering practitioners and engineers in other disciplines looking to perform or understand the discipline of systems engineering.



[AI Assurance : Towards Trustworthy, Explainable, Safe, and Ethical AI, Feras A. Batarseh and Laura Freeman. \(2022\).](#) This book provides readers with solutions and a foundational understanding of the methods that can be applied to test AI systems and provide assurance.



[Energy Storage for Power System Planning and Operation, Zechun Hu. \(2020\).](#)

An authoritative guide to large-scale energy storage technologies and applications for power system planning and operation.



[Smart Grid Systems : Modeling and Control, N. Ramesh Babu. \(2019\).](#)

This book provides a comprehensive discussion from a number of experts and practitioners and describes the challenges and the future scope of the technologies related to smart grid.



[Practical Guide to Inspection, Testing and Certification of Electrical Installations, Christopher Kitcher. \(2019\).](#)

This book covers everything you need to learn about inspection and testing, with clear reference to the latest updates to the legal requirements and wiring regulations.



[Python - An Introduction to Programming \(2nd Edition\), James R. Parker. \(2021\).](#)

This book is an introduction to programming concepts that uses Python 3 as the target language. It follows a practical just in time presentation where material is given to the student when it is needed.



[Power Electronics Handbook \(4th Edition\), M. H. Rashid. \(2018\).](#)

This book brings together over 100 years of combined experience in the specialist areas of power engineering to offer a fully revised and updated expert guide to total power solutions.



[The Safety Critical Systems Handbook : A Straightforward Guide to Functional Safety: IEC 61508 \(2010 Edition\), IEC 61511 \(2015 Edition\) and Related Guidance, David J. Smith and Kenneth G. L. Simpson. \(2016\).](#)

Provides an overview and discussion of safety standards applicable to a wide range of sectors including the operation of nuclear power plants.



[The City & Guilds Textbook: Book 1 Electrical Installations, Second Edition, Peter Tanner. \(2022\).](#)

Enhance your understanding of concepts in electrical installation with 100s of clear and accurate technical drawings and step-by-step photo sequences as well as getting ready for the workplace with industry tips.

Ejournals (provided by EBSCO)

Energies. Covers topics related to energy sources, systems, policy, and management.

Harvard Business Review. Presents analysis of management problems and practice in all fields of management and administration.

New Scientist. The latest news about advances in science and technology with an international scope.

Environmental Science and Pollution Research International. Covers all areas of Environmental Science and related subjects, with emphasis on chemical compounds developments in vehicle logistics globally.)

FierceBiotech. Covers the fast growing world of Biopharma with news, analysis and data on the pharmaceutical industry and technological advances within it.

Qualitative Report. Devoted to the writing and discussion of and about qualitative, critical, action, and collaborative inquiry and research.

Construction Management & Economics. Peer reviewed coverage of developments in construction management and economics on a wide range of topics.

Energy, Sustainability & Society. A forum for natural scientists, engineers, and experts in and around the energy industry.

ACM Computer Surveys. Publishes new perspectives on hardware and software, computer systems organization, computer science theory, artificial intelligence, and applications.



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