The Institution of Engineering and Technology

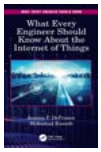
September 2023

Student recommendations update: An online reading list from the IET Library

These ebooks and ejournals, available via the IET Virtual Library have been selected for engineering students. This list updates last year's list and covers career development, essential engineering mathematics publications and introductions to key engineering topics.

theiet.org/virtual-library

Ebooks (provided by EBSCO and Knovel)



What Every Engineer Should Know About the Internet of Things, Joanna F. DeFranco and Mohamad Kassab. (2021). This practical text provides an introduction to IoT that can be understood by every engineering discipline and discusses detailed applications of IoT with research-based examples and case studies.

Technical Writing : A Practical Guide for Engineers, Scientists, and Nontechnical Professionals, Second Edition, Phillip A. Laplante. (2019). This guide complements traditional writer's reference manuals on technical writing through presentation of first-hand examples that help readers understand practical considerations in writing and producing technical content.

AI for Physics, Volker Knecht. (2023). Written in accessible language without mathematical formulas, this short book provides an overview of the wide and varied applications of artificial intelligence (AI) across the spectrum of physical sciences.

Practical Career Advice for Engineers : Personal Letters From an Experienced Engineer to Students and New Engineers, Radovan Zdero. (2021). This book is a series of personal conversation-style letters that offers practical career advice to all engineers and guides them through their entire career.

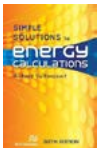
The City & Guilds Textbook: Book 1 Electrical Installations, Second Edition, Peter Tanner. (2022). Enhance your understanding of concepts in electrical installation with 100s of clear and accurate technical drawings and step-by-step photo sequences as well as getting ready for the workplace with industry tips.

The City & Guilds Textbook: Book 2 Electrical Installations, Second Edition, Peter Tanner. (2022). Equip yourself with the tools for success with this comprehensive and updated edition using the most up-to-date information available for the new industry standards.

Introduction to Python for Science and Engineering, David J. Pine. (2019). This guide offers a quick and incisive introduction to Python programming for any discipline of science and engineering, with plenty of examples, practical hints, and insider tips.

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.

Advance : The Ultimate How-To Guide For Your Career, Gary Burnison. (2020). Includes advice on taking your career to the next level, career development tips and guidance on being seen and heard.



Simple Solutions to Energy Calculations, Richard Vaillencourt (2022). This book aims to simplify energy feasibility studies and associated calculations, sharing time saving methods and tips for complex energy calculations.

Mathematics Formulae for Engineers and Scientists, Engineering Mathematics Group (2018). This book provides easy and quick access to mathematics formulae for those who use them in their everyday work. This book is a useful reference for students who study engineering, science and technology.

So, You Have to Write a Literature Review : A Guided Workbook for Engineers, Catherine Berdanier and Joshua Lenart. (2020). This book presents a dynamic and practical method in which engineering students can learn to write literature reviews, and translate genre-based writing instruction into easy-to-follow, bite-sized activities and content.

Engineering In Perspective: Lessons For A Successful Career, Tony Ridley. (2017). This book discusses how important it is that a successful engineer has not only traditional engineering skills but also good interpersonal skills coupled with a deep understanding of social, economic and political factors.

Ejournals (provided by EBSCO)

Career Development Quarterly (Articles on career assessment and measurement, career counseling practices, career indecision, case histories and work and family.)

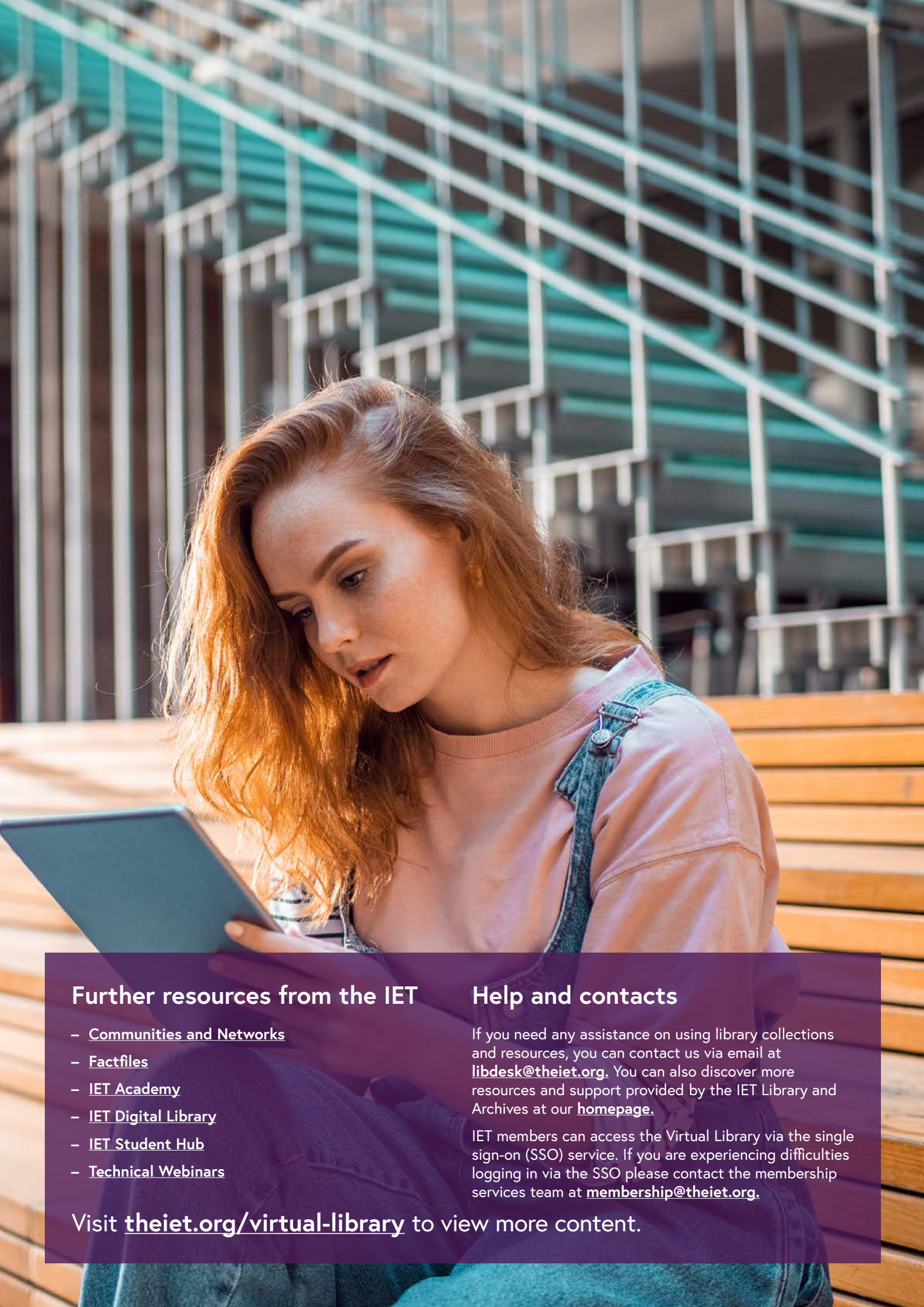
Journal of Career Development (Provides professionals with the most up-to-date concepts, ideas, and methodology in career development theory, research, and practice.)

Journal of Engineering Education (Publishes articles on the field of engineering education, including the knowledge and competencies possessed by engineers, and how these are learned and assessed.)

Advances in Engineering Education (Focuses on advances in engineering education practice including innovations in course and curriculum design, teaching, and assessment.)

Mathematical Problems in Engineering. (Publishes results of rigorous engineering research carried out using mathematical tools.)

Applications of Mathematics. (Presents research about applications of mathematical methods in various branches of science and engineering.)



Further resources from the IET

- Communities and Networks
- Factfiles
- IET Academy
- IET Digital Library
- IET Student Hub
- 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.** 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.**

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