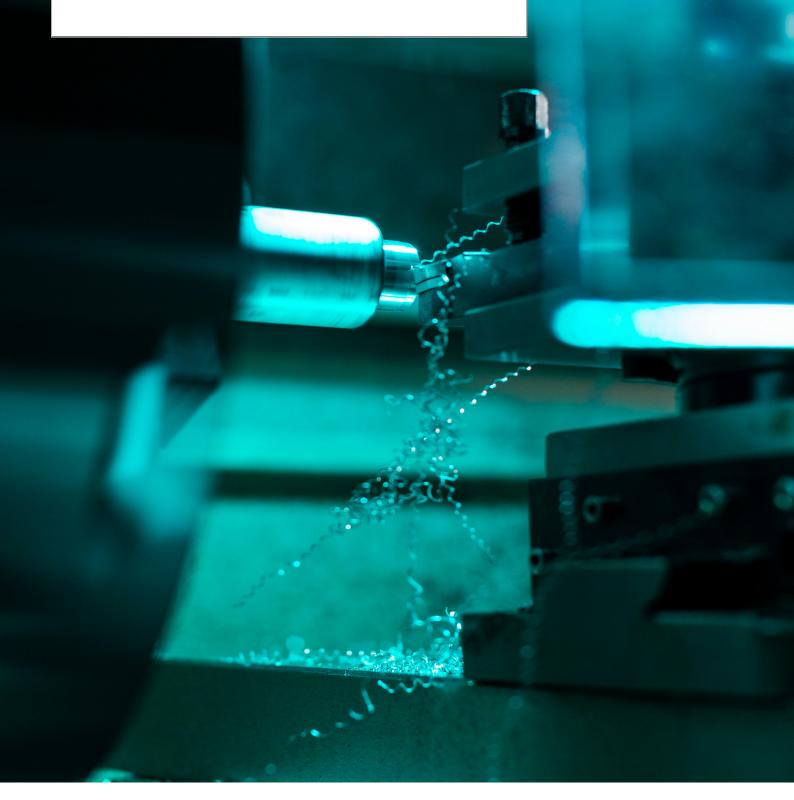
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Ian C. Turner Chartered Consulting Engineer, UK

Requiring only a very basic knowledge of the physics of fluids, this book provides a sound understanding of fluid power systems and their uses. It takes a strongly practical approach and covers maintenance and trouble-shooting, with a particular emphasis on safety systems and regulations. This second edition completely updates the guidance on safety legislation, codes of practice, technical standards and standardisation organisations, reflecting advances in technology. It is written for students from Levels 3 to 5, and for a wide range of practising engineers: especially plant, operations, and measurement and control engineers

Routledge August 2020 : 184pp Pb: 978-0-367-46084-6 : **£48.99** Hb: 978-0-367-46085-3 : **£86.99** eBook: 978-1-003-02681-5

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Routledge November 2020 : 598pp Pb: 978-0-367-55445-3 : **£48.99** Hb: 978-0-367-55443-9: £115

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Mike Tooley Brooklands College, UK, Lloyd Dingle

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# **Engineering Technologies**

Level 2



Mike Tooley Brooklands College, UK

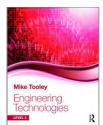
Written specifically for the EAL Level 2 Diploma in Engineering and Technology, this book covers the three mandatory units on this course: Engineering Environment Awareness, Engineering Techniques and Engineering Principles. Within each unit, the Learning Outcomes are covered in detail and the book includes activities and test your knowledge sections to check your understanding. At the end of each chapter is a checklist to make sure you have achieved each objective before you move onto the next section. Online, you can download answers to selected questions found within the book, as well as reference material and resources to support several other EAL units.

Routledge September 2016 : 364pp Pb: 978-1-138-67447-9 : £38.99 eBook: 978-1-315-56129-5

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# **Engineering Technologies**

Level 3



Mike Tooley Brooklands College, UK

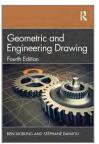
EAL Engineering Level 3 covers each compulsory unit within a dedicated chapter, including maths boxes, case studies, practice exercises and sample assessment sections that encourage readers to explore engineering for themselves whilst helping them to prepare for their exams. A companion website includes extra downloadable chapters for several optional units

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Ken Morling, Stéphane Danjou Rhine-Waal University of Applied Sciences, Germany

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Routledge June 2022 : 422pp Pb: 978-0-367-43123-5 : **£48.99** Hb: 978-0-367-43127-3 : **£115** eBook: 978-1-003-00138-6

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Part '



Edited by Michael Clifford University of Nottingham, UK

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thermodynamics, electronics, and machine design. Printed in color, this updated bestseller has a full range of learning features, and online resources availabe for both students and instructors.

CRC Press December 2022: 732pp Pb: 978-0-367-33316-4: £59.99 Hb: 978-1-032-36232-8: £97.99 eBook: 978-0-479-31916-7

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#### **7TH EDITION**

# **Materials for Engineers and Technicians**



#### William Bolton, R.A. Higgins

This comprehensive introduction to materials engineering and manufacturing processes for BTEC Level 2 students and beginning level 3 students remains straightforward and readable. The references to specifications for materials and materials testing have been updated to include current European-wide standards. The chapter on selection of materials provides more cases, and the sections on new developments in materials and recycling of materials have been extended. Sustainability and 3D printing are now included, more applications have been indicated, and a number of case studies of materials and associated problems have been added.

Routledge October 2020 : 460pp Pb: 978-0-367-53550-6 : £41.99 Hb: 978-0-367-53549-0 : £165 eBook: 978-1-003-08244-6

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**Alan Darbyshire** College Lecturer, UK**, Charles Gibson** Yeovil College, UK

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Routledge July 2022: 518pp Pb: 978-1-032-18853-9: £48.99 Hb: 978-1-032-18854-6: £89.99 eBook: 978-1-003-25657-1

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**John Bird , Carl Ross** Professor of Structural Dynamics, University of Portsmouth, UK

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Routledge September 2019 : 388pp Pb: 978-0-367-25324-0 : £46.99 Hb: 978-0-367-25326-4 : £185 eBook: 978-0-429-28720-6

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Routledge November 2021:518pp Pb: 978-0-367-65140-4:**£62.99** Hb: 978-0-367-65141-1:**£160** eBook: 978-1-003-12802-1

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Routledge October 2019 : 576pp Pb: 978-0-367-20474-7 : **£52.99** Hb: 978-0-367-20475-4 : **£105** eBook: 978-0-429-26170-1

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# T Level Engineering

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#### **Andrew Livesey**

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Routledge May 2023 : 260pp Pb: 978-1-032-25750-1 : £36.99 Hb: 978-1-032-25751-8 : £84.99 eBook: 978-1-003-28483-3

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A Comprehensive Guide to Manual Operation



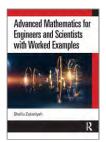
David Harrison Newcastle College, UK

Workshop Machining is a comprehensive textbook that explains the fundamental principles of manually operating machinery to form shapes in a variety of materials. It bridges the gap between traditional toolmaking skills and programming and operation of CNC machines in a production environment. Everything is covered from the basic machine controls to advanced cutting operations using a wide range of tooling and work holding devices. Theory and practice are shown viaa mixture of diagrams, text and illustrated worked examples, as well as through

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Shefiu Zakariyah University of Derby, UK

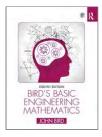
This covers core to advanced topics in mathematics. providing a comprehensive, step-by-step presentation of concepts to engineers, scientists and general readers. It moves from simple to challenging areas, with carefully tailored worked examples also of different degrees of challenge. Mathematical concepts are linked with engineering applications. It is written primarily for students at levels 3 and 4 (typically in the early stages of a degree in engineering or a related discipline) or for those undertaking foundation, access, Higher National Certificate (HND), International Foundation Year (IFY), and International Year One (IYO) courses with math modules.

Routledge November 2024 : 844pp Pb: 978-1-032-66327-2 : **£45.99** Hb: 978-1-032-66510-8: £105 eBook: 978-1-032-66512-2

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John Bird Defence College of Technical Training, UK

Basic Engineering Mathematics has helped thousands of students to succeed in their exams. Mathematical theories are explained in a straightforward manner, supported by over 500 practical engineering examples and applications to ensure that readers can relate theory to practice. The extensive and thorough topic coverage makes this a superb text for introductory level engineering courses. Its companion website provides resources for both students and lecturers, including lists of essential formulae, multiple choice tests, and full solutions for all 1,700 further questions; and illustrations and answers to revision tests for adopting course instructors.

Routledge March 2021 : 480pp Pb: 978-0-367-64367-6 : **£38.99** Hb: 978-0-367-64370-6 : **£115** eBook: 978-1-003-12421-4

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# Bird's Comprehensive Engineering Mathematics



#### John Bird

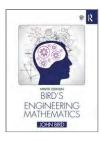
This comprehensive textbook covers the key mathematical principles for real-life engineering problems. Along with its companion website it provides simple explanations, supported by 1600 worked problems and over 3200 further problems contained within 384 exercises throughout the text. With 34 Revision tests together with 9 Multiple-choice tests -- and detailed solutions to 3200 further problems.

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#### 9TH FDITION

# **Bird's Engineering Mathematics**



John Bird Defence College of Technical Training, UK

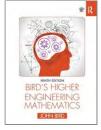
Engineering Mathematics has helped thousands of students to succeed in their exams, using worked examples and interactive problems. Mathematics is explained in a straightforward manner, supported by over 550 practical engineering examples and applications which relate theory to practice. This is a great text for a range of Level 2 and 3 engineering courses, and for A level revision. Its companion website provides resources for both students and lecturers, including lists of essential formulae and multiple-choice tests and full solutions for all 1900 further questions; and illustrations and answers to revision tests for adopting

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Shefiu Zakariyah University of Derby, UK

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**Jane Bottomley** Kungliga Tekniska Högskolan (KTH), Sweden.

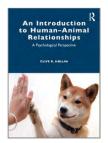
This second edition is an accessible companion designed to help science and technology students develop the knowledge, skills and strategies needed to produce clear and coherent academic writing in their university assignments. Using authentic texts to explore the nature of scientific writing, the book covers key areas such as scientific style, effective sentence and paragraph structure, and coherence in texts and arguments. Throughout the book, a range of tasks offers the opportunity to put theory into practice. This is an invaluable tool for the busy science or technology student looking to improve their writing and reach their full academic potential.

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A Psychological Perspective



#### Clive R. Hollin

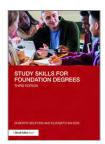
An Introduction to Human-Animal Relationships is a comprehensive introduction to the field of human-animal interaction from a psychological perspective across a wide range of themes. This key text brings an important perspective to the field of human-animal studies and will be useful to students and scholars in the fields of psychology, sociology, animal welfare, anthrozoology, veterinary science, and zoology.

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#### Dorothy Bedford, Elizabeth Wilson

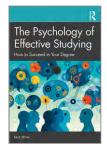
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How to Succeed in Your Degree



Paul Penn Independent Scholar, UK

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**David Wilkinson** Research Fellow within the Work-Based Learning Unit at the University of Leeds, **Dennis Dokter** 

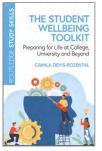
Designed for those undertaking research for the first time, the second edition of The Researcher's Toolkit is a practical and accessible guide for all those partaking in small-scale research. Jargon-free and assuming no prior knowledge, it covers the entire research process, from defining a research topic or question through to its completion. This book is a must-read guide for students and budding researchers as well as educators seeking to explain academic research and writing to their pupils. It will benefit anyone looking to complete a research project whether inside academia or beyond.

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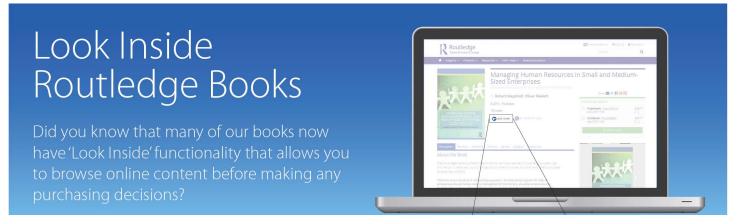




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