PHYSICS & RELATED SUBJECT AREAS


Fully revised and updated for the new linear qualification, written and checked by curriculum and specification experts, this Student Book supports and extends students through the new course whilst delivering the maths, practical and synoptic skills needed to succeed in the new A Levels and beyond. The book uses clear straightforward explanations to develop real subject knowledge and allow students to link ideas together while developing essential exam skills.


From the same author as the popular first edition, the second edition of this trusted, accessible physics textbook breaks down content into manageable chunks to help students with the transition from GCSE to A Level study. It has been fully revised and updated for the new A Level specifications for first teaching from September 2015, and is suitable for AQA, OCR, WJEC and Edexcel. The textbook provides plenty of examples and practice questions for consolidation of learning. Additional sections in the textbook provide help with revision and exam technique, practical skills and maths skills.


Created especially for the new WJEC AS Level Physics specification being taught in Wales from September 2015 and written by experienced teachers and examiners, this student book is endorsed by WJEC offering you high quality support you can trust. Designed to be motivating and student-friendly, this book will support you through every step of your course and help you thoroughly prepare for your exams. / Each topic includes detailed explanations and underpinning knowledge, all written in clear uncomplicated language / Exam practice and skills guidance is provided for the new assessment objectives / Maths techniques and skills are regularly tested throughout / Examples and worked solutions explain and reinforce understanding of key physics concepts / Numerous questions, tests and tips help ensure you have a good grasp of the key content for each topic.

The fourth edition helps bridge the gap between GCSE and A Level Physics for your students of all different abilities, reflecting the different experience and knowledge of students coming to A Level Physics from GCSE.

COMPUTER SCIENCE, INFORMATION AND GENERAL WORK & RELATED SUBJECT AREAS

Cushing, Steve. (2013). AQA GCSE Computer Science Computing Fundamentals. UK: Hodder Education. 004 C95 – 3 copies available

Unlock your full potential with this revision guide which focuses on the key content and skills you need to know. With My Revision Notes for AQA GCSE Computer Science, which perfectly matches the latest examined elements of the course, you can:
- Take control of your revision: plan and focus on the areas you need to revise, with advice, summaries and notes from author Steve Cushing
- Show you fully understand key topics by using specific strategies and theories to add depth to your knowledge of programming and computing issues and processes
- Apply programming and computing terms accurately with the help of definitions and key words on all topics
- Improve your skills to tackle specific exam questions such as how to choose appropriate programming languages with the help of self-testing and exam-style questions and answers


The authors present the complete guide to ANSI standard C language programming. Written by the developers of C, this new version helps readers keep up with the finalized ANSI standard for C while showing how to take advantage of C's rich set of operators, economy of expression, improved control flow, and data structures. The 2/E has been completely rewritten with additional examples and problem sets to clarify the implementation of difficult language constructs. For years, C programmers have let K&R guide them to building well-structured and efficient programs. Now this same help is available to those working with ANSI compilers. Includes detailed coverage of the C language plus the official C language reference manual for at-a-glance help with syntax notation, declarations, ANSI changes, scope rules, and the list goes on and on.

**004.076 M63 – 3 copies available**

This revision guide will provide you with extensive notes, exam questions and model answers covering the current syllabus of F451 – Computing Fundamentals, the first specification is taken in turn and notes, questions and model answers are provided illustrating the section. All of the specifications for F451 is covered in this manner. Students who work through this revision guide carefully and thoroughly should find themselves well prepared to tackle anything that the examiner might throw at them.

**SCIENCE AND MATH & RELATED SUBJECT AREAS**


**510.76 At88 – 20 copies available**

Motivating readers by making maths easier to learn, this work includes complete past exam papers and student-friendly worked solutions which build up to practice questions, for all round exam preparation. It also includes a Live Text CDROM which features fully worked solutions examined step-by-step, and animations for key learning points.


**510 B65 – 3 copies available**

The book incorporates many modern approaches to mathematical understanding whilst keeping the best of the traditional methods by making a feature of many worked examples and exercises to illustrate each new concept at every stage of its development. The book is arranged in a logical sequence of topics which is suitable for a student working on his own, but flexible enough to allow a teacher to incorporate the book into their teaching order. This product is part of the series “Pure Mathematics”.


**510 C87 – 3 copies available**

Foundation Maths has been written for students taking higher and further education courses who have not specialized in mathematics on post-16 qualifications and need to use mathematical tools in their courses. It is ideally suited to those studying marketing, business studies, management, science, engineering, social science, geography, combined studies and design. It will be useful for those who lack confidence and who need careful, steady guidance in mathematical methods. For those whose mathematical expertise is already established, the book will be a helpful revision and reference guide. The style of the book also makes it suitable for self-study and distance learning.
**510 C87 – 3 copies available**

Mathematics for Engineers teaches, develops and nurtures those skills. Practical, informal and accessible, it begins with the foundations and gradually builds upon this knowledge as it introduces more complex concepts to cover all requirements for a first year engineering maths course, together with introductory material for even more advanced topics.


This textbook offers an accessible and comprehensive grounding in many of the mathematical techniques required in the early stages of an engineering or science degree, and also for the routine methods needed by mathematics students.


Building on the foundations laid in the companion text Modern Engineering Mathematics, this book gives an extensive treatment of some of the advanced areas of mathematics that have applications in various fields of engineering, particularly as tools for computer-based system modelling, analysis and design. Despite the advanced level of this text, the philosophy of learning by doing is retained, with continuing emphasis on the development of students’ ability to use mathematics with understanding to solve engineering problems.


The tenth edition of this bestselling text includes examples in more detail and more applied exercises; both changes are aimed at making the material more relevant and accessible to readers. Kreyszig introduces engineers and computer scientists to advanced math topics as they relate to practical problems. It goes into the following topics at great depth: differential equations, partial differential equations, Fourier analysis, vector analysis, complex analysis, and linear algebra/differential equations.

A Foundation Course in Statics and Dynamics is the ideal text for anyone encountering engineering mechanics for the first time or who needs reinforcement of the basic principles. From the basics of static mechanics and frameworks, through to kinetics, friction and kinematics, it provides a largely non-mathematical introduction for students on foundation, conversion or undergraduate degree courses in engineering and technology. The book aims to teach the subject in the most accessible and enjoyable way by avoiding the use of unnecessary mathematics. It uses a consistent technical level of writing to create an accessible, introductory text and includes examples taken from both civil and mechanical engineering to illustrate the theory and develop understanding.

ENGINEERING & RELATED SUBJECT AREAS


Specifically written to cover AQA’s Product Design (3-D Design) specification, our student book takes a focused look at design and manufacturing processes, providing a visual insight into specific products and industries to help motivate students. Clear learning objectives at the start of each chapter, helping students focus on what they need to know. Key terms reinforce learning, providing definitions of key words that students need to be familiar with. Includes a range of activities that encourages your students to analyse materials and manufacturing processes used in product design.


This all-in-one-package includes more than 500 fully solved problems, examples, and practice exercises to sharpen your problem-solving skills. Plus, you will have access to 20 detailed videos featuring instructors who explain the most commonly tested problems—it’s just like having your own virtual tutor! You’ll find everything you need to build confidence, skills, and knowledge for the highest score possible.


This updated textbook provides a resource on the non-technical aspects of professional practice for both engineering students and young technical professionals. Coverage supports the Accreditation Board for Engineering and Technology (ABET)’s Engineering Criteria 2000, as well as ASCE’s current BoK and ASME and AIChE’s BoKs.

Helps students make the transition to writing at college or university as simple as possible, providing them with the basic skills they need to write in an effective academic style. This book gives advice to overcome the main hurdles: overcoming apprehension; planning reading; and getting organized.

TOTAL: 19 Titles

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