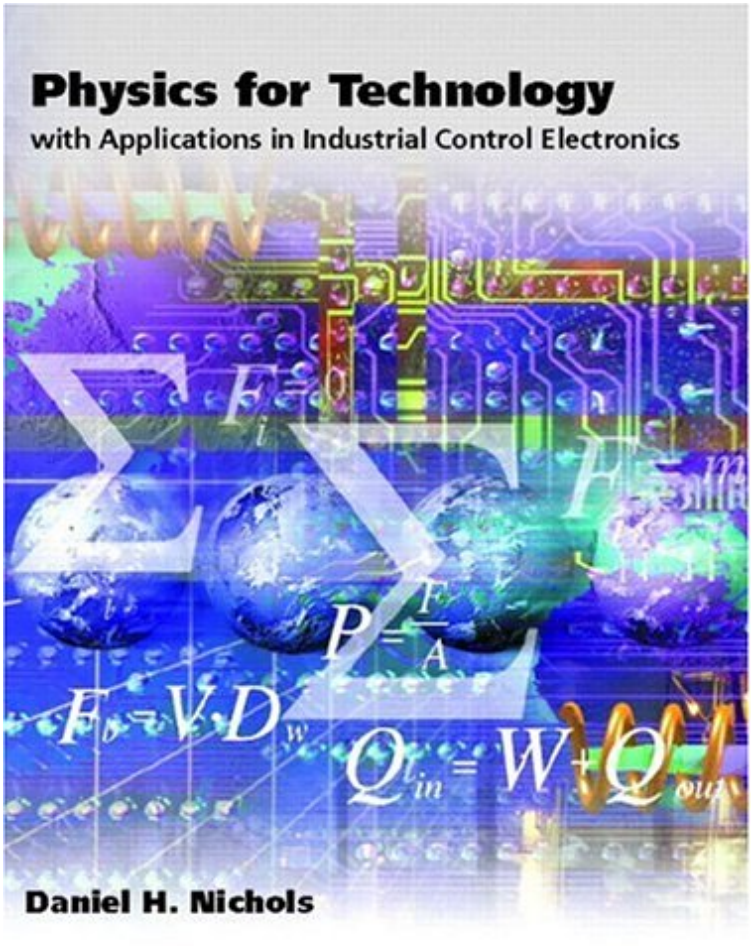
Physics for Technology: With Applications in Industrial Control Electronics

Daniel H. Nichols
*DOC | *audiobook | ebooks | Download PDF | ePub*



#2157621 in Books 2001-10-27Ingredients: Example IngredientsOriginal language:EnglishPDF # 1 10.80 x .90 x 8.10l, 1.89 #File Name: 0130266027304 pages | File size: 48.Mb

Daniel H. Nichols : Physics for Technology: With Applications in Industrial Control Electronics before purchasing it in order to gage whether or not it would be worth my time, and all praised Physics for Technology: With Applications in Industrial Control Electronics:

1 of 1 people found the following review helpful. Great Text for Community College Technology ProgramBy ViperBoyThis text fits the needs of the technology program at our community college--challenging, but not overly difficult. Physics laws and principles are closely tied to industrial processes and examples.1 of 1 people found the following review helpful. It's a textbookBy GaryWhat else is there to say. I got it cheaper than if I had bought it at the college bookstore.0 of 1 people found the following review helpful. Book binding is no goodBy KGeorgeThe textbook only gets two stars because within the first week of using, the pages are coming out. The binding on this book sucks,

the book is new and I am not rough on my books. I guess I should have just gotten the one at the school library, tried to save myself some money but really saved nothing with this new book already coming apart.

This innovative introduction to physics replaces lengthy derivations and theoretical discussions with practical applications of physics readers actually encounter in industry--and, it relates all physics concepts to devices they already know (e.g., speedometer, thermometer, weight scale, etc.). Includes practical exercises and 10 laboratory assignments. Electronics Review. Units and Measurements. Linear Motion. Force and Momentum. Energy Work and Power. Circular Motion. Machines. Strength of Materials. Fluids. Fluid Flow. Temperature and Heat. Thermodynamics. Waves. Light. Magnetism. For Electronic Technicians working with electromechanical devices.

From the Back Cover Physics for Technology with Applications in Industrial Control Electronics provides an introduction to physics using applications from various technology-related disciplines. It includes coverage of linear and rotational motion; energy, work, and power; heat and temperature; fluids; waves; and magnetism. Illustrations are used as an integral part of the text to support the written information and to make it easier for students to visualize and understand the concepts. Practical examples of physics in industry, especially in the field of electronics, help to reinforce and apply the concepts presented in the text. Other features of this text include Worked examples of important formulas Application problems and questions at the end of each chapter A review of trigonometry A built-in laboratory section on perforated pages for easy removal and use in a lab setting Excerpt. Reprinted by permission. All rights reserved. This book is intended as an introductory physics text for students majoring in engineering technology programs with particular emphasis in electronic applications. A background in algebra and AC/DC electronics is assumed. It was written in an effort to try to make clear the relevance of physics to a career in electronics. To achieve this, lengthy derivations and theoretical discussions on physics have been replaced with practical applications of physics in industry. Unlike most texts in physics where a general concept is explained and leads to specific examples, I tried to take the opposite approach. Whenever possible, the discussion starts off with something the student is familiar with (for example, a speedometer, thermometer, etc.) and generalizes it to the physics behind these devices. This approach makes clear the motivation and relevance for studying physics. One of the unique features of this book is the incorporation of electronics into the general physics discussions. By doing so, this book serves as an introduction to the physics of sensors and an introduction to industrial control electronics. The text is intended for a one-semester course in physics using a judicious selection of chapters. Acknowledgments I would like to thank my colleagues at DeVry, Chicago: Dean Patrick O'Connor for editing the first draft and many helpful discussions, and Don Ingram for many of the photographs used throughout the book. I would also like to thank my good friend Penny for her help with the illustrations and editing the text. I would like to acknowledge the reviewers of this text: Steve Brown, Clackamas Community College (OR); Michael Crittenden, Genesse Community College (NY); Susan Ramlo, University of Akron (OH); and William Shi, DeVry Institute of Technology (NY). Lastly, I would like to thank my family for all their encouragement and support. DANIEL H. NICHOLS Excerpt. Reprinted by permission. All rights reserved. This book is intended as an introductory physics text for students majoring in engineering technology programs with particular emphasis in electronic applications. A background in algebra and AC/DC electronics is assumed. It was written in an effort to try to make clear the relevance of physics to a career in electronics. To achieve this, lengthy derivations and theoretical discussions on physics have been replaced with practical applications of physics in industry. Unlike most texts in physics where a general concept is explained and leads to specific examples, I tried to take the opposite approach. Whenever possible, the discussion starts off with something the student is familiar with (for example, a speedometer, thermometer, etc.) and generalizes it to the physics behind these devices. This approach makes clear the motivation and relevance for studying physics. One of the unique features of this book is the incorporation of electronics into the general physics discussions. By doing so, this book serves as an introduction to the physics of sensors and an introduction to industrial control electronics. The text is intended for a one-semester course in physics using a judicious selection of chapters. Acknowledgments I would like to thank my colleagues at DeVry, Chicago: Dean Patrick O'Connor for editing the first draft and many helpful discussions, and Don Ingram for many of the photographs used throughout the book. I would also like to thank my good friend Penny for her help with the illustrations and editing the text. I would like to acknowledge the reviewers of this text: Steve Brown, Clackamas Community College (OR); Michael Crittenden, Genesse Community College (NY); Susan Ramlo, University of Akron (OH); and William Shi, DeVry Institute of Technology (NY). Lastly, I would like to thank my family for all their encouragement and support. DANIEL H. NICHOLS