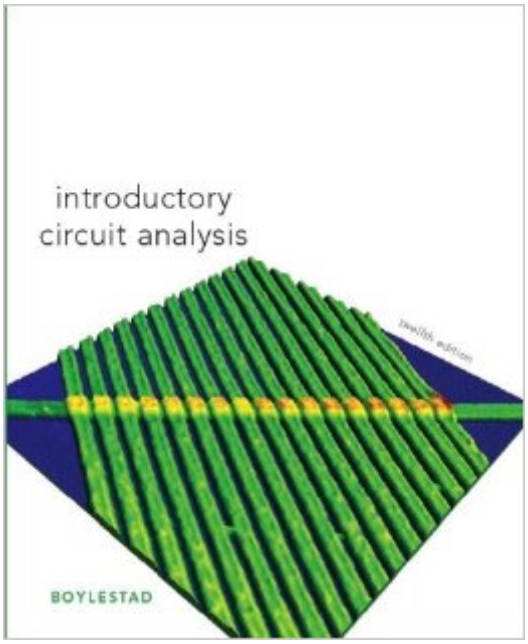
Introductory Circuit Analysis (12th Edition)



Synopsis

For DC/AC Circuit Analysis coursesÂ requiringÂ a comprehensive, classroom testedÂ and time tested text with an emphasis on circuit analysis and theory. Â THE most widely acclaimed text in the field for more than three decades , Introductory Circuit Analysis provides introductory-level students with the most thorough, understandable presentation of circuit analysis available. Exceptionally clear explanations and descriptions, step-by-step examples, practical applications, and comprehensive coverage of essentials provide students with a solid, accessible foundation

Book Information

Hardcover: 1200 pages

Publisher: Prentice Hall; 12 edition (January 15, 2010)

Language: English

ISBN-10: 0137146663

ISBN-13: 978-0137146666

Product Dimensions: 11.1 x 1.7 x 8.8 inches

Shipping Weight: 5.9 pounds

Average Customer Review: 4.0 out of 5 starsÂ Â See all reviewsÂ (75 customer reviews)

Best Sellers Rank: #37,352 in Books (See Top 100 in Books) #10 inÂ Books > Business & Money > Job Hunting & Careers > Vocational Guidance #27 inÂ Books > Crafts, Hobbies & Home > Home Improvement & Design > How-to & Home Improvements > Electrical #45 inÂ Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics

Customer Reviews

Circuit analysis is a very intense, math-oriented field. The objective is to be able to predict a voltage or current at ANY spot in a circuit, and be sure the circuit is efficient vs. the laws of electricity and electronics. LINEAR circuits can use techniques like complex numbers, substitution, simplification, etc., but NON LINEAR means you’re getting into the most advanced math on the planet: Fourier transforms, matrix calculus, linear algebra, tensors, systems of inequality equations, and much more. Even a single semiconductor (eg. pn diode) makes the circuit nonlinear, as do time varying components, oscillators, etc., so-- tough subject.That means that most Engineering, academic texts are out of the reach of many undergrads unless they got through linear algebra. LaPlace transforms, graph theory, wavelets, etc. are all ADVANCED topics. So, you get an electronics text instead, learn the basics, but really miss out on WHY the circuits are doing what they are doing. This is where this book shines! The author does an AMAZING job of covering real analysis without resorting to

calculus hardly at all-- making the book PERFECT for hobbyists, self study, and electronics "techs."In fact, he covers a LOT of basic electronics too-- you can really start with NO knowledge of the difference between a capacitor and resistor, and progress all the way through 555's, transistors, op-amps and all the rest! I review books for library purchasers and out of the 25 top electronics and analysis texts, I'd rate this #1 for self study/ beginners, in BOTH electronics and circuit analysis! Then, if you want to go farther, go ahead and explore the linear algebra/ Fourier etc. calculus based texts. I mean, even a charge moving past a point at time=t is a derivative, so this author does the almost impossible by not getting into integrals by page two! The truth is, a lot of real engineers (like me) use rules of thumb and shortcuts much more than we use dynamic systems of differential equations all day to check our designs! PSpice to the rescue-- and there is a LOT here!For reference, I AM a circuit analyst at payroy dot com who evaluates circuits for uniqueness as well as ideal function, and still find this text outstanding for simplifying explanations without dumbing them down. After all, the truth is, we engineers SOLVE circuit analysis problems BY simplifying them--making complex circuits simpler with analogies, piecewise linearization of non linears, nodal and mesh analysis, etc.! Work smarter, not harder.Library Picks reviews only for the benefit of shoppers and has nothing to do with , the authors, manufacturers or publishers of the items we review. We always buy the items we review for the sake of objectivity, and although we search for gems, are not shy about trashing an item if it's a waste of time or money for shoppers. If the reviewer identifies herself, her job or her field, it is only as a point of reference to help you gauge the background and any biases.

This book has a very clear, "lack of communication". The book is fine for the basics but the problem exercises do not involve the basics. The author explains problems from the beginning but goes straight to the end with the problem exercises. There needs to be more depth between the examples and the problems. This book is fine for some one who already knows it. But,if you don't and want to get confused and frustrated, then I recommend this book. If you are unfortunate and are forced to use this book, I would look for an outside source for reference. Beware!!! My question to the author is: Why are you keeping the middle a secret. This stuff is not as hard as the author makes it. To sum this up, the author says here is an elementary example now I want you to solve this advanced problem. Students need more examples with more depth. This book may be titled as introductory but it sure is geared for the more advanced.Thanks, but no thanks.

We use this text as well as the accompanying lab manual in our introductory course (Intro to circuit

analysis). For the most part this book is adequately laid out, with many topics covered as well as practical applications. What is lacking however, is in-depth explanations of the equations - that is, how/why they are using the numbers they are, especially the why. Perhaps a study guide and/or a solutions manual would be a good complement to the text itself.This book assumes too many things, and being an introductory level book, more explanations are necessary.

We are using this book for one of our engineering courses and have made it to the 8th chapter so far. For students who have taken Physics 2, everything will be pretty easy to understand. Just skimming the chapters will be enough to do the problems.One thing I can't stand about this book is the fact that the answers to the odd problems at the back of the book have a lot of errors. It seems like they just copied and pasted the solutions from a previous edition. It's disappointing to pay over $100 for a book just to find out that the authors did not even check their work. What a way to set an example.The reason I'm giving it 2 stars and not 1 is because the book has a lot of illustrations and teaches you the hands-on part of circuits.