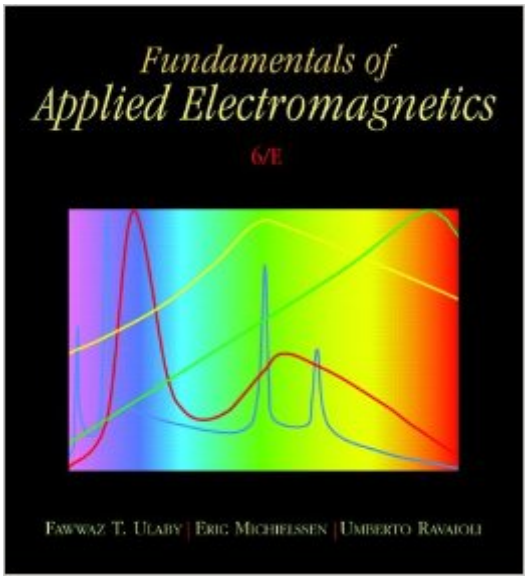
Fundamentals Of Applied Electromagnetics (6th Edition)



Synopsis

KEY BENEFIT: Widely acclaimed both in the U.S. and abroad, this reader-friendly yet authoritative volume bridges the gap between circuits and new electromagnetics material. Ulaby begins coverage with transmission lines, leading readers from familiar concepts into more advanced topics and applications. KEY TOPICS: Introduction: Waves and Phasors; Transmission Lines; Vector Analysis; Electrostatics; Magnetostatics; Maxwell's Equations for Time-Varying Fields; Plane-Wave Propagation; Reflection, Transmission, and Waveguides; Radiation and Antennas; Satellite Communication Systems and Radar Sensors. MARKET: A useful reference for engineers.

Book Information

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Customer Reviews

I am an EE undergrad, and this was the assigned textbook in my third year electrodynamics course. I used Cheng’s book before. Cheng’s book has a more theoretical approarch and mathematical rigorousness. Ulaby’s book, however, is superior when it comes to building an intution or an ’engineering sense’ of how systems work and how to solve problems. I would definitely recommend this book for the second/third year EE major whose studying the topic for the first time as the book offers a very accessible introduction and many end-of-chapter problems that are actually doable and can enhance your understading of the subject matter; unlike cheng’s problem sets which can get very difficult/challenging.

I got this book for a semester, and as it turned out the professor wanted to use a different one, and I

think that was a good choice, I think the other explained things more clearly in English before jumping into equations. I would sometimes check back to see what this book had to say, and some things helped, but for the most part this book wasn't as helpful.

Don't buy it, it's a waste of time if you are just starting out. Awkward notation, too many pictures, not enough explanation... just don't buy it, even if it's required. I ended up going with the tried and true David K. Cheng - Field and Wave Electromagnetics. That one is excellent!

I've had this book for an undergraduate Electrical and Computer Engineering course in waves and transmission lines. In general, I would say that the book is a mess - it doesn't explain things coherently, jumps between unrelated subjects within the chapter, and fails to link equations in meaningful ways. Our homework problems for the class were assigned directly out of the book, and the students quickly began to describe them as "scavenger hunts" - when you found the equations you needed from the chapter text, the problems were quite easy, but you'd spend more than half the time looking for them and trying to deduce from the text whether they were contextually the right ones to use. Many students would give up on using the text at all and would skip straight to online solution manuals, not to copy answers but simply to find comprehensive lists of the correct equations.This problem is exacerbated by a near total lack of useful examples, which is a must have for engineering classes. Proper example problems that use the equations and concepts of a chapter are the cornerstone of teaching difficult mathematics and design techniques, but such practical uses are few and far between in Ulaby's text, and tend to be difficult to follow if not entirely incomprehensible. I found the chapter on basic electrostatics to be especially shocking - most physics texts cover the same material in half the space, and include extensive examples of the equations in use, but this text takes almost 30 pages of redundant equations and tangential explanations with almost no useful examples on potential or derivational technique.In general, if you have a choice, I'd say avoid this text. If not, be prepared to make the most out of online resources, and keep another physics textbook on hand for reference. All the essentials are there, but some major revisions will have to be done to make future editions accessible and useful to students of engineering and the applied sciences.

I am fortunate enough to have taken classes with Dr. Ulbay. He is without a doubt the finest professor anywhere. While I didn't get to take the course for this book with him, I found having his book very helpful. It does a great job explaining concepts and providing examples. Also the applets

which are available online now that go with the book are fantastic and really help illustrate the concepts.

I've been using this book for most of the semester now and it lacks... a lot. It'll give you tons of equations and theory, but no ways (or very few ways) to actually apply either. It's quite frustrating to have to rely solely on my professor for suitable examples, especially for a class that is as difficult as this (Electromagnetics). I wish we were using a better book for this class!

This was my first E&M book out of many. It's a very good "starter" book for introducing concepts and notation to someone who does not have much math beyond vector calculus. The book is generally intended for engineering undergrads, and so spends most of its time walking you through things at a slower pace than other books. The trade-off is that you miss out on many great advanced topics in antenna theory, waveguides, etc. Even so, the treatment on transmission line theory is especially well-done. If you're looking for something more advanced, Jin Au Kong has some good references along with Jackson's classic text. Pozar's text is a great source for more advanced topics more in the transmission-line realm.

It's ok for an intro book for maybe 2nd year or 3rd year engineering students. This is NOT for physic majors as it pertains more relevant information towards engineers. (Mostly Electrical Engineers). Having said that, there are some mistakes throughout the text, in the diagrams, in the captions. In fact, I say this book has more mistake than I ever encountered in college textbooks. I wouldn't use this as a main textbook, maybe a supplementary textbook.

Cryptography: Protocols, Algorithms, and Source Code in C [APPLIED CRYPTOGRAPHY: PROTOCOLS, ALGORITHMS, AND SOURCE CODE IN C BY Schneier, Bruce (Author) Nov-01-1995 Applied Therapeutics: The Clinical Use of Drugs (APPLIED THERAPEUTICS (KODA-KIMBLE)) Elementary Stochastic Calculus With Finance in View (Advanced Series on Statistical Science & Applied Probability, Vol 6) (Advanced Series on Statistical Science and Applied Probability) Time Domain Electromagnetics (Academic Press Series in Engineering) Engineering Electromagnetics Microstrip and Printed Antenna Design (Electromagnetics and Radar) Ultra-Wideband Short-Pulse Electromagnetics 4 (v. 4) Electromagnetics