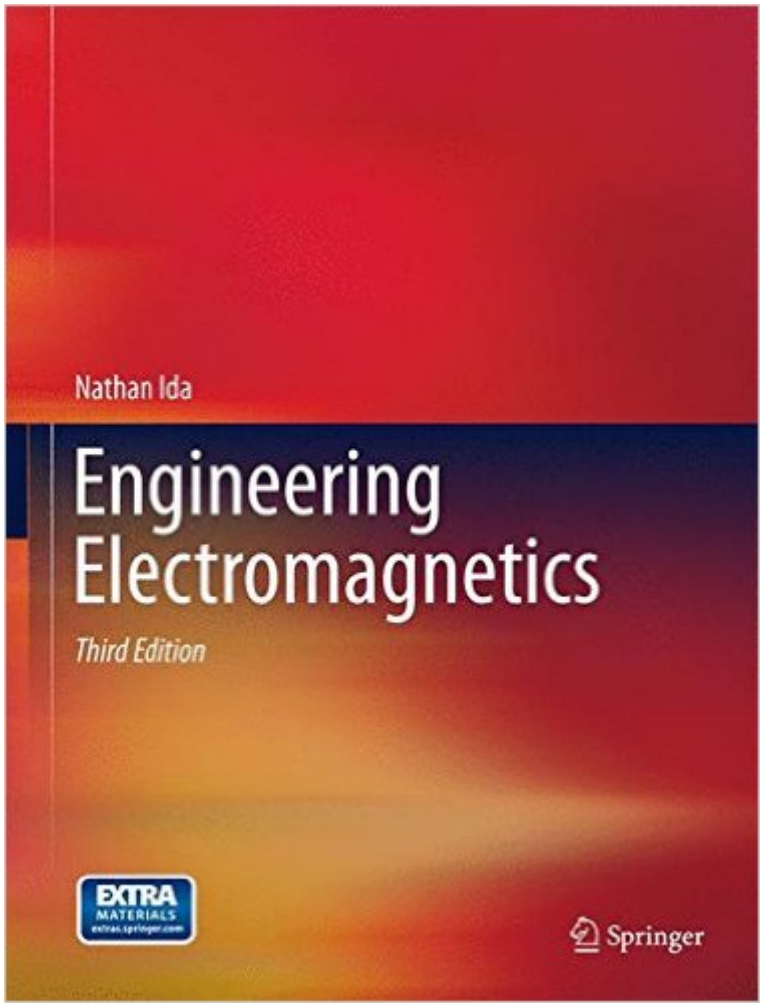
Engineering Electromagnetics



Synopsis

This book provides students with a thorough theoretical understanding of electromagnetic field equations and it also treats a large number of applications. The text is a comprehensive two-semester textbook. The work treats most topics in two steps â “ a short, introductory chapter followed by a second chapter with in-depth extensive treatment; between 10 to 30 applications per topic; examples and exercises throughout the book; experiments, problemsÂ and summaries.The new edition includes: modifications to about 30-40% of the end of chapter problems; a new introduction to electromagnetics based on behavior of charges; a new section on units; MATLAB tools for solution of problems and demonstration of subjects; most chapters include a summary. The book is an undergraduate textbook at the Junior level, intended for required classes in electromagnetics. It is written in simple terms with all details of derivations included and all steps in solutions listed. It requires little beyond basic calculus and can be used for self-study. The wealth of examples and alternative explanations makes it very approachable by students.Â Â Â Â More than 400 examples and exercises, exercising every topic in the bookÂ Â Â Â Â Â Â Â Â Â Â Includes 600 end-of-chapter problems, many of them applications or simplified applicationsÂ Â Â Â Â Â Â Â Â Â Â Discusses the finite element, finite difference and method of moments in a dedicated chapter

Book Information

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Customer Reviews

Amazing. I am taking Dr. Ida’s electromagnetics courses and this book is physically the largest and heaviest book I have encountered in my life. It can be used as a shield in times of danger and once

you have read every word, you acquire the power to batter enemies with electromagnetic waves. I am still training but as of now I can propagate plane waves in one dimension. One day I am sure you will be riding the electromagnetic waves as well. Ta ta!

A wealth of knowledge. Graduate level physics mixed with serious engineering applicability.

Clear concepts, lots of applications, good coverage.

This is one of the worst textbooks I have ever purchased. The author does a horrible job of explaining most concepts and in many areas unnecessarily complicates the subject at hand.