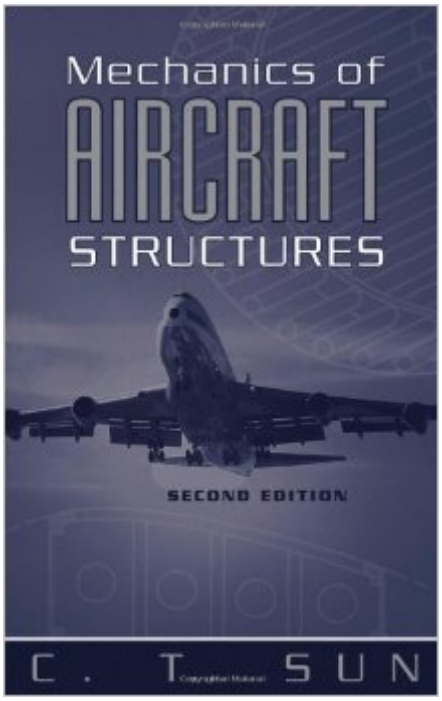
Mechanics Of Aircraft Structures



Synopsis

Designed to help students get a solid background in structural mechanics and extensively updated to help professionals get up to speed on recent advances This Second Edition of the bestselling textbook Mechanics of Aircraft Structures combines fundamentals, an overview of new materials, and rigorous analysis tools into an excellent one-semester introductory course in structural mechanics and aerospace engineering. It’s also extremely useful to practicing aerospace or mechanical engineers who want to keep abreast of new materials and recent advances. Updated and expanded, this hands-on reference covers: * Introduction to elasticity of anisotropic solids, including mechanics of composite materials and laminated structures * Stress analysis of thin-walled structures with end constraints * Elastic buckling of beam-column, plates, and thin-walled bars * Fracture mechanics as a tool in studying damage tolerance and durability Designed and structured to provide a solid foundation in structural mechanics, Mechanics of Aircraft Structures, Second Edition includes more examples, more details on some of the derivations, and more sample problems to ensure that students develop a thorough understanding of the principles.

Book Information

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Customer Reviews

I won’t go into much detail about the frustrating and inadequate nature of this book, as many others have already done so. Basically, all you need to know about this book is that it is a waste of time. The author rarely explains anything with sufficient detail and seems to expect you to already know an incredible amount about aircraft structures. My TA even told us that we had better come to class

every day, because the textbook is pretty much worthless. I wondered why anyone would force students to waste money on a book that is cleary insufficient, but then I recognized the author's name. It seems the only reason why I am forced to buy this book is because the author is a professor at my school. Just stay away from this book if you can.

This book is not very usable if this is the first time you are seeing this material. Everything is presented as if only for review and you have already learned all the material before. I would pass on this book if possible

I am an aerospace engineering student who had to purchase this book for a structures class. The book is relatively short, which is fine, and covers what needs to be covered.The problem is that it's layout is hard to follow and many of the derivations are one-offs with little relation to the rest of the material. A better layout would derive everything in a principled manner and then show how, for example, Bernoulli Euler and Timoshenko beam theory are merely simple versions of general beam theory based on your assumptions. That would really help us understand what assumptions are being made, why they are being made, and we have the tools to tackle whatever by starting from the general equations.I highly recommend Kosmatka's structures notes from UCSD in place of CT Sun. If it ever is published go for that instead.

This is arguably one of the WORST engineering text books I have ever used. Forget about how expensive a book with such little content is, I can let that part slide.1) This book is so poorly laid out and written, it is difficult to put my frustration into words. It frequently references figures several pages away, and equations are rarely effectively derived. To fully understand the derivations, expect to have to reference several other sources. It is pretty clear that the publishers sole intent was to cram this stuff into as small of a book as possible. You will waste a ton of time flipping back and fourth all over the place.2) The example problems in the book are obscenely simple compared to the actual chapter problems and leave many questions unanswered. One may argue that I should be able to figure out the questions I have on my own from the text, which I can, however it is such a huge waste of time when a few extra lines would make it much easier to understand.3) The chapter on "composites" is an absolute joke. It is a token explanation of very basic composite theory and having taken an entire course on composites, I can say it is basically useless for any practical purpose.4) The fact that this book only covers 2-D shear flow is again, a testament to the usefulness (or should I say uselessness) of this book and is well suited to people who like solving math

problems but will never be able to actually apply knowledge to the real world.I own 1 other text book and have seen another sold on on the same subject that are SIGNIFICANTLY better than this. Do yourself a favor and purchase any other textbook and just copy homework problems from a class mate.

I haven't utilized this book much, but I was required to purchase it for my class. I've used it for homework assignments from the questions in the text, but for nothing else. The notes I've gotten in class have been sufficient, and the few times I've turned to the book or further clarification, it hasn't provided any. Not very detailed in any particular subject. Not overly helpful for deeper study.

I do not like this book. I am able to read and comprehend the material, but it is difficult to do. The derivations are very math intensive, and there aren't enough words explaining the steps during the derivations. The steps laying out the derivation are complete at the beginning of the derivation, but they diminish as the derivation is worked out. The book isn't terrible, but I prefer my instructors notes over the book. I only open this book when I can't piece together my notes taken in class.

Bad book. I was forced to buy the book by the course. The example are bad, the explanation are unclear, and the structure of the book was bad.

and Thermal Sciences) Dynamics of Structures (4th Edition) (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Dynamics of Structures (5th Edition) (Prentice-Hall International Series I Civil Engineering and Engineering Mechanics)