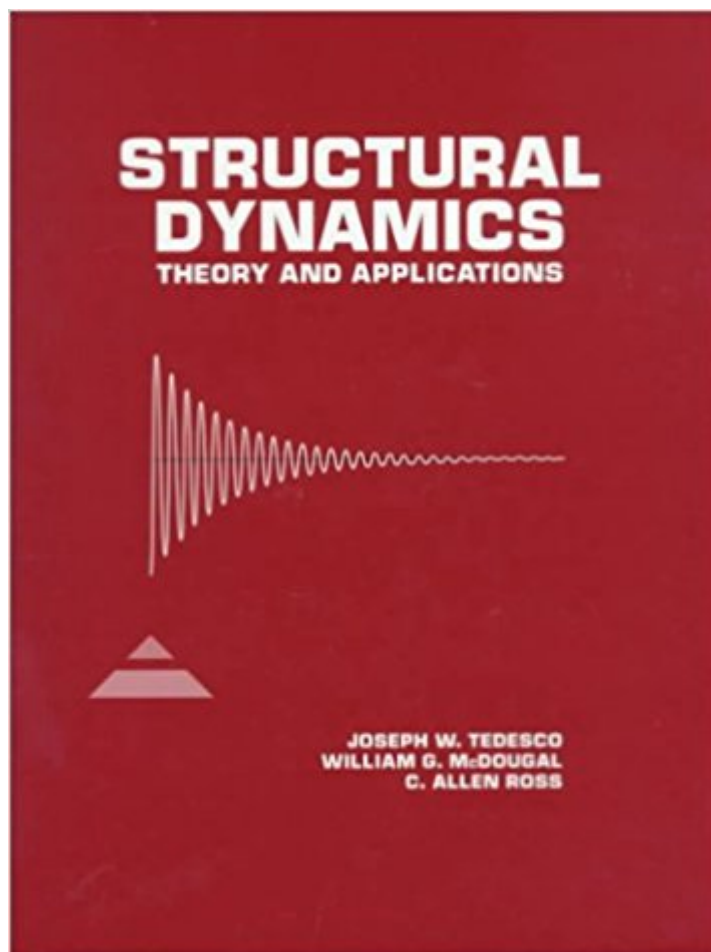


The book was found

Structural Dynamics: Theory And Applications



Synopsis

Structural Dynamics: Theory and Applications provides readers with an understanding of the dynamic response of structures and the analytical tools to determine such responses. This comprehensive text demonstrates how modern theories and solution techniques can be applied to a large variety of practical, real-world problems. As computers play a more significant role in this field, the authors emphasize discrete methods of analysis and numerical solution techniques throughout the text. Features: covers a wide range of topics with practical applications, provides comprehensive treatment of discrete methods of analysis, emphasizes the mathematical modeling of structures, and includes principles and solution techniques of relevance to engineering mechanics, civil, mechanical and aerospace engineering.

Book Information

Paperback: 816 pages

Publisher: Pearson; 1 edition (December 11, 1998)

Language: English

ISBN-10: 0673980529

ISBN-13: 978-0673980526

Product Dimensions: 7.9 x 1.7 x 10 inches

Shipping Weight: 3.4 pounds (View shipping rates and policies)

Average Customer Review: 3.0 out of 5 stars 7 customer reviews

Best Sellers Rank: #189,915 in Books (See Top 100 in Books) #7 in [Books > Engineering & Transportation > Engineering > Civil & Environmental > Structural Dynamics](#) #95 in [Books > Engineering & Transportation > Engineering > Civil & Environmental > Structural](#) #199 in [Books > Textbooks > Engineering > Civil Engineering](#)

Customer Reviews

This book provides engineering students with an understanding of the dynamic response of structures and the analytical tools to determine such responses. This comprehensive text demonstrates how modern theories and solution techniques can be applied to a large variety of practical, real-world problems. As computers play a more significant role in this field, the authors emphasize discrete methods of analysis and numerical solution techniques throughout the text. Features Covers a wide range of topics with practical applications Provides comprehensive treatment of discrete methods of analysis Emphasizes the mathematical modeling of structures Includes principles and solution techniques of relevance to engineering mechanics, civil,

mechanical, and aerospace engineering

C. Allen Ross is Emeritus Professor of the Department of Aerospace Engineering, Mechanics and Engineering Science at the University of Florida, and is a faculty member at the Graduate Engineering Research Center, Shalimar, Florida. Dr. Ross is a Registered Professional Engineer with the State of Florida and has thirty-eight years of teaching and research experience with the University of Florida. He serves on a number of professional committees and is an Associate Fellow of AIAA.

This book has always stood out for me in terms of usefulness. Like most books in this category, the familiar/fundamental topics of steady-state response, sudden/shock loading, etc are covered.....but also there are chapters on elastic wave propagation in solids (with practical applications as far as impact goes), blast loads on structures, and structures subjected to water waves. I also found the section on Inelastic Response (in the Earthquake chapter; chapter 18) particularly useful. Also, see the discussion on the selection of the time step for dynamic analysis (p.427-428). If you've ever analyzed a structure subjected to sinusoidal/unbalanced forces, you know that the selection of the time step is pretty important. Another helpful bit of information is a chart presented (on p.423) that suggests damping values based on the stress level of the supporting frame. As other users have pointed out: there are typos in this book. I have the hard cover (original print) from 1999.....so perhaps later versions have cleaned this up.

It's an expensive book, and it's already falling apart. I'm usually very careful with my books and I like to keep them neat and clean. I can't even give review about the content of the book cause I'm afraid to read it...the pages are coming off so easily. I'm trying to find a hard cover version online, because I usually like to keep my engineering books. It's just upsetting how an expensive book like that has such a poor binding. Somebody decided to be cheap...hmmm...

This book is written slightly toward Civil Engineering perspective but can be used for Mechanical Engineering. Application to Civil engineering such as, seismic, wave dynamic is quite good. The writing is compressible but The Imperial unit in the examples is quite annoying.

The cover is in bad condition, doesn't worth this price since the new one only cost 20 dollars more. Don't save 20 dollars, get a new one

The scope and content of the book is very appropriate for a beginning student in structural dynamics, and the organization is very nice. I think the book strikes a good balance of coverage between civil and mechanical engineering subject matter. However, a serious flaw of the book at least in the first printing (and the only printing as far as I can tell) is the exceptional number of typographical errors it contains. I would give more stars if an edition with the typos fixed were to appear.

For me, this is a good book for students who want to get master degree in Civil Engineering, Building Engineering and Aerospace Engineering. Students can understand of the dynamic response of structures and the analytical tools to determine such responses. Furthermore, it demonstrates modern theories, solution techniques and real-world problems.

This book starts with the basic and provides various examples to make the conception clear.

[Download to continue reading...](#)

Structural Dynamics of Earthquake Engineering: Theory and Application Using Mathematica and Matlab (Woodhead Publishing Series in Civil and Structural Engineering) Structural Dynamics: Theory and Applications Probabilistic Structural Dynamics: Advanced Theory and Applications The Techniques of Modern Structural Geology, Volume 3: Applications of Continuum Mechanics in Structural Geology Structural Dynamics: Theory and Computation Structural Analysis: With Applications to Aerospace Structures (Solid Mechanics and Its Applications) Structural Equation Modeling with Mplus: Basic Concepts, Applications, and Programming (Multivariate Applications Series) Strengthening of Reinforced Concrete Structures: Using Externally-Bonded Frp Composites in Structural and Civil Engineering (Woodhead Publishing Series in Civil and Structural Engineering) Structural Analysis and Synthesis: A Laboratory Course in Structural Geology Structural Analysis and Synthesis: A Laboratory Course in Structural Geology 3rd (third) edition by Rowland, Stehen M., Duebendorfer, Ernest M., Schiefelbein, I published by Wiley-Blackwell (2007) [Spiral-bound] Structural Analysis and Synthesis: A Laboratory Course in Structural Geology, 2nd Edition Molecular Gas Dynamics: Theory, Techniques, and Applications (Modeling and Simulation in Science, Engineering and Technology) Dynamics of Structures: Theory and Applications to Earthquake Engineering (2nd Edition) Dynamics of Structures: Theory and Applications to Earthquake Engineering Introduction to Structural Dynamics and Aeroelasticity (Cambridge Aerospace Series, Vol. 15) Harnessing Bistable Structural Dynamics: For Vibration Control, Energy

Harvesting and Sensing Introduction to Structural Dynamics and Aeroelasticity (Cambridge Aerospace Series) Structural Dynamics and Vibration in Practice: An Engineering Handbook Structural Dynamics of Electronic and Photonic Systems Fundamentals of Structural Dynamics

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)