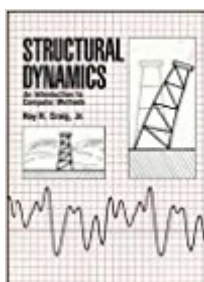


The book was found

# Structural Dynamics: An Introduction To Computer Methods



## Synopsis

Provides the basic material needed to use structural dynamics computer programs and to do structural dynamics testing. Introduces the numerical techniques underlying finite element computer codes through use of "hand" solutions and the coding of several subroutines in FORTRAN and BASIC. Emphasizes the mathematical modelling of structures and the methods for solving structural dynamics problems with a digital computer. Presents solution techniques applicable to various engineering disciplines.

## Book Information

Hardcover: 544 pages

Publisher: Wiley; 1 edition (August 19, 1981)

Language: English

ISBN-10: 0471044997

ISBN-13: 978-0471044994

Product Dimensions: 6.7 x 1.2 x 9.1 inches

Shipping Weight: 2.4 pounds

Average Customer Review: 5.0 out of 5 stars 3 customer reviews

Best Sellers Rank: #642,858 in Books (See Top 100 in Books) #31 in Books > Engineering & Transportation > Engineering > Civil & Environmental > Structural Dynamics #348 in Books > Textbooks > Engineering > Aeronautical Engineering #352 in Books > Engineering & Transportation > Engineering > Civil & Environmental > Structural

## Customer Reviews

Provides the basic material needed to use structural dynamics computer programs and to do structural dynamics testing. Introduces the numerical techniques underlying finite element computer codes through use of "hand" solutions and the coding of several subroutines in FORTRAN and BASIC. Emphasizes the mathematical modelling of structures and the methods for solving structural dynamics problems with a digital computer. Presents solution techniques applicable to various engineering disciplines.

While retaining much material covered in classical texts on structural dynamics and vibrations, this text emphasizes the mathematical modelling of structures and the methods for solving structural dynamics problems with a digital computer. Using a systematic approach, it thoroughly reviews the basic principles of structural dynamics, presenting solution techniques that apply to various

engineering disciplines. The book specifically features: An extensive introduction to numerical techniques for computing natural frequencies and mode shapes and for computing transient response A systematic introduction to the use of finite elements in structural dynamics analysis An application of complex frequency response representations for the response of single and multiple-degree-of-freedom systems A complete exposition of both the mode-displacement and mode-acceleration versions of mode-superposition for computing dynamic response An introduction to practical methods of component mode synthesis for dynamic analysis An introduction of an instructional matrix manipulation and finite element computer code, ISMIS (interactive Structures and Matrix Interpretive System) for solving structural dynamics problems. Civil, aerospace and mechanical engineers will find the book amply illustrated with numerous worked-out examples tailored to their specific fields. Upon completion of the book they will be able to read and apply the technical literature on this topic, and use structural dynamics computer programs intelligently.

Classical book on Structural Dynamics despite of your age (1981)

Made the concepts very clear. Learned a lot from this book!!!

Thanks

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

Structural Dynamics: An Introduction to Computer Methods Structural Dynamics of Earthquake Engineering: Theory and Application Using Mathematica and Matlab (Woodhead Publishing Series in Civil and Structural Engineering) Experimental Structural Dynamics: An Introduction to Experimental Methods of Characterizing Vibrating Structures 1st Grade Computer Basics : The Computer and Its Parts: Computers for Kids First Grade (Children's Computer Hardware Books) Introduction to Structural Dynamics and Aeroelasticity (Cambridge Aerospace Series, Vol. 15) Introduction to Structural Dynamics and Aeroelasticity (Cambridge Aerospace Series) Introduction to Structural Dynamics Analog Methods for Computer-Aided Circuit Analysis and Diagnosis (Electrical and Computer Engineering) 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 The Techniques of Modern Structural Geology, Volume 3:  
Applications of Continuum Mechanics in Structural Geology Introduction to Cybercrime: Computer  
Crimes, Laws, and Policing in the 21st Century: Computer Crimes, Laws, and Policing in the 21st  
Century (Praeger Security International) Fundamentals of Structural Dynamics Fundamentals of  
Structural Dynamics:2nd (Second) edition Structural Dynamics: Theory and Applications  
Harnessing Bistable Structural Dynamics: For Vibration Control, Energy Harvesting and Sensing  
Probabilistic Structural Dynamics: Advanced Theory and Applications Basic Structural Dynamics

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)