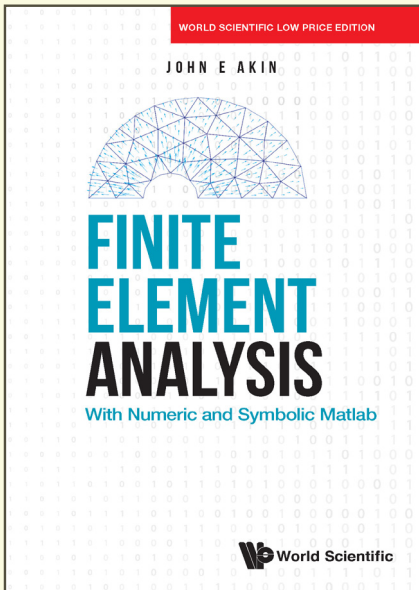


Finite Element Analysis

With Numeric and Symbolic Matlab



By **John E Akin**
(Rice University, USA)

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ABOUT THE BOOK

This comprehensive compendium presents the detailed theory, implementation and application of finite element analysis via heavily commented Matlab scripts. The book includes over 110 examples of the methods, and has a very detailed subject index. It uniquely illustrates the use of symbolic Matlab capabilities to derive element interpolation functions and to analytically integrated complicated element matrices.

The useful volume text is suitable as a reference on finite element methods and efficient Matlab programming. Chapters prominently end with a detailed summary of the important features and tables of useful finite element matrices. It can be used as the textbook for introductory, intermediate, or advanced courses utilizing numerically integrated and curvilinear element.

READERSHIP

Researchers, professionals, academics, undergraduate and graduate students in mechanical engineering, aerospace engineering, civil engineering and numerical analysis.

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- Overview
- Calculus Review
- Terminology from Differential Equations
- Parametric Interpolation
- Numerical Integration
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