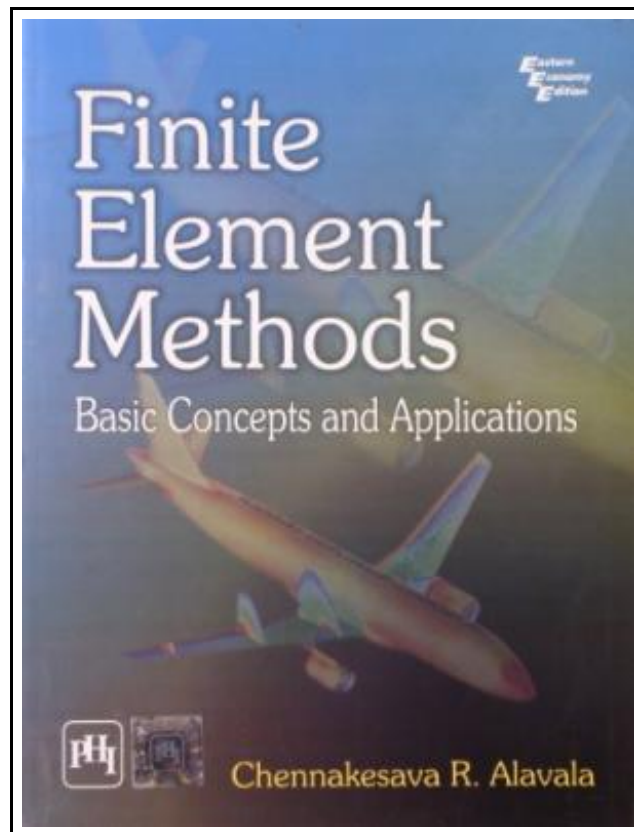


Finite Element Methods: Basic Concepts and Applications



Filesize: 1.19 MB

Reviews

It is one of the best books. Indeed, it really is a play, nevertheless an amazing and interesting literature. It is extremely difficult to leave it before concluding, once you begin to read the book.
(Sofia Yundt)

FINITE ELEMENT METHODS: BASIC CONCEPTS AND APPLICATIONS

[DOWNLOAD](#)

To save **Finite Element Methods: Basic Concepts and Applications** eBook, make sure you click the link listed below and download the file or have access to additional information that are highly relevant to FINITE ELEMENT METHODS: BASIC CONCEPTS AND APPLICATIONS ebook.

PHI Learning, 2009. Softcover. Book Condition: New. 18 x 24 cm. Finite Element Methods form an indispensable part of engineering analysis and design. The strength of FEM is the ease and elegance with which it handles the boundary conditions. This compact and well-organized text presents a comprehensive analysis of Finite Element Methods (FEM). The book gives a clear picture of structural, torsion, free-vibration, heat transfer and fluid flow problems. It also provides detailed description of equations of equilibrium, stress-strain relations, interpolation functions and element design, symmetry and applications of FEM. The text is a synthesis of both the physical and the mathematical characteristics of finite element methods. A question bank at the end of each chapter comprises descriptive and objective type questions to drill the students in self-study. KEY FEATURES # Includes step-by-step procedure to solve typical problems using ANSYS® software. # Gives numerical problems in SI units. # Elaborates shaper functions for higher-order elements. # Furnishes a large number of worked-out examples and solved problems. This profusely illustrated, student-friendly text is intended primarily for undergraduate students of Mechanical/Production/Civil and Aeronautical Engineering. By a judicious selection of topics, it can also be profitably used by postgraduate students of these disciplines. In addition, practising engineers and scientists should find it very useful besides students preparing for competitive exams. CONTENTS: Preface ? Acknowledgements 1. INTRODUCTION 2. FINITE ELEMENT MODELLING 3. ONE DIMENSIONAL BAR ELEMENTS 4. PLANE TRUSS ELEMENTS 5. PLANE BEAM ELEMENTS 6. PLANE FRAME ELEMENTS 7. PLANE STRESS AND PLANE STRAIN PROBLEMS 8. LINEAR TRIANGULAR ELEMENTS 9. ISOPARAMETRIZATION TWO DIMENSIONAL ELEMENTS 10. NUMERICAL INTEGRATION 11. AXISYMMETRIC ELEMENTS 12. THREE DIMENSIONAL STRESS ANALYSIS 13. FREE VIBRATION ANALYSIS 14. REVIEW QUESTIONS 15. TORSION ANALYSIS 16. HEAT TRANSFER ANALYSIS 17. FLUID FLOW ANALYSIS 18. ERROR ANALYSIS 19. SOLUTION OF FE EQUATIONS 20. POSTPROCESSING Appendix:...

[Read Finite Element Methods: Basic Concepts and Applications Online](#)[Download PDF Finite Element Methods: Basic Concepts and Applications](#)

Other PDFs

**[PDF] In Nature s Realm, Op.91 / B.168: Study Score**

Follow the link below to download and read "In Nature s Realm, Op.91 / B.168: Study Score" file.

[Download Document »](#)

**[PDF] Learn em Good: Improve Your Child s Math Skills: Simple and Effective Ways to Become Your Child s Free Tutor Without Opening a Textbook**

Follow the link below to download and read "Learn em Good: Improve Your Child s Math Skills: Simple and Effective Ways to Become Your Child s Free Tutor Without Opening a Textbook" file.

[Download Document »](#)

**[PDF] Read Write Inc. Phonics: Green Set 1 Storybook 2 My Dog Ned**

Follow the link below to download and read "Read Write Inc. Phonics: Green Set 1 Storybook 2 My Dog Ned" file.

[Download Document »](#)

**[PDF] Read Write Inc. Phonics: Pink Set 3 Non-Fiction 1 Jay s Clay Pot**

Follow the link below to download and read "Read Write Inc. Phonics: Pink Set 3 Non-Fiction 1 Jay s Clay Pot" file.

[Download Document »](#)

**[PDF] Children s Handwriting Book of Alphabets and Numbers: Over 4,000 Tracing Units for the Beginning Writer**

Follow the link below to download and read "Children s Handwriting Book of Alphabets and Numbers: Over 4,000 Tracing Units for the Beginning Writer" file.

[Download Document »](#)

**[PDF] Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .**

Follow the link below to download and read "Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications ." file.

[Download Document »](#)