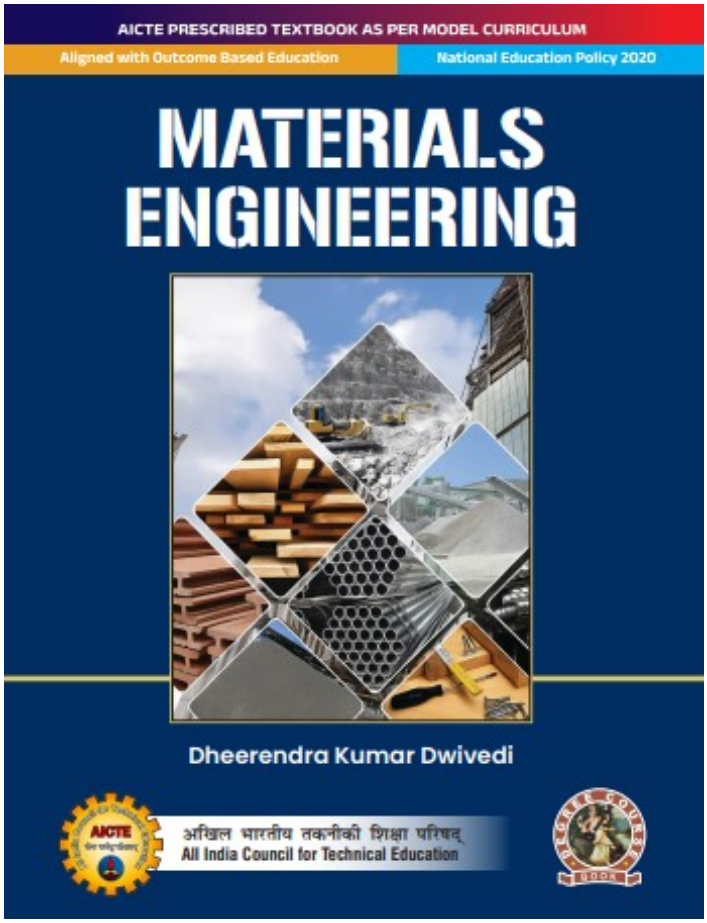

Materials Engineering

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Product Description

Materials Engineering Materials play very important in development of efficient and reliable products, and systems leading to the improved life of society. Material affects the design and manufacturing of products and systems significantly. Therefore, it is extremely important for mechanical, production, manufacturing and material engineers to have a systematic understanding on fundamental of material science affecting microstructure and mechanical properties coupled techniques and approaches available to modify and improve properties as per need of application. The book entitled “Materials Engineering” developed as per model curriculum of AICTE for 4th semester student of subject Materials Engineering **Salient Features:**

- Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes.
- In start of eads unit learning outcomes are listed to make the student understand what is expected out of him/her after completing that unit.
- Book provides lots of recent information, interesting facts, QR Code for E resources, QR Code for use of ICT, projects, group discussion etc.
- Student and teacher centric subject materials included in book with balanced and chronological manner.
- Figures, tables, and software screen shots are inserted to improve clarity of the topics.
- Apart from essential information a 'Know More' section is also provided in each unit to extend the learning beyond syllabus.
- Short questions, objective questions and long answer exercises are given for practice of students after every chapter.
- Solved and unsolved problems including numerical examples are solved with systematic steps.

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- Theories of Failures Under Static Loading and Fatigue Behaviour
- Phase Diagram and Metallurgical Transformation
- Hear Treatment of Steel
- Common Engineering Metals: Mechanical Properties and Manufacturing

Unit Summary Exercises Practical Know More References and Suggested Readings

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