



Basic Mechanical Engineering

Author : Chandra Shekhar Rajoria

ISBN 13 : 978-93-55387-53-0

ISBN 10 : 93-55387-53-9

E-ISBN 13 : 978-93-55387-53-0

Edition : First

Pages : 280

Type of book : Paperback

Year : 2026

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 528.00

Categories : [AICTE Prescribed Textbooks,](#)
[English Books](#)

Condition Type : New

Country Origin : India

Product Description

Basic Mechanical Engineering This book familiarizes the students with different domains of Mechanical Engineering. It provides an exposure of basic science to the engineering students, the fundamentals of Mechanical Engineering systems as well as enables them to get and insight of the subject. The book covers the basic thermodynamic principles including heat transfer, thermal power plant systems, steam turbines, condensers, cooling towers, internal combustion engines and refrigeration. It also covers the basics of material science, manufacturing process, machine tools and their mechanisms with their application in engineering problems. The main content of this book is aligned with the model curriculum of AICTE followed by concept of outcome-based education as per the National Education Policy (NEP) 2020. Salient features:

- Content of the book aligned with the mapping course outcomes, programs and Units Outcomes.
- In the beginning of each 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.



Table of Contents

Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Guidelines for Teachers Guidelines for Students Abbreviations and Symbols List of Figures List of Tables

1. Introduction to Thermodynamics
2. Heat Transfer & Thermal Power Plant.
3. Steam Turbines, IC Engines and Refrigeration
4. Materials and Manufacturing Processes
5. Machine Tools and Machining Processes

References for Further Learning CO and PO Attainment Table Index

Author

Dr. Dharmendra Singh Assistant Professor, Department of Mechanical Engineering, Govt. Engineering College Bikaner, Rajasthan, India **Dr. Chandra Shekhar Rajoria** Assistant Professor, Department of Mechanical Engineering, Govt. Engineering College, Bikaner, Rajasthan, India

