

Shigley's Mechanical Engineering Design

Keith Nisbett | Richard Budynas 1266929894 • 9781266929892 2024 Release



Overview

Shigley's Mechanical Engineering Design is intended for students beginning the study of mechanical engineering design. Students will find that the text inherently directs them into familiarity with both, the basics of design decisions and the standards of industrial components. It combines the straightforward focus on fundamentals that instructors have come to expect, with a modern emphasis on design and new applications. This textbook maintains the well-designed approach that has made this book the standard in machine design for nearly 50 years.

What You Need to Know

Real-World Applications and Examples

Provides students with real-world engineering problems. Includes engineering failure analysis.

Practical Approach

Blends fundamental concepts with practical specifications of components. Guides the practicing engineer with a basis for decision-making in machine design.

Depth of Topic Coverage

 Low
 High

 Writing Style

 Practical. Student-Centered. Career-Focused.

 Course Level

 Intro & Applied Mechanical Engineering Design

 Duration of Course

 1 or 2 Semester

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- 4. Deflection and Stiffness

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- 6. Fatigue Failure Resulting from Variable Loading

Part 3 – Design of Mechanical Elements

- 7. Shafts and Shaft Components
- 8. Screws, Fasteners, and the Design of Nonpermanent Joints
- 9. Welding, Bonding, and the Design of Permanent Joints
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Part 4 – Special Topics

- 19. Finite-Element Analysis
- 20. Geometric Dimensioning and Tolerancing

Appendix A - Useful Tables

Appendix B - Answers to Selected Problems



This Title has Gone Evergreen

This title is transitioning to an evergreen delivery model. This means you will have the most relevant and up-to-date content, tools, and accessibility delivered directly to your existing McGraw Hill Connect[®] course, all without switching editions or building a new course from scratch. If you use the McGraw Hill eBook, your content will be updated automatically. Please talk to your representative about your options if you require a print component.

A complete list of Release Notes for this title is available within your Connect course at **connect.mheducation.com**

Big Changes in this Release

Connect Enhancements

Enhancements to Connect include Application-Based Activities: Highly interactive, assignable exercises boost engagement and allow students to apply concepts learned to real-world scenarios. Each ABA involves the application of multiple topics providing the ability to synthesize information and use critical-thinking skills.

Text Updates

Please refer to Evergreen Release Notes for details.