

Fluid Mechanics

Problem Solving Using

MATLAB

Komaragiri Srinivasa Raju
Dasika Nagesh Kumar

NEW

THE BOOK

The present textbook is the first book of its kind which is exclusively devoted to problem-solving using MATLAB. The book is an excellent textbook for teaching fluid mechanics at the undergraduate level. The textbook contains problems on virtually all topics that covered in undergraduate fluid mechanics courses.

A Solution Manual containing solutions to chapter-end exercises is also available for the instructors.

KEY FEATURES

- Explanation of Fluid Mechanics in MATLAB in structured and lucid manner
- 161 example problems supported by corresponding MATLAB codes compatible with 2016a version and are available in the "Learning Centre" section at www.phindia.com
- 162 exercise problems for reinforced learning
- 12 MP4 videos for the demonstration of MATLAB codes

for effective understanding (available in the "Learning Centre" section at www.phindia.com)

- A Question Bank containing 261 Representative Questions and 120 Numerical Problems

TARGET AUDIENCE

Students of

B.E/B.Tech and AMIE (Civil, Mechanical and Chemical Engineering) &
Useful to students preparing for GATE and UPSC examinations

THE AUTHORS

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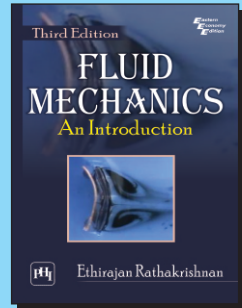
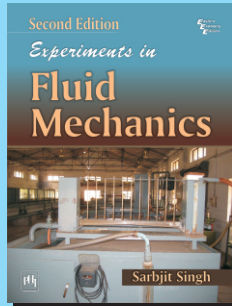
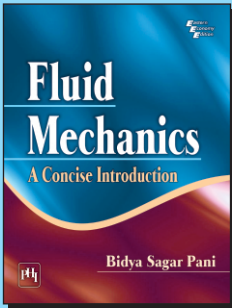
Points to be noted

1. Fluid Properties
2. Pressure Measurement
3. Hydro Statics
4. Buoyancy
5. Hydro Kinematics
6. Bernoulli Applications
7. Momentum Principle
8. Orifices and Mouthpieces

9. Notches and Weirs
 10. Flow through Pipes
 11. Laminar Flow
 12. Turbulent Flow
 13. Boundary Layer Theory
 14. Drag and Lift
 15. Open Channel Flow
 16. Dimensional Analysis
- Question Bank
- Appendix: Selected MATLAB Commands

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