

Introduction To Fluid Mechanics Robert W Fox Alan T Mcdonald Philip J Pritchard 7th International St Edition By Fox Robert W Published By John Wiley Sons Paperback

*Fluid mechanics is often seen as the most difficult core subject encountered by engineering students. The problem stems from the necessity to visualise complex flow patterns and fluid behaviour modelled by high level mathematics. This text overcomes this difficulty by introducing the concepts through everyday examples, before moving on to the more involved mathematics. The various theories of flow have been correlated with real phenomena and, combined with numerous figures and photographs, help the reader place the subject in context. Examples from a broad range of engineering disciplines are included making this textbook suitable for all engineers studying fluid systems as part of their degree. Introduction to Fluid Mechanics is translated from the best-selling Japanese book by Professor Yasuki Nakayama, and adapted for the international market by Professor Robert Boucher. Introduces the concepts through everyday examples before moving on to the more invoved mathematics Various theories of flow are applied to real phenomena and illustrated with numerous figures and photographs Includes examples from a broad range of engineering disciplines For all fluid mechanics, hydraulics, and related courses in Mechanical, Manufacturing, Chemical, Fluid Power, and Civil Engineering Technology and Engineering programs. The leading applications-oriented approach to engineering fluid mechanics is now in full color, with integrated software, new problems, and extensive new coverage. Now in full color with an engaging new design, Applied Fluid Mechanics, Seventh Edition, is the fully updated edition of the most popular applications-oriented approach to engineering fluid mechanics. It offers a clear and practical presentation of all basic principles of fluid mechanics (both statics and dynamics), tying theory directly to real devices and systems used in mechanical, chemical, civil, and environmental engineering. The 7th edition offers new real-world example problems and integrates the use of world-renowned PIPE-FLO(r) software for piping system analysis and design. It presents new procedures for problem-solving and design; more realistic and higher quality illustrations; and more coverage of many topics, including hose, plastic pipe, tubing, pumps, viscosity measurement devices, and computational fluid mechanics.Full-color images and color highlighting make charts, graphs, and tables easier to interpret organize narrative material into more manageable chunks, and make all of this text's content easier to study. Teaching and Learning Experience This applications-oriented introduction to fluid mechanics has been redesigned and improved to be more engaging, interactive, and pedagogically effective. *Completely redesigned in full color, with additional pedagogical features, all designed to engage today's students: This edition contains many new full-color images, upgraded to improve realism, consistency, graphic quality, and relevance. New pedagogical features have been added to help students explore ideas more widely and review material more efficiently.*Provides more hands-on practice and real-world applications, including new problems and software: Includes access to the popular PIPE-FLO(r) and Pump-Base(r) software packages, with detailed usage instructions; new real-world example problems; and more supplementary problems *Updated and refined to reflect the latest products, tools, and techniques: Contains updated data and analysis techniques, improved problem solving and design techniques, new content on many topics, and extensive new references.*

Original edition: Munson, Young, and Okiishi in 1990.

Micro- and Nanoscale Fluid Mechanics

Elementary Fluid Mechanics

A Physical Introduction to Fluid Mechanics

"Why Study Fluid Mechanics?
1.1 Getting Motivated
Flows are beautiful and complex. A swollen creek tumbles over rocks and through crevasses, swirling and foaming. A child plays with sticky tafy, stretching and reshaping the candy as she pulls it and twist it in various ways. Both the water and the tafy are fluids, and their motions are governed by the laws of nature. Our goal is to introduce the reader to the analysis of flows using the laws of physics and the language of mathematics. On mastering this material, the reader becomes able to harness flow to practical ends or to create beauty through fluid design. In this text we delve deeply into the mathematical analysis of flows, but before beginning, it is reasonable to ask if it is necessary to make this significant mathematical effort. After all, we can appreciate a flowing stream without understanding why it behaves as it does. We can also operate machines that rely on fluid behavior - drive a car for exam- 15 behavior?
mathematical analysis. ple - without understanding the fluid dynamics of the engine, and we can even repair and maintain engines, piping networks, and other complex systems without having studied the mathematics of flow
What is the purpose, then, of learning to mathematically describe fluid
The answer to this question is quite practical: knowing the patterns fluids form and why they are formed, and knowing the stresses fluids generate and why they are generated is essential to designing and optimizing modern systems and devices. While the ancients designed wells and irrigation systems without calculations, we can avoid the wastefulness and tediousness of the trial-and-error process by using mathematical models"--

The multidisciplinary field of fluid mechanics is one of the most actively developing fields of physics, mathematics and engineering. In this book, the fundamental ideas of fluid mechanics are presented from a physics perspective. Using examples taken from everyday life, from hydraulic jumps in a kitchen sink to Kelvin∞Helmholtz instabilities in clouds, the book provides readers with a better understanding of the world around them. It teaches the art of fluid-mechanical estimates and shows how the ideas and methods developed to study the mechanics of fluids are used to analyze other systems with many degrees of freedom in statistical physics and field theory. Aimed at undergraduate and graduate students, the book assumes no prior knowledge of the subject and only a basic understanding of vector calculus and analysis. It contains 32 exercises of varying difficulties, from simple estimates to elaborate calculations, with detailed solutions to help readers understand fluid mechanics.

Since most of the problems arising in science and engineering are nonlinear, they are inherently difficult to solve. Traditional analytical approximations are valid only for weakly nonlinear problems and often fail when used for problems with strong nonlinearity. ∞Nonlinear Flow Phenomena and Homotopy Analysis: Fluid Flow and Heat Transfer∞ presents the current theoretical developments of the analytical method of homotopy analysis. This book not only addresses the theoretical framework for the method, but also gives a number of examples of nonlinear problems that have been solved by means of the homotopy analysis method. The particular focus lies on fluid flow problems governed by nonlinear differential equations. This book is intended for researchers in applied mathematics, physics, mechanics and engineering. Both Kuppalapalle Vajravelu and Robert A. Van Gorder work at the University of Central Florida, USA.

A Short Course for Physicists

Fluid Mechanics

An Introduction to the Theory of Fluid Flows

Fluid mechanics embraces engineering, science, and medicine. This book’s logical organization begins with an introductory chapter summarizing the history of fluid mechanics and then moves on to the essential mathematics and physics needed to understand and work in fluid mechanics. Analytical treatments are based on the Navier-Stokes equations. The book also fully addresses the numerical and experimental methods applied to flows. This text is specifically written to meet the needs of students in engineering and science. Overall, readers get a sound introduction to fluid mechanics.

Introduction to Fluid Mechanics, Sixth Edition, is intended to be used in a first course in Fluid Mechanics, taken by a range of engineering majors. The text begins with dimensions, units, and fluid properties, and continues with derivations of key equations used in the control-volume approach. Step-by-step examples focus on everyday situations, and applications. These include flow with friction through pipes and tubes, flow past various two and three dimensional objects, open channel flow, compressible flow, turbomachinery and experimental methods. Design projects give readers a sense of what they will encounter in industry. A solutions manual and figure slides are available for instructors.

Market_Desc: Mechanical and Civil Engineers, Students and Professors of Engineering Special Features: " Explores the fundamental concepts, physical concepts and first principles of fluid mechanics" Integrates 30% new problems that make the material more relevant" Offers an expanded discussion of pipe networks and a new section on oblique shocks and expansion waves" Presents new, simplified examples with more detailed explanations to make concepts easier to understand About The Book: One of the bestselling books in the field, Introduction to Fluid Mechanics continues to provide readers with a balanced and comprehensive approach to mastering critical concepts. The new seventh edition once again incorporates a proven problem-solving methodology that will help them develop an orderly plan to finding the right solution. It starts with basic equations, then clearly states assumptions, and finally, relates results to expected physical behavior.

Many of the steps involved in analysis are simplified by using Excel.

Prepared for Department of Mechanical Engineering, Technical University of Denmark

Introduction to Fluid Mechanics 7E for University of California Santa Barbara and WileyPLUS Set

(WCS)Introduction to Fluid Mechanics 5th Edition w/ Study Tips SET

This book provides readers with an understanding of the theory, concepts and applications of fluid mechanics.

This is an introductory fluid mechanics text, intended for the first Fluid Mechanics course required of all engineers. The goal of this book is to modernise the teaching of fluid mechanics by encouraging students to visualise and simulate flow processes. The book also introduces students to the capabilities of computational fluid dynamics (CFD) techniques, the most important new approach to the study of fluids. Fluid mechanics is traditionally one of the most difficult topics in the curriculum for ME students: this text aims to overcome those learning difficulties through visualisation of the key concepts.Contents: 1. Fundamental Concepts 1.1 Introduction 1.2 Gases. Liquids and Solids 1.3 Methods of Description 1.4 Dimensions and Unit Sytems 1.5 Problem Solving 2. Fluid Properties 2. 1 Introduction 2.2 Mass, Weight and Density 2.3 Pressure 2.4 Temperature and Other Thermal Properties 2.5 The Perfect Gas Law 2.6 Bulk Compressibility Modules 2.7 Viscosity 2.8 Surface Tension 2.9 Fluid Energy 3. Case Studies in Fluid Mechanics 3.1 Introduction 3.2 Common Dimensionless Groups 3.3 Case Studies 4. Fluid Forces 4.1 Introduction 4.2 Classification of Fluid Forces 4.3 The Orgins of Body and Surface Forces 4.4 Body Forces 4.5 Surface Forces 4.6 Stress in a Fluid 4.7 Forces Balance in a Fluid 5. Fluid Statics 5.1 Introduction 5.2 Hydrostatic Stress 5.3 Hydrostatic Equation 5.4 Hydrostatic Pressure Distribution 5.5 Hydrostatic Force 5.6 Hydrostatic Moment 5.7 Resultant Force and Point of Application 5.8 Buoyancy and Archimedes 5.9 Equilibrium and Stability of Immerseed Bodies 6. The Velocity Field and Fluid Transport 6.1 Introduction 6.2 The Fluid Velocity Field 6.3 Fluid Acceleration 6.4 The Substantial Derivative 6.5 Classification of Flows 6.6 No-Slip, No-Penetration Boundary Condition 6.7 Fluid Transport 6.8 Average Velocity and Flowrate 7. Control Volume Analysis 7.1 Introduction 7.2 Basic Concepts: System and Control Volume 7.3 System and Control Volume Analysis 7.4 Reynolds Transport Theorem for a System 7.5 Reynolds Transport Theorem for a Control Volume 7.6 Control Volume Analysis 8. Flow of an Invidic Fluid: The Bernoulli Equation 8.1 Introduction 8.2 Friction Flow along a Streamline 8.3 Bernoulli Equation 8.4 Static, Dynamic, Stagnation and Total Pressure 8.5 Applications of the Bernoulli Equation 8.6 Relationship to the Energy Equation 9. Dimensional Analysis and Similitude 9.1 Introduction 9.2 Buckingham PI Theorem 9.3 Repeating Variables Method 9.4 Similitude and Model Development 9.5 Correlation of Experimental Data 9.6 Application to Case Studies 10. Elements of Flow Visualisation and Flow Structure 10. 1 Introduction 10.2 Lagrangian Kinematics 10.3 The Eulerian-Langrangian Connection 10.4 Material Lines, Surfaces and Volumes 10.5 Pathlines and Streaklines 10.6 Streamlines and Streamtubes 10.7 Motion and Deformation 10.8 Velocity 10.9 Rate of Rotation 10.10 Rate of Expansion 10.11 Rate of Shear Deformation 11. Governing Equations of Fluid Dynamics 11.1 Introduction 11.2 Continuity Equation 11.3 Momentum Equation 11.4 Constitutive Model for a Newtonian Fluid 11.5 Navier-Stokes Equations 11.6 Euler Equations 11.7 Energy Equation 11.8 Discussion 12. Analysis of Incompressive Flow 12.1 Introduction 12.2 Steady Viscous Flow 12.3 Unsteady Viscous Flow 12.4 Turbulent 12.5 Inviscid Irrotational Flow 13. Flow in Pipes and Ducts 13.1 Introduction 13.2 Steady Fully Developed Flow in a Pipe or Duct 13.3 Analysis of Flow in Single Path Pipe and Duct Systems 13.4 Analysis of Flow in Multiple Path Pipe and Duct Systems 13.5 Elements of Pipe and Duct Systems Design 14. External Flow 14.1 Introduction 14.2 Boundary Layers: Basic Concepts 14.3 Drag: Basic Concepts 14.4 Drag Coefficients 14.5 Lfie and Drag of Airfoils 15. Open Channel Flow 15.1 Introduction 15.2 Basic Concepts in Open Channel Flow 15.3 The Importance of the Froude Number 15.4 Energy Conservation in Open Channel Flow 15.5 Flow in a Channel with Uniform Depth 15.6 Flow in a Channel with Gradually-Varying Depth 15.7 Flow Under a Sluice Gate 15.8 Flow over a Weir

Leading experts present a unique, invaluable introduction to the study of the geometry and typology of fluid flows. From basic motions on curves and surfaces to the recent developments in knots and links, the reader is gradually led to explore the fascinating world of geometric and topological fluid mechanics. Geodesics and chaotic orbits, magnetic knots and vortex links, continual flows and singularities become alive with more than 160 figures and examples. In the opening article, H. K. Moffatt sets the pace, proposing eight outstanding problems for the 21st century. The book goes on to provide concepts and techniques for tackling these and many other interesting open problems.

Introduction to Fluid Mechanics 7th Edition for University of California Santa Barbara

An Introduction to Computational Fluid Mechanics by Example

Nonlinear Flow Phenomena and Homotopy Analysis

By explaining basic equations, stating assumptions and then relating results to expected physical behavior, this new edition will help students to develop a systematic, orderly approach to problem solving. Aimed at an introductory course covering the basic elements of fluid mechanics, the study contains new material on fluid machinery, supersonic channel flow and more current data for real situations.

ELEMENTARY FLUID MECHANICS BY JOHN K. VENNARD Assistant Professor of Fluid Mechanics New York University. PREFACE: Fluid mechanics is the study under all possible conditions of rest and motion. Its approaches analytical, rational, and mathematical rather than empirical it concerns itself with those basic principles which lead to the solution of numerous diversified problems, and it seeks results which are widely applicable to similar fluid situations and not limited to isolated special cases. Fluid mechanics recognizes no arbitrary boundaries between fields of engineering knowledge but attempts to solve all fluid problems, irrespective of their occurrence or of the characteristics of the fluids involved. This textbook is intended primarily for the beginner who knows the principles of mathematics and mechanics but has had no previous experience with fluid phenomena. The abilities of the average beginner and the tremendous scope of fluid mechanics appear to be in conflict, and the former obviously determine limits beyond which it is not feasible to go these practical limits represent the boundaries of the subject which I have chosen to call elementary fluid mechanics. The apparent conflict between scope of subject and beginner f s ability is only along mathematical lines, however, and the physical ideas of fluid mechanics are well within the reach of the beginner in the field. Holding to the belief that physical concepts are the sine qua non of mechanics, I have sacrificed mathematical rigor and detail in developing physical pictures and in many cases have stated general laws only without numerous exceptions and limitations in order to convey basic ideas such oversimplification is necessary in introducing a new subject to the beginner. Like other courses in mechanics, fluid mechanics must include disciplinary features as well as factual information the beginner must follow theoretical developments, develop imagination in visualizing physical phenomena, and be forced to think his way through problems of theory and application. The text attempts to attain these objectives in the following ways omission of subsidiary conclusions is designed to encourage the student to come to some conclusions by himself application of bare principles to specific problems should develop ingenuity illustrative problems are included to assist in overcoming numerical difficulties and many numerical problems for the student to solve are intended not only to develop ingenuity but to show practical applications as well. Presentation of the subject begins with a discussion of fundamentals, physical properties and fluid statics. Frictionless flow is then discussed to bring out the applications of the principles of conservation of mass and energy, and of impulse-momentum law, to fluid motion. The principles of similarity and dimensional analysis are next taken up so that these principles may be used as tools in later developments. Frictional processes are discussed in a semi-quantitative fashion, and the text proceeds to pipe and open-channel flow. A chapter is devoted to the principles and apparatus for fluid measurements, and the text ends with an elementary treatment of flow about immersed objects.

Fluid mechanics is the study of how fluids behave and interact under various forces and in various applied situations, whether in liquid or gas state or both. The author of Advanced Fluid Mechanics compiles pertinent information that are introduced in the more advanced classes at the senior level and at the graduate level. “Advanced Fluid Mechanics courses typically cover a variety of topics involving fluids in various multiple states (phases), with both elastic and non-elastic qualities, and flowing in complex ways. This new text will integrate both the simple stages of fluid mechanics (“Fundamentals) with those involving more complex parameters, including Inviscid Flow in multi-dimensions, Viscous Flow and Turbulence, and a succinct introduction to Computational Fluid Dynamics. It will offer exceptional pedagogy, for both classroom use and self-instruction, including many worked-out examples, end-of-chapter problems, and actual computer programs that can be used to reinforce theory with real-world applications. Professional engineers as well as Physicists and Chemists working in the analysis of fluid behavior in complex systems will find the contents of this book useful. All manufacturing companies involved in any sort of systems that encompass fluids and fluid flow analysis (e.g., heat exchangers, air conditioning and refrigeration, chemical processes, etc.) or energy generation (steam boilers, turbines and internal combustion engines, jet propulsion systems, etc.), or fluid systems and fluid power (e.g., hydraulics, piping systems, and so on)will reap the benefits of this text. Offers detailed derivation of fundamental equations for better comprehension of more advanced mathematical analysis Provides groundwork for more advanced topics on boundary layer analysis, unsteady flow, turbulent modeling, and computational fluid dynamics Includes worked-out examples and end-of-chapter problems as well as a companion web site with sample computational programs and Solutions Manual

An Introduction to Fluid Mechanics

Introduction to Fluid Mechanics, Sixth Edition

Applied Fluid Mechanics

Introductory text, geared toward advanced undergraduate and graduate students, applies mathematics of Cartesian and general tensors to physical field theories and demonstrates them in terms of the theory of fluid mechanics. 1962 edition.

This text focuses on the physics of fluid transport in micro- and nanofabricated liquid-phase systems, with consideration of gas bubbles, solid particles, and macromolecules. This text was designed with the goal of bringing together several areas that are often taught separately - namely, fluid mechanics, electrodynamics, and interfacial chemistry and electrochemistry - with a focused goal of preparing the modern microfluidics researcher to analyse and model continuum fluid mechanical systems encountered when working with micro- and nanofabricated devices. This text serves as a useful reference for practising researchers but is designed primarily for classroom instruction. Worked sample problems are included throughout to assist the student, and exercises at the end of each chapter help facilitate class learning.

Geared toward advanced undergraduate and graduate students in applied mathematics, engineering, and the physical sciences, this introductory text covers kinematics, momentum principle, Newtonian fluid, compressibility, and other subjects. 1971 edition.

Introductory Fluid Mechanics

Advanced Fluid Mechanics

Fox and McDonald’s Introduction to Fluid Mechanics, Binder Ready Version

Structured introduction covers everything the engineer needs to know: nature of fluids, hydrostatics, differential and integral relations, dimensional analysis, viscous flows, more. Solutions to selected problems. 760 illustrations. 1985 edition.

Uncover Effective Engineering Solutions to Practical Problems With its clear explanation of fundamental principles and emphasis on real world applications, this practical text will motivate readers to learn. The author connects theory and analysis to practical examples drawn from engineering practice. Readers get a better understanding of how they can apply these concepts to develop engineering answers to various problems. By using simple examples that illustrate basic principles and more complex examples representative of engineering applications throughout the text, the author also shows readers how fluid mechanics is relevant to the engineering field. These examples will help them develop problem-solving skills, gain physical insight into the material, learn how and when to use approximations and make assumptions, and understand when these approximations might break down. Key Features of the Text
* The underlying physical concepts are highlighted rather than focusing on the mathematical equations.
*

Dimensional reasoning is emphasized as well as the interpretation of the results. * An introduction to engineering in the environment is included to spark reader interest. * Historical references throughout the chapters provide readers with the rich history of fluid mechanics.

Over 100 detailed example problems illustrate important fluid mechanics concepts. * Approximately 1300 end-of-chapter problems are arranged by difficulty level and include many problems that are designed to be solved using Excel. * The CD for the book includes: A Brief Review of Microsoft Excel and numerous Excel files for the example problems and for use in solving problems. * The new edition includes an expanded discussion of pipe networks, and a new section on oblique shocks and expansion waves.

Introduction to Fluid Mechanics

Transport in Microfluidic Devices

Fox and McDonald's Introduction to Fluid Mechanics

Through ten editions, Fox and McDonald's Introduction to Fluid Mechanics has helped students understand the physical concepts, basic principles, and analysis methods of fluid mechanics. This market-leading textbook provides a balanced, systematic approach to mastering critical concepts with the proven Fox-McDonald solution methodology. In-depth yet accessible chapters present governing equations, clearly state assumptions, and relate mathematical results to corresponding physical behavior. Emphasis is placed on the use of control volumes to support a practical, theoretically-inclusive problem-solving approach to the subject. Each comprehensive chapter includes numerous, easy-to-follow examples that illustrate good solution technique and explain challenging points. A broad range of carefully selected topics describe how to apply the governing equations to various problems, and explain physical concepts to enable students to model real-world fluid flow situations. Topics include flow measurement, dimensional analysis and similitude, flow in pipes, ducts, and open channels, fluid machinery, and more. To enhance student learning, the book incorporates numerous pedagogical features including chapter summaries and learning objectives, end-of-chapter problems, useful equations, and design and open-ended problems that encourage students to apply fluid mechanics principles to the design of devices and systems.

"This text is written for an introductory course in fluid mechanics. Our approach to the subject emphasizes the physical concepts of fluid mechanics and methods of analysis that begin from basic principles. One primary objective of this text is to help users develop an orderly approach to problem solving. Thus, we always start from governing equations, state assumptions clearly, and try to relate mathematical results to corresponding physical behavior. We emphasize the use of control volumes to maintain a practical problem-solving approach that is also theoretically inclusive"--

The objective of this introductory text is to familiarise students with the basic elements of fluid mechanics so that they will be familiar with the jargon of the discipline and the expected results. At the same time, this book serves as a long-term reference text, contrary to the oversimplified approach occasionally used for such introductory courses. The second objective is to provide a comprehensive foundation for more advanced courses in fluid mechanics (within disciplines such as mechanical or aerospace engineering). In order to avoid confusing the students, the governing equations are introduced early, and the assumptions leading to the various models are clearly presented. This provides a logical hierarchy and explains the interconnectivity between the various models. Supporting examples demonstrate the principles and provide engineering analysis tools for many engineering calculations.

Introduction to Mathematical Fluid Dynamics

Munson, Young and Okiishi's Fundamentals of Fluid Mechanics

One of the bestselling books in the field, Introduction to Fluid Mechanics continues to provide readers with a balanced and comprehensive approach to mastering critical concepts. The new seventh edition once again incorporates a proven problem-solving methodology that will help them develop an orderly plan to finding the right solution. It starts with basic equations and results to expected physical behavior. Many of the steps involved in analysis are simplified by using Excel.

This new book builds on the original classic textbook entitled: An Introduction to Computational Fluid Mechanics by C. Y. Chow which was originally published in 1979. In the decades that have passed since this book was published the field of computational fluid dynamics has seen a number of changes in both the sophistication of the algorithms used but also advanced solution techniques. This new book incorporates the latest algorithms in the solution techniques and supports this by using numerous examples of applications to a broad range of industries from mechanical and aerospace disciplines to civil and the biosciences. The computer programs are developed and available in MATLAB. In addition the core text provides up-to-date solution methods for flow visualization, and pseudo-spectral methods. The computer codes at the following website: www.wiley.com/go/biringen

Fox & McDonald's Introduction to Fluid Mechanics 9th Edition has been one of the most widely adopted textbooks in the field. This highly-regarded text continues to provide readers with a balanced and comprehensive approach to mastering critical concepts, incorporating a proven problem-solving methodology that helps readers develop an orderly plan to finding the right solution. The ninth edition features a wealth of example problems integrated throughout the text as well as a variety of new end of chapter problems.

Solutions Manual for Introduction to Fluid Mechanics

Vectors, Tensors and the Basic Equations of Fluid Mechanics

An Introduction to the Geometry and Topology of Fluid Flows

Fluid mechanics, the study of how fluids behave and interact under various forces and in various applied situations-whether in the liquid or gaseous state or both-is introduced and comprehensively covered in this widely adopted text. Revised and updated by Dr. David Dowling, Fluid Mechanics, Fifth Edition is suitable for both a first or second course in fluid mechanics at the graduate or advanced undergraduate level. The leading advanced general text on fluid mechanics, Fluid Mechanics, 5e includes a free copy of the DVD "Multimedia Fluid Mechanics," second edition. With the inclusion of the DVD, students can gain additional insight about fluid flows through nearly 1,000 fluids video clips, can conduct flow simulations in any of more than 20 virtual labs and simulations, and can view dozens of other new interactive demonstrations and animations, thereby enhancing their fluid mechanics learning experience. Text has been reorganized to provide a better flow from topic to topic and to consolidate portions that belong together. Changes made to the book's pedagogy accommodate the needs of students who have completed minimal prior study of fluid mechanics. More than 200 new or revised end-of-chapter problems illustrate fluid mechanical principles and draw on phenomena that can be observed in everyday life. Includes free Multimedia Fluid Mechanics 2e DVD

*Fox and McDonald's Introduction to Fluid Mechanics*John Wiley & Sons

Fluid Flow and Heat Transfer

Introduction to Fluid Mechanics and Fluid Machines

INTRODUCTION TO FLUID MECHANICS, 7TH ED