MECHATRONICS: A FOUNDATION COURSE

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·Presents key concepts and formulas in a user friendly format with windows, tables, and lists for easy reference and recollection
·Contains a large number of worked examples related to real-life situations and the practice of mechatronics
·Supplies numerous problems and exercises based on practical situations and applications
·Describes the use of MATLAB, SIMULINK, LabVIEW, and associated toolboxes with examples for their use
·Includes access to a website with PowerPoint slides and teaching suggestions
An instructors solutions manual with suggestions for curriculum planning and development and detailed solutions to end-of-chapter problems is available upon qualified course adoption

Designed for students across all of engineering, this text offers the multidisciplinary approach needed to develop a foundation in mechatronics. It covers electrical and mechanical components, sensors and instrumentation, drives and actuators, controls, signal processing, component interfacing, modeling, and design. Practical applications and tools introduced up front are uniformly integrated throughout the book. Cases studies and worked examples that make use of MATLAB®, Simulink®, and LabView® application and case studies are included, as are numerous exercises, most based on real engineering practice.

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