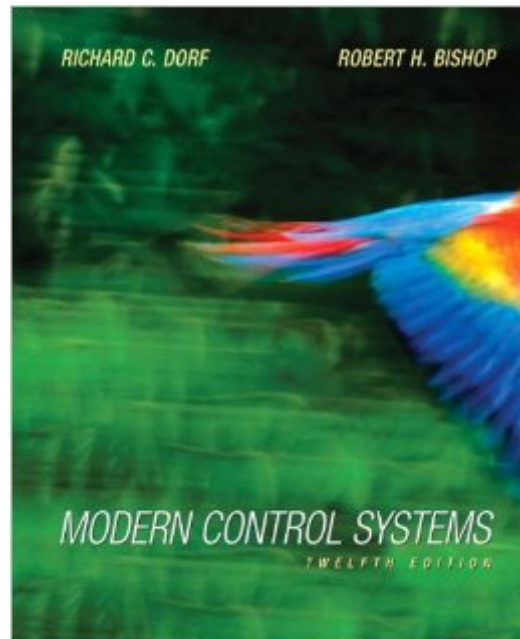# Modern Control Systems (12th Edition)

Synopsis

Modern Control Systems, 12e, is ideal for an introductory undergraduate course in control systems for engineering students. Â Written to be equally useful for all engineering disciplines, this text is organized around the concept of control systems theory as it has been developed in the frequency and time domains. It provides coverage of classical control, employing root locus design, frequency and response design using Bode and Nyquist plots. It also covers modern control methods based on state variable models including pole placement design techniques with full-state feedback controllers and full-state observers. Many examples throughout give students ample opportunity to apply the theory to the design and analysis of control systems. Incorporates computer-aided design and analysis using MATLAB and LabVIEW MathScript.

Book Information

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Customer Reviews

If you want to learn about Modern Control Systems the first time around then use a book written by Ogata, Kuo or Nise. These three authors have some of the best books on this subject that you will ever see.As for this bookGOOD:The Matlab part of the book I would give 4 stars. It is pretty good and lets you get acquainted with the control toolbox. There are a wide variety of problems in the book and it has a lot of design problems for the reader. Problems include exercise problems, regular problems (beats me why he didn't put them together), advance problems and Matlab Problems. If you already know the subject then it could possibly be a good design book.BAD:Worst book I have

ever read. This book offers some of the worst explanations I have ever seen in a book. It is nearly impossible to do the problems with the information given to you. Reading the book is like solving an exercise problem in itself. A lot of times the math is skipped so you have no idea how he got to the answer. While other books happened to spend 4 pages on a topic, Dorf managed to compress it into a useless paragraph. Also, Dorf expects you to clairvoyantly know what a definition is. When reading through a chapter he talks about something without telling you what it is. Somehow he expected you to know that at the end of the chapter, AFTER you've read everything he'll give you a definition list. Very few exercise problems have answers to them so if you are doing something wrong then you will not know. If you are looking for self-study from this book then start crying now because you will throw over 100 bucks in the garbage.The most definitively annoying thing about the book is how it references other books.

I had to buy this book for the controls class I'm taking right now and I must say this is easily one of the worst textbooks I've ever used. The chapters are way too dense. You're literally asked to learn 130 pages worth of material in Chapters 1&2 combined. For an introductory chapter, that's a lot of to ask of anyone who is new to a subject. The book would benefit immensely from asking problems (with solutions) throughout each chapter so you can slowly digest the concepts in a systemic manner. The examples are pretty terrible in my opinion as they are not very straight forward and presented with tons of equations but little context. Also, very rarely do they mirror the end-of-chapter questions, so you can't even use them to see if you are doing the problems correctly. It's clear that this series needs a serious trimming to cut out a lot of text and just display things in a clear concise manner. Instead of exposes of text, just get to the meat of the chapters with straight-forward examples that ramp up in difficulty. Overall, my experience with the book is like taking a Dragon kick from Bruce Lee, a Haymaker from Chuck Liddell and getting electrocuted simultaneously.Edit: 4/13/2013We have been using this this textbook all semester and my original review still holds. The examples continually prove to be awful in ways that make you wonder if there was even an editor to this textbook. I doubt they ever really asked a student honestly to give them feedback because anyone who isn't a lobotomized eggplant or sycophant would tell the writers this book is garbage. The explanations are lacking to the nth degree and the author clearly thinks himself "a clever person" by asking problems that cover corner cases WITHOUT COVERING THEM IN THE TEXT.

Modern Control Systems (12th Edition) NLP: Neuro Linguistic Programming: Re-program your control over emotions and behavior, Mind Control - 3rd Edition (Hypnosis, Meditation, Zen,

Self-Hypnosis, Mind Control, CBT) Wind Turbine Control Systems: Principles, Modelling and Gain Scheduling Design (Advances in Industrial Control) Handbook of Networked and Embedded Control Systems (Control Engineering) Modeling and Control of Discrete-event Dynamic Systems: with Petri Nets and Other Tools (Advanced Textbooks in Control and Signal Processing) Robust Control Systems with Genetic Algorithms (Control Series) Electrical Control of Fluid Power: Electric and Electronic Control of Hydraulic & Air Systems Transactional Information Systems: Theory, Algorithms, and the Practice of Concurrency Control and Recovery (The Morgan Kaufmann Series in Data Management Systems) Introduction to Logistics Systems Planning and Control (Wiley Interscience Series in Systems and Optimization) Hierarchical Decision Making in Stochastic Manufacturing Systems (Systems & Control: Foundations & Applications) Modern Control Systems (10th Edition) Modern Control Technology: Components and Systems Bayesian Signal Processing: Classical, Modern and Particle Filtering Methods (Adaptive and Cognitive Dynamic Systems: Signal Processing, Learning, Communications and Control) Modern Control Systems Analysis and Design Using MATLAB and Simulink American Government: Roots and Reform, 2012 Election Edition (12th Edition) Modern Essentials Bundle - Modern Essentials *7th Edition* a Contemporary Guide to the Therapeutic Use of Essential Oils, an Intro to Modern Essentials, Reference Card, and Aroma Designs Bookmark Technical Drawing (12th Edition) Luckey's Hummel Figurines and Plates: Identification and Price Guide (12th Edition) O'Brien's Collecting Toys: A Collector's Identification and Value Guide, 12th Edition Computers Are Your Future Complete (12th Edition)