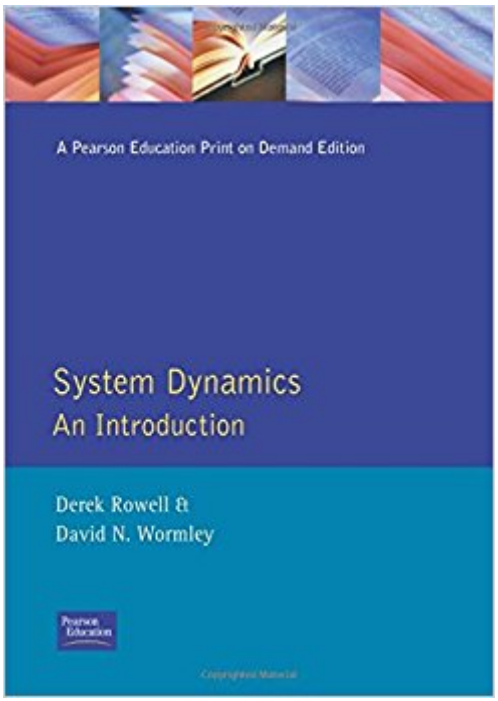
System Dynamics: An Introduction



Synopsis

Rowell and Wormley use a linear graph approach. This contrasts with the bond graph approach or no graph approach. This is the first modern linear graph System Dynamics that has been published in 30 years. Chapters are organized so that introductory material is presented first, with more advanced topics coming later. Contains exceptionally clear presentation of Frequency response. Features detailed development of the construction of lumped-parameter system models from sets of primitive elements; and modeling techniques are presented using an energy based state-space formulation method that provides linkages to classical system representations.

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Customer Reviews

Rowell and Wormley use a linear graph approach. This contrasts with the bond graph approach or no graph approach. This is the important qualifying question for this text. This is the first modern linear graph System Dynamics that has been published in 30 years.

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formulation method that provides linkages to classical system representations.

This textbook is very unclear about how to apply the concepts presented. General formulas are either not provided or are very difficult to locate. The provided examples are hard to follow and leave out several steps making them almost useless for learning how to apply the presented concepts. I would only recommend this book if you are forced to use it for a class.

A really great subject but the book is not very clear. Often times, my professor would say something like, "Your book says this, but don’t do that. Instead, do it this way."

worked for school, hated actually reading it

A nice introductory text on system dynamics. The treatment of time-domain modeling and analysis is very good. Unfortunately, the treatment of the s-domain (laplace) approach is a little weak. Overall, good.