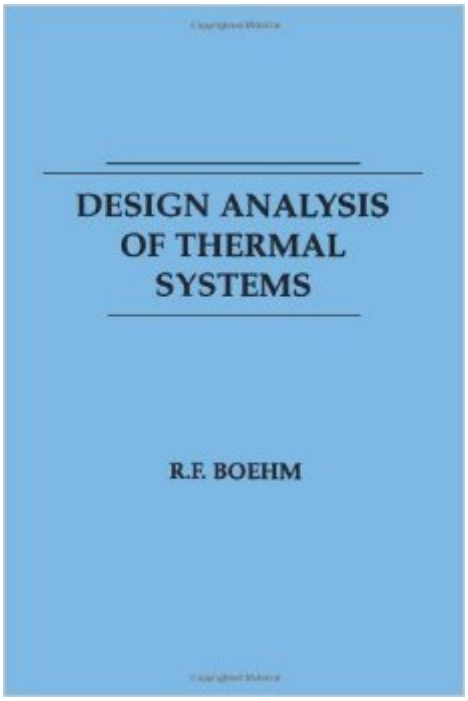
Design Analysis Of Thermal Systems



Synopsis

Here is the first book to introduce, at the senior-undergraduate and graduate levels, key aspects of the analysis of thermal systems appropriate for computer-aided design. Extensive examples and problems emphasize modelling and computer applications while synthesizing material on thermodynamics, heat transfer, and fluid mechanics. Features thorough coverage of second law analytical techniques, extensive material on numerical simulation and optimization, and an excellent description of cost analysis for thermal system design. Topics covered include the curvefitting of physical data, applications of the second law of thermodynamics, the concept and process of steady-state flowsheeting, the solving of n algebraic equations in n unknowns in both linear and nonlinear systems, the art of preliminary cost estimation, and techniques of optimization. Appendixes give dozens of project ideas and cover most of the introductory ideas found in an engineering economics text.

Book Information

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Customer Reviews

This is one of those rare books that teaches thermal engineering from a systems point of view. This is a valuable skill to have these days since you need to be a jack of all trades sometimes. If you are looking for something that tells you how to derive complex equations from first principles, this is not the book. But if you are looking for practical applications that factor in cost issues when taking design decisions, this is worth it.

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