



Systems Engineering with Economics, Probability and Statistics

By C. Jotin Khisty, Jamshid Mohammadi, Adjo A. Amekudzi

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This extensively revised comprehensive textbook, covering a wide range of topics, is suitable for courses at the graduate and undergraduate levels, each with a different emphasis. There is more than enough material to cover two semesters of an undergraduate course, as well as a one semester graduate course. The pedagogy provides enough flexibility for an instructor to teach the topics in systems engineering he or she would like. **Systems Engineering with Economics, Probability, and Statistics, Second Edition** is sufficiently broad-based for undergraduate and graduate programs in various branches of engineering and management.

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- Includes a wide range of topics covering the fundamentals and practice applications of probability and statistics (including advanced topics on statistical analysis and testing and interpretation of engineering data), microeconomics, engineering economics, hard systems (such as linear programming, decision analysis, CPM, LOB, and PERT), soft systems analysis (such as Checklands method), and sustainable development and sustainability applications in engineering planning
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- Contains two new chapters: one on sustainable development, sustainability, engineering and planning; and the other on case studies dealing with engineering and planning for sustainability
- WAV material includes a solutions manual for those exercise problems that

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Editorial Review

About the Author

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Dr. Adjo Amekudzi is an associate professor of civil and environmental engineering at the Georgia Institute of Technology in Atlanta, Georgia. She earned her Bachelors degree in Civil Engineering (Structures) from Stanford University, Masters in Civil Engineering (Transportation) from Florida International University, and Masters in Civil Infrastructure Systems and PhD in Civil and Environmental Engineering (Infrastructure Systems) from Carnegie Mellon University. Her research, teaching and professional activities focus on the study, development and application of systems methods to civil infrastructure decision making to promote sustainable development. She has published over fifty papers on sustainability planning and evaluation and infrastructure asset management, and an edited book on infrastructure reporting and asset management. Amekudzi is the founding chair of the *Committee on Sustainability and the Environment* of the Transportation and Development Institute of the American Society of Civil Engineers.

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