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Titolo	Introduction to Probability, Statistical Methods, Design of Experiments and Statistical Quality Control [[electronic resource] /] / by Dharmaraja Selvamuthu, Dipayan Das
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Altri autori (Persone)	DasDipayan
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Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Basic Concepts of Probability -- Chapter 3. Random Variable and Distribution Function -- Chapter 4. Standard Deviation -- Chapter 5. Multiple Random Variable and Joint Distribution -- Chapter 6. Limiting Distributions -- Chapter 7. Descriptive Statistics -- Chapter 8. Sampling Distributions -- Chapter 9. Estimation -- Chapter 10. Testing of Hypothesis -- Chapter 11. Analysis of Correlation and Regression -- Chapter 12. Single Factor Experimental Design -- Chapter 13. Multi-Factor Experimental Designs -- Chapter 14. Response Surface Methodology -- Chapter 15. Acceptance Sampling -- Chapter 16. Control Charts. Appendix A. Statistical Tables -- Appendix B. Introduction to the R Software Program. .
Sommario/riassunto	This revised book provides an accessible presentation of concepts from probability theory, statistical methods, the design of experiments, and statistical quality control. It is shaped by the experience of the two teachers teaching statistical methods and concepts to engineering students. Practical examples and end-of-chapter exercises are the

highlights of the text, as they are purposely selected from different fields. Statistical principles discussed in the book have a great relevance in several disciplines like economics, commerce, engineering, medicine, health care, agriculture, biochemistry, and textiles to mention a few. Organised into 16 chapters, the revised book discusses four major topics—probability theory, statistical methods, the design of experiments, and statistical quality control. A large number of students with varied disciplinary backgrounds need a course in basics of statistics, the design of experiments and statistical quality control at an introductory level to pursue their discipline of interest. No previous knowledge of probability or statistics is assumed, but an understanding of calculus is a prerequisite. The whole book also serves as a master level introductory course in all the three topics, as required in textile engineering or industrial engineering.

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