

1. Record Nr.	UNINA9910153076603321
Autore	Dorf Richard C
Titolo	Modern Control Systems : Introduction to Total Quality
Pubbl/distr/stampa	, : Pearson Education UK, , 2014 ©2014
ISBN	1-292-03712-1
Edizione	[12th ed.]
Descrizione fisica	1 online resource (1047 pages)
Altri autori (Persone)	BishopRobert H
Soggetti	Feedback control systems Linear time invariant systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Table of Contents -- 1. Introduction to Control Systems -- 2. Mathematical Models of Systems -- 3. State Variable Models -- 4. Feedback Control System Characteristics -- 5. The Performance of Feedback Control Systems -- 6. The Stability of Linear Feedback Systems -- 7. The Root Locus Method -- 8. Frequency Response Methods -- 9. Stability in the Frequency Domain -- 10. The Design of Feedback Control Systems -- 11. The Design of State Variable Feedback Systems -- 12. Robust Control Systems -- Appendix: Matlab Basics -- Index.
Sommario/riassunto	For an introductory undergraduate course in control systems for engineering students. 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.

