## **Contents**

PREF	FACE		v
CHA	PTER 1 INTRODUCTORY MATERIALS		1
1-1	Introduction 1		
1-2	Commands and Matrix Functions Used in MATLAB 1		
1-3	Outline of the Book 5		
CHA.	PTER 2 BASIC BACKGROUND MATERIALS		7
2-1	Introduction 7		
2-2	Entering Matrices in MATLAB Programs 8		
2-3	Vector Generation, Matrix Operations, Eigenvalues, and Related Subjects 21	d	
2-4	Plotting Response Curves 30		
2-5	Mathematical Models of Linear Systems 36		
CHA	PTER 3 TRANSIENT-RESPONSE ANALYSIS OF CONTINUOUS-TIME SYSTEMS		41
3-1	Introduction 41		
3-2	Step Response 42	OCH.	
3-3	Impulse Response 70	• .	
3-4	Ramp Response 80		
3-5	Transformation of System Models 90		
CHA	PTER 4 TRANSIENT-RESPONSE ANALYSIS OF DISCRETE-TIME SYSTEMS		98
4-1	Introduction 98	,	
4-2	Digital Filters 102	,	