

English
for the Students of
Chemical Engineering

Nosratollah Ghiassee, PhD
Kazem Mirjalili
Mahshid Roshani

Tehran
2015/1394



The Organization for Researching and Composing
University Textbooks in the Humanities (SAMT)
The Center for Research and Development in Humanities

Table of Contents

Unit	Title	Page
	1. Introduction to Chemical Engineering	1
	2. Thermodynamics	18
	3. Fluid Mechanics	37
	4. Unit Operations	57
	5. Mass Transfer	72
	6. Heat Transfer	88
	7. Heat Exchangers	104
	8. Solvent Extraction	119
	9. Packed Towers	135
	10. Ion Exchange and Adsorption	150
	11. Leaching	166
	12. Drying	182
	13. Comminution	197
	14. Treatment of Water and Wastes	212
	15. Corrosion	231
	16. Petroleum	249
	17. The Science of Polymers	267
	18. Reaction Kinetics	286
	19. Plant Design	303
	20. Chemical Process Control	321