

# Brief Contents

Preface 19

## **PART I** Conceptual Foundations of Accounting Information Systems 27

**CHAPTER 1** Accounting Information Systems: An Overview 28

**CHAPTER 2** Overview of Transaction Processing and Enterprise Resource Planning Systems 56

**CHAPTER 3** Systems Documentation Techniques 84

## **PART II** Data Analytics 117

**CHAPTER 4** Relational Databases 118

**CHAPTER 5** Introduction to Data Analytics in Accounting 162

**CHAPTER 6** Transforming Data 188

**CHAPTER 7** Data Analysis and Presentation 214

## **PART III** Control of Accounting Information Systems 247

**CHAPTER 8** Fraud and Errors 248

**CHAPTER 9** Computer Fraud and Abuse Techniques 282

**CHAPTER 10** Control and Accounting Information Systems 322

**CHAPTER 11** Controls for Information Security 360

**CHAPTER 12** Confidentiality and Privacy Controls 394

**CHAPTER 13** Processing Integrity and Availability Controls 422

## **PART IV** Accounting Information Systems Applications 451

**CHAPTER 14** The Revenue Cycle: Sales to Cash Collections 452

**CHAPTER 15** The Expenditure Cycle: Purchasing to Cash Disbursements 494

**CHAPTER 16** The Production Cycle 532

**CHAPTER 17** The Human Resources Management and Payroll Cycle 562

**CHAPTER 18** General Ledger and Reporting System 592

**PART V** The REA Data Model 625

**CHAPTER 19** Database Design Using the REA Data Model 626

**CHAPTER 20** Implementing an REA Model in a Relational Database 660

**CHAPTER 21** Special Topics in REA Modeling 684

**PART VI** The Systems Development Process 717

**CHAPTER 22** Introduction to Systems Development and Systems Analysis 718

**CHAPTER 23** AIS Development Strategies 754

**CHAPTER 24** Systems Design, Implementation, and Operation 784

Glossary 812

Index 829