

PREFACE

The seventh edition of *Management Information Systems for the Information Age* provides you the ultimate in flexibility to tailor content to the exact needs of your MIS or IT course. The nine chapters and thirteen Extended Learning Modules may be presented in logical sequence, or you may choose your own mix of technical topics and business/managerial topics.

The nine chapters form the core of material covering business and managerial topics, from strategic and competitive technology opportunities to the organization and management of information using databases and data warehouses. If you covered only the chapters and none of the modules, the focus of your course would be MIS from a business and managerial point of view.

The thirteen Extended Learning Modules provide a technical glimpse into the world of IT, covering topics ranging from building a Web site, to computer crimes and digital forensics, to how to use Microsoft Access. If you chose only the modules and none of the chapters, the focus of your course would be on the technical and hands-on aspects of IT.

At the beginning of each chapter (and in the Instructor's Manual for each chapter), we include our recommendations concerning which modules to cover immediately after covering a given chapter. For example, Module H on computer crime and digital forensics follows logically after Chapter 8 on protecting people and information. But you can cover Chapter 8 and omit Module H—that's completely up to you. On the other hand, you can omit Chapter 8 and cover Module H—you have flexibility to do what suits your needs and the needs of your students.

You can easily select a course format that represents your own desired blend of topics. While you might not choose to cover the technologies of networks, for example, you might require your students to build a small database application. In that case, you would omit Module E (Network Basics) and spend more time on Module C (Designing Databases and Entity-Relationship Diagramming) and Module J (Implementing a Database with Microsoft Access).

On the facing page, we've provided a table of the chapters and the modules. As you put your course together and choose the chapters and/or modules you want to cover, we would offer the following:

- Cover any or all of the chapters as suits your purposes.
- Cover any or all of the modules as suits your purposes.
- If you choose a chapter, you do not have to cover its corresponding module.
- If you choose a module, you do not have to cover its corresponding chapter.
- You may cover the modules in any order you wish.

Please note that your students will find Modules F, G, I, K, L, and M on the CD that accompanies the textbook. Also, to better serve a large and diverse market, we have provided two versions of Module D (Decision Analysis with Spreadsheet Software) and two of Module J (Implementing a Database with Microsoft Access). In the book, these two modules cover Office 2007 Excel and Access. However, if you're using a previous iteration of Microsoft Office, you can teach Excel and Access using the versions of Modules D and J found on the CD, as they teach Excel and Access using Office 2003.

The unique organization of this text gives you **complete flexibility** to design your course as you see fit.

THE CHAPTERS	THE EXTENDED LEARNING MODULES
CHAPTER 1	Extended Learning Module A
The Information Age in Which You Live	Computer Hardware and Software
CHAPTER 2	Extended Learning Module B
Major Business Initiatives	The World Wide Web and the Internet
CHAPTER 3	Extended Learning Module C
Databases and Data Warehouses	Designing Databases and Entity-Relationship Diagramming
CHAPTER 4	Extended Learning Module D
Decision Support and Artificial Intelligence	Decision Analysis with Spreadsheet Software
CHAPTER 5	Extended Learning Module E
Electronic Commerce	Network Basics
CHAPTER 6	Extended Learning Module F*
Systems Development	Building a Web Page with HTML
CHAPTER 7	Extended Learning Module G*
Enterprise Infrastructure, Metrics, and Business Continuity Planning	Object-Oriented Technologies
CHAPTER 8	Extended Learning Module H
Protecting People and Information	Computer Crime and Digital Forensics
CHAPTER 9	Extended Learning Module I*
Emerging Trends and Technologies	Building an E-Portfolio
	Extended Learning Module J
	Implementing a Database with Microsoft Access
	Extended Learning Module K*
	Careers in Business
	Extended Learning Module L*
	Building Web Sites with FrontPage
	Extended Learning Module M*
	Programming in Excel with VBA

*The complete text for Modules F, G, I, K, L, and M are on the CD that accompanies this text. (On the CD also are version of Modules D and J using Office 2003.)

- **Management focus**—By focusing on the chapters, your class will take a managerial approach to MIS.
- **Technical focus**—If hands-on, technical skills are more important, focus your MIS course on the modules.

Assurance of Learning Ready

All educational institutions today are focused on the notion of assurance of learning, the demonstration that students are indeed learning in the classroom. *Assurance of learning* is key in accreditation and in reassuring all constituents (employers, prospective students, the parents of prospective students, institutional administration, and so on) that the value of the educational dollar is very high.

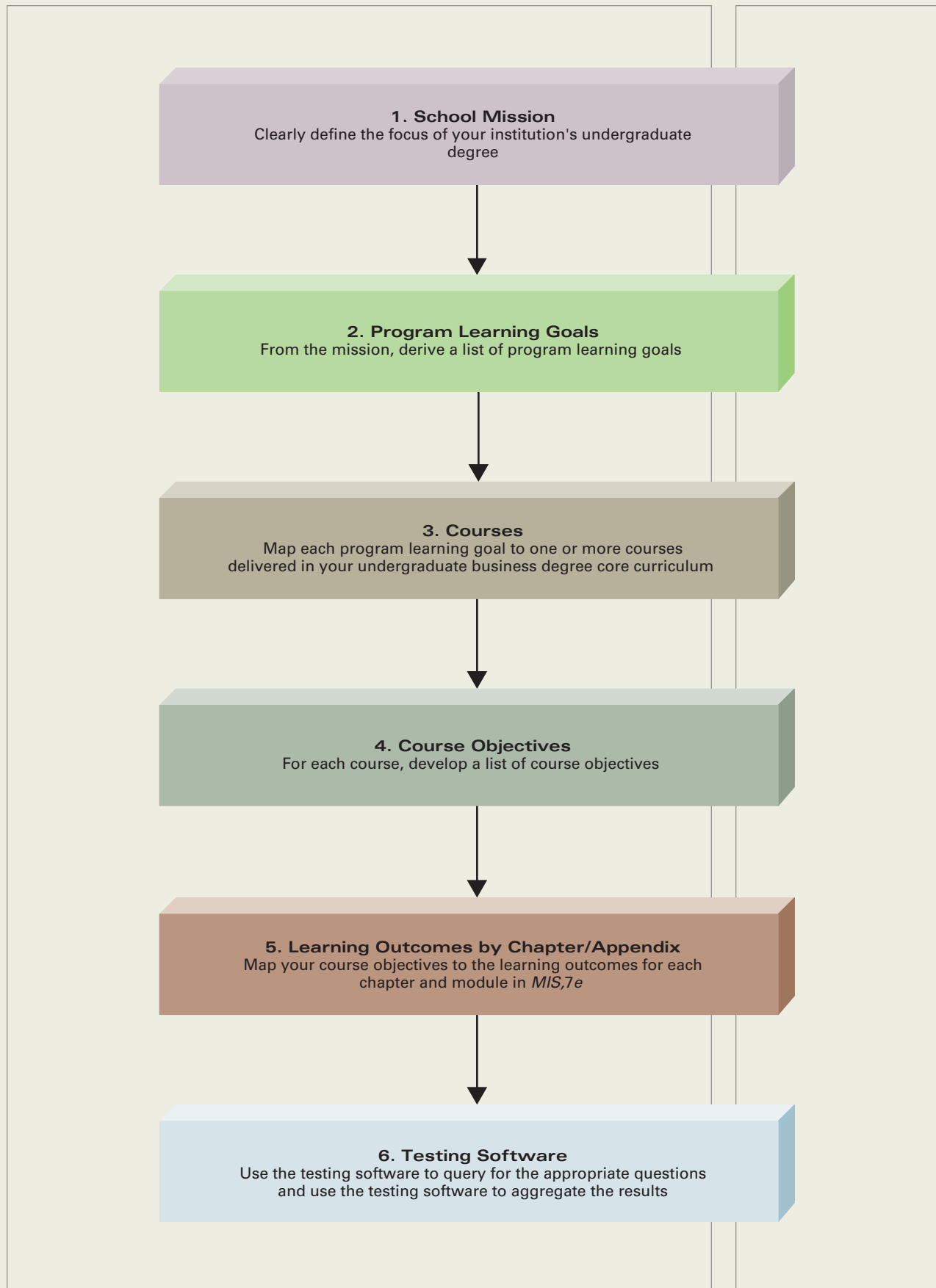
Management Information Systems for the Information Age, Seventh Edition, is designed specifically to support your assurance of learning initiatives. It does so in simple, yet powerful, fashion.

***Management Information Systems for the Information Age*, Seventh Edition, maps each test bank question to a learning outcome for the chapter or module. The instructor can use the test bank software to easily query for learning outcome questions that relate directly to the learning objectives for the course. The instructor can then use the reporting features of the software to aggregate results in similar fashion, making the collection and presentation of assurance of learning information simple and easy.**

If you're just starting your assurance of learning initiatives, take a close look at the diagram on the opposite page.

1. **School Mission**—start here to clearly define and understand the focus of your educational institution in delivering its undergraduate degree.
2. **Program Learning Goals**—from your school's mission, derive a list of program learning goals. Each of these usually maps to a specific business functional area. For example, a program learning goal for MIS might be: "Understand the use of information technology in business (and other types of organizations, i.e., not-for-profit, etc.) (1) to create and sustain a competitive advantage, (2) to be more efficient in operations, (3) to make more effective decisions, and (4) to transform the organization to remain viable in the marketplace."
3. **Courses**—map each program learning goal to one or more courses delivered in your undergraduate degree business core curriculum. This will tell you in which courses you need to provide assurance of learning for each program learning goal.
4. **Course Objectives**—for each course, develop a list of course objectives. You probably already have these and include them in your syllabus to inform students of what they will be learning.
5. **Learning Outcomes by Chapter/Module**—map your course objectives to the learning outcomes for each chapter and module in *Management Information Systems for the Information Age*, Seventh Edition. Some of your course objectives may cross more than one chapter or module or they may be inclusive of just one chapter or module.
6. **Testing Software**—use the testing software provided with the text to query for questions by the learning outcomes you identified in the previous step. Choose the questions most appropriate to you. Use the reporting features of the testing software to aggregate results by learning outcome.

If you would like further insight into assurance of learning in MIS, including rubrics for software projects, contact your McGraw-Hill sales representative. Stephen Haag can provide a two-part presentation on assurance of learning.



Changes for the Seventh Edition

The content changes for the Seventh Edition were driven by:

- Instructor feedback from the sixth edition.
- Changes that have occurred in the business world.
- Advances that have occurred in the technology area.
- Changes made by our competitors.

As a group of authors and contributors working together, we carefully sifted through all the competitive scanning information we could gather to create a Seventh Edition that builds on the success of the sixth edition.

Throughout the text, you'll find new or updated opening and closing case studies, Industry Perspectives, and Global Perspectives. You'll also find new or expanded coverage on the following essential IT topics:

- **Enterprise Resource Planning (ERP) Systems**—now appearing in Chapter 2 (as a system foundation for integrating CRM, SCM, and e-collaboration functions) and Chapter 7 as the enabling infrastructure of a service-oriented architecture framework.
- **Service-Oriented Architecture (SoA)**—now appearing in Chapter 6 (as the architecture approach within which component-based development is undertaken) and Chapter 7 in creating an SoA-enabled ERP infrastructure.
- **Component-Based Development**—now appearing in Chapter 6 as the “umbrella” for rapid application development (RAD), extreme programming (XP), and agile software development methodologies.
- **Web 2.0**—integrated throughout the text, especially in Extended Learning Module B, Chapter 5, and Chapter 9. Technologies include wikis, social networking sites, blogs, RSS feeds, and podcasting.
- **IT Metrics**—extensive coverage in Chapter 7 including specific metrics that focus on infrastructure-centric measures, call center measures, and Web-centric measures.
- **Business Continuity Planning**—in-depth coverage of the business continuity planning development cycle, including risk assessment, requirement recovery documents, collocation facilities, hot and cold sites, and disaster recovery plans.
- **Service Level Agreements (SLAs)**—expanded coverage in Chapters 6 (outsourcing), 7 (call centers), and 9 (personal application service providers), including service level specifications and service level objectives.
- **9 Major E-Commerce Business Models**—every combination of “B” (Business), “C” Consumer, and “G” Government with good illustrations and examples.
- **E-Business Trends**—now a part of Chapter 5, focusing on screenagers, digital immigrants, digital natives, mobile computing (and m-commerce), and the *Long Tail*.
- **IT Culture**—now appearing in Chapter 2 with two focuses: (1) the structural placement of the IT function—silo, matrix, and fully integrated; and (2) the philosophical approach to the acquisition, development, and use of IT (ranging from “wait and see” to supporting technology innovation failure).

Changes specific to each chapter/module include:

- **Chapter 1** is no longer an introduction to the book. Now it jumps right into the integration of business strategy and information technology by covering Porter's Five Forces Model, Porter's three generic strategies, top line versus bottom line, the run-grow-transform (RGT) framework, and value-chain analysis. These major topics drive all our discussions of technology throughout the book.
- **Updated Chapter 2**, expanded coverage of e-collaboration and new content on IT culture and enterprise resource planning (ERP) systems.
- **Updated Chapter 5**, less coverage of electronic government and new content on e-business trends.
- **Updated Chapter 6**, new content on component-based development (CBD), service-oriented architectures (SoA), and service level agreements (SLAs).
- **Updated Chapter 7**, expanded coverage of ERP systems and new content on IT success metrics and business continuity planning.
- **Updated Chapter 9**, including such topics as haptic interfaces and nanotechnology.
- **Updated Module B**, new content on Web 2.0.

In all, you'll find exciting new content on the following topics (and many more):

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| • Call center success metrics | • <i>The Long Tail</i> |
| • Ad-supported e-commerce model | • Mashups |
| • Blogs | • Microsoft Windows Vista |
| • Web-centric success metrics | • Nanotechnology |
| • Botnets | • Near Field Communication |
| • Business continuity planning | • Open-source information |
| • Component-based development (CBD) | • Path-to-profitability (P2P) |
| | • Pharming |
| • Crowdsourcing | • Podcasting |
| • Porter's three generic strategies | • Predictive analytics |
| | • Redacting |
| • Digital immigrants | • Requirement recovery document |
| • Digital natives | • Rootkit |
| • Drones | • RSS feeds |
| • GIGO | • Screenagers |
| • Infrastructure-centric metrics | • Service level agreements |
| | • Service-oriented architecture |
| • Intrusion prevention systems | • Technology innovation failure |
| • Invisible backlog | • Web 2.0 |
| • IT culture | • Wiki |
| • Location mashups | • Zombie |