

<<信息技术与应用导论>>

图书基本信息

书名：<<信息技术与应用导论>>

13位ISBN编号：9787040100440

10位ISBN编号：7040100444

出版时间：2001-5

出版范围：高等教育

作者：哈奇森

页数：960

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

## 前言

20世纪末，以计算机和通信技术为代表的信息科学和技术，对世界的经济、军事、科技、教育、文化、卫生等方面的发展产生了深刻的影响，由此而兴起的信息产业已经成为世界经济发展的支柱。

进入21世纪，各国为了加快本国的信息产业，加大了资金投入和政策扶持。

为了加快我国信息产业的进程，在我国《国民经济和社会发展第十个五年计划纲要》中，明确提出“以信息化带动工业化，发挥后发优势，实现社会生产力的跨越式发展。

”信息产业的国际竞争将日趋激烈。

在我国加入WTO后，我国信息产业将面临国外竞争对手的严峻挑战。

竞争成败最终将取决于信息科学和技术人才的多少与优劣。

在20世纪末，我国信息产业虽然得到迅猛发展，但与国际先进国家相比，差距还很大。

为了赶上并超过国际先进水平，我国必须加快信息技术人才的培养，特别要培养一大批具有国际竞争能力的高水平的信息技术人才，促进我国信息产业和国家信息化水平的全面提高。

为此，教育部高等教育司根据教育部吕福源副部长的意见，在长期重视推动高等学校信息科学和技术的教学的基础上，将实施超前发展战略，采取一些重要举措，加快推动高等学校的信息科学和技术等相关专业的教学工作。

在大力宣传、推荐我国专家编著的面向21世纪和“九五”重点的信息科学和技术课程教材的基础上，在有条件的高等学校的某些信息科学和技术课程中推动使用国外优秀教材的影印版进行英语或双语教学，以缩短我国在计算机教学上与国际先进水平的差距，同时也有助于强化我国大学生的英语水平。

为了达到上述目的，在分析一些出版社已影印相关教材，一些学校已试用影印教材进行教学的基础上，教育部高等教育司组织并委托高等教育出版社开展国外优秀信息科学和技术优秀教材及其教学辅助材料的引进研究与影印出版的试点工作。

为推动用影印版教材进行教学创造条件。

## <<信息技术与应用导论>>

### 内容概要

《信息技术与应用导论（第7版影印版）》综合介绍信息技术的知识、技能以及与信息技术相关的人文和社会方面的内容。

作为各专业的信息技术导论性课程，《信息技术与应用导论（第7版影印版）》既介绍了计算机软硬件系统的基础知识，同时也介绍了如何使用计算机处理日常报表、报告、数据库、通信等。

《信息技术与应用导论（第7版影印版）》尽可能地将最有用的信息综合起来提供给读者，因此，《信息技术与应用导论（第7版影印版）》具有如下特点：覆盖面广。

几乎包含了要了解IT技术所必须掌握的所有核心概念和内容，详而不繁。

实用性强。

所讲述的软件都是最新的，涉及的内容包罗万象。

复习巩固提高。

每章都有关键问题表，章末都有“是什么、怎么做、为什么重要”式的小结，每章都有自我测试题和思考题。

丰富的补充材料。

有教师参考资料（试题库、教师手册、PowerPoint幻灯片）、视频片段、互动式配套光盘、自助学习系统，提供两种自我测试软件。

内容：1. 概述 2. 硬件 3. I/O硬件 4. 存储器 5. 系统软件 6. 应用软件 7. 通信技术 8. 通信技术的应用 9. 信息系统的分析与设计 10. 软件编程与语言 11. 信息管理 12. 文件与数据库 13. 高级计算 14. 种族、隐私、安全与社会问题。

<<信息技术与应用导论>>

作者简介

作者：(美国)哈奇森

书籍目录

1. Overview: The Foundation for Your Future  
 1.1 Who Is the User?—Mostly People Like You  
 1.2 The Importance of Becoming  
 1.3 What Is a Computer-Based Information The Digital Basis of Computers The Analog Basis of Life  
 1.4 Computer Hardware  
 Input Hardware  
 Processing and Memory (Primary Storage)  
 Hardware  
 Output Hardware  
 Secondary Storage Hardware  
 Communications Hardware  
 1.5 Computer Software  
 System Software: The Computer's Boss  
 Applications Software: Your Servant  
 1.6 Types of Computer Systems: What's the Difference?  
 1.7 Milestones in Computer Development  
 The Evolution of Computers: Data Overload or Knowledge  
 1.8 Computing Trends: Connectivity, Interactivity, and Digital Convergence  
 Connectivity  
 Interactivity  
 Digital Convergence  
 CAREER BOX: Using Computers in Real Estate  
 CAREER BOX: Using Computers in Government and Politics  
 Summary  
 Exercises  
 EPISODE 1: Starting a Web Business E 1.362  
 2. Processing Hardware: Turning Data into Something You Can Use  
 2.1 How Data and Programs Are Represented in the Computer  
 Binary Coding Schemes  
 The Parity Bit: Checking for Errors  
 Machine Language: Your Brand of Computer's Very Own Language  
 How Computer Capacity Is Expressed: Bit by Bit  
 2.2 The Processor, Main Memory, and Registers  
 The Processor In Charge  
 Specialized Processor Chips: Assistants to the CPU  
 CISC, RISC, and MPP: Not All Processors Are Created Equal  
 Main Memory: Working Storage Area for the CPU  
 Registers  
 The Machine Cycle: How a Single Instruction Is Processed  
 2.3 Telling Computers Apart: RAM Capacity, Word Size, and Processor Speed  
 RAM Capacity  
 Word Size  
 Processing Speeds  
 2.4 Focus on the Microcomputer: What's Inside?  
 The Power Supply  
 The Motherboard  
 The Microprocessor  
 RAM Chips  
 ROM Chips  
 Other Forms of Memory  
 Ports: Connecting Peripherals  
 Expansion Slots and Boards  
 2.5 Coming Attractions?  
 CAREER BOX: Using Computers in Law  
 CAREER BOX: Using Computers in Information Technology  
 Summary  
 Exercises  
 3. Input/Output Hardware: Interfaces Between You & the Computer  
 3.1 I/O, I/O, It's Off to Work We Go  
 3.2 Input Hardware  
 Keyboard Input  
 Pointing Devices  
 Source-Data Entry  
 Scanning Devices  
 Voice Recognition  
 Audio Input Devices  
 Video and Photographic Input  
 Sensors  
 Human-Biology Input Devices  
 Multimedia Input Needs  
 Input Controls: Preserving Data Integrity  
 3.3 Output Hardware  
 Impact Printers  
 Nonimpact Printers  
 Plotters  
 Installing a Printer or Plotter  
 Multifunction Printer Technology.  
 "One for All  
 Monitors  
 Future Display Technology  
 Audio Output Hardware  
 Multimedia Output Needs  
 3.4 In and Out: Devices That Do Both  
 Terminals  
 Smart Cards and Optical Cards  
 Touch Screens  
 Now You See It, Now You Don't  
 CAREER BOX: Using Computers in Law Enforcement  
 CAREER BOX: Using Computers in Genealogy  
 Summary  
 Exercises  
 EPISODE 2: Deciding to Start Your Web Business  
 4. Storage Hardware: Preserving Data & Information  
 4.1 Storage Fundamentals  
 Common Elements of Storage Technology  
 Types of Files  
 What Can You Do with Files Besides Filing Them?  
 4.2 Tape Storage  
 4.3 Diskette Storage  
 How a Disk Drive Works  
 Characteristics of Diskettes  
 4.4 Hard Disks  
 Nonremovable Internal Hard Disk Drives of Microcomputers  
 Microcomputer Hard Disk Variations.  
 "Power and Portability  
 Virtual Memory: Using Disk Space to Increase RAM  
 Hard Disk Technology for Large Computer Systems  
 Future Hard Disk Technology.  
 "The MR Head  
 4.5 Optical Disks  
 CD-ROM Disks  
 CD-R Disks  
 CD-RW Disks  
 DVD-ROM.  
 "The "Digital Convergence" Disk  
 4.6 The Importance of Backup  
 4.7 Other Forms of Secondary Storage  
 Flash-Memory Cards  
 Advanced Storage Technology  
 CAREER BOX: Using Computers in Agriculture  
 Summary  
 Exercises  
 5. System Software: The Director  
 5.1 Two Basic Software Types: For the Computer and for the User  
 5.2 System Software Components  
 Operating System: In Control  
 Utility Programs: Helping Hands  
 Language Translators  
 System Software Interfaces  
 5.3 Common Operating Systems: Platforms  
 DOS and Windows  
 3.x  
 Windows 9x  
 Windows NT  
 I Windows 2000  
 OS/2 Warp  
 Unix  
 Linux  
 Macintosh  
 OS Net Ware  
 5.4 The Future: Is the Web Changing Everything?  
 Bloatware or the Network Computer?  
 The Jolt from Java  
 CAREER BOX: Using Computers in Photography  
 Summary  
 Exercises  
 6. Applications Software: The User's Tools  
 6.1 Applications Software Tools  
 6.2 Common Features of Applications Software  
 Compatibility Issues: What Goes with What?  
 6.3 Productivity Software Tools  
 Word Processing Software  
 Spreadsheet Software  
 Personal Finance Software  
 Presentation Graphics  
 Database Management System Software  
 Groupware  
 Desktop Accessories and PIMs  
 Integrated Software and Software Suites  
 Web Browsers  
 6.4 Specialty Applications Software Tools  
 Desktop-Publishing Software  
 Project Management

Software Computer-Aided Design (CAD) and Manufacturing (CAM) Drawing and Painting Software  
 Multimedia Authoring Software 6.5 Installing and Updating Applications Software Installing Applications  
 Software Software Versions and Releases 6.6 Ethics and Intellectual Property Rights: When Can You Copy? What  
 Is a Copyright? Piracy, Plagiarism, and Ownership of Image and Sounds Public Domain Software, Freeware, and  
 Shareware Proprietary Software and Types of Licenses The Software Police CAREER BOX: Using Computers  
 in Automobile Manufacturing CAREER BOX: Using Computers in Sports Summary Exercises EPISODE 3: Planing  
 for Commerce at Your Site 7 Communications Technology: Starting Along the Information Superhighway 7.1 Using  
 Computers to Communicate Technological Basics Analog Signals: Continuous Waves Digital Signals: Discrete  
 Bursts The Modem: The Great Translator Communications Software ISDN,, Cable Modems, ADSL, and  
 Dishes: Faster, Faster, Faster? 7.2 Communications Channels: The Conduitsof Communications Twisted-Pair Wire  
 Coaxial Cable Fiber-Optic Cable Microwave Systems Satellite Systems Other Wireless Communications 7.3 Factors  
 Affecting Communications Among Devices Transmission Rate." Higher Frequency, Wider BandwMth. More Data  
 Line Configurations: Poin t-to-Point and Multipoint Serial and Parallel Transmission Direction of Transmission  
 Flow: Simplex, Half-Duplex, and Full-Duplex Transmission Mode: Asynchronous Versus Synchronous Packet  
 Switching: Getting More Data on a Network Multiplexing: Enhancing Communications Efficiencyes Protocols:  
 The Rules of Data Transmission 7.4 Communications Networks Types of Networks: Wide Area,  
 Metropolitan Area, and Local Some Network Features: Hosts and Nodes. Downloading and Uptloading Advantages  
 of Networks 7.5 Local Networks Types of Local Networks: PBXs and LANs Types of LANs: Client-Server  
 and Peer-to-Peer Topology of LANs 7.6 Networking at Work Fax Messages Voice Mail Electronic  
 Mail Videoconferencing and V-Mail Workgrouping Computing and Groupware Electronic Data  
 Interchange Intranets and Extranets Telecommuting The Virtual Office CAREER BOX: Using Careers in Retailing  
 (E-Tailing) Summary Exercises Uses of Communications Technology: Tel ecommuti ng, Online Resources, & the  
 Internet 8.1 The Internet Where Did the Internet Come From? Connecting to the Internet What Can You Use  
 the Internet for? Internet Addresses 8.2 The World Wide Web Popular Uses of the Web Browsing the Web  
 Searching the Web Experiencing Multimedia on the Web Designing Web Pages Push Technology: Web Sites  
 Come Looking for You 8.3 Online Services: Who Should Use Them? Online Services Versus Portals: Is There a  
 Difference? 3. Input/Output Hardware: Interfaces Between You & the Computer 4. Storage Hardware: Preserving  
 Data & Information 5. System Software: The Director 6. Applications Software: The User's Tools 7. Communications  
 Technology: Starting Along The Information Superhighway 8. Uses of Communications  
 Technology: Telecommuting, Online Resources, & The Internet 9. Information Systems Analysis & Design: The  
 Systems Development Life Cycle 10. Software Programming & Languages: Where Software Comes  
 From 11. Information Management: Who Needs To Know What, & When? 12. Files & Databases: Organizing &  
 Maintaining Digital Data 13. Advances in Computing: Multimedia, Artificial Intelligence, & Intelligent  
 Agents 14. Ethics, Privacy, Security, & Social Questions: Computing for Right Living

## 章节摘录

插图：Function keys: Function keys are labeled with an F and a number, such as F1 and F2. They are used for issuing commands, not typing in characters. Desktop microcomputers usually have 12 function keys, portables often only 10, defined by the software you are using. For example, in one program, pressing F2 may print your document; in a different program, pressing F2 may save your work to disk. The documentation manual that comes with the software tells you how to use the function keys. Also, some companies make small templates that fit around or above the function keys and list the commands that the function keys correspond to. Many keyboards also include built-in enhancements such as microphones, speakers, and volume control. As computers have become more widespread, so has the incidence of various hand and wrist injuries. Accordingly, keyboard manufacturers have been giving a lot of attention to ergonomics. Ergonomics is the study of the physical relationships between people and their work environment; that is, it is the science of designing equipment for a safe and comfortable environment. Ergonomics deals with designing efficient and safe chairs, desks, and lights. It also recommends safe viewing distances from monitors. Keyboard manufacturers, as a result of ergonomic studies, have developed ergonomically sound keyboards to help prevent injuries and for use by physically challenged individuals. ( See Figure 3.3. )

编辑推荐

《信息技术与应用导论(第7版影印版)》是由高等教育出版社出版的。



版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>