

高职高专规划教材



双高规划教材

新编计算机专业英语 基础教程

王蕾 编



西北工业大学出版社

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【内容提要】 本书是为高职高专计算机英语课程而编写的教材。主要目的是使学生通过计算机英语的学习,即掌握一定的专业术语,又能提高英语的说、读、写、译的能力,从而能更好地适应信息社会对计算机人才的要求。本书分为基础篇、提高篇、技巧篇、和点睛篇四部分。

本书既适合高职高专学生使用,同时也适合于有一定计算机基础的自学者参考学习。

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前言

【适用对象】

本书既适合高职高专的计算机专业或相关专业的学生使用，同时也便于有一定计算机基础的自学者参考学习。

【学习目标】

- 能在英文环境下操作计算机，包括硬件的安装和维护、软件的使用等。
- 能通过上网或其他途径阅读计算机英语文章，从而掌握最新的计算机技术。
- 能适应实际工作的需要，包括阅读各类英文计算机技术文档，以及与外国技术专家或同事进行简单的技术交流。

【本书特色】

1. 循序渐进

- 结构：从“基础篇”到“提高篇”，从阶段一到阶段四，逐步培养学生的自学能力，从而能真正实现素质教育。
- 内容：在“基础篇”这个最基本的环节中，在每一课中，按照课文→阅读材料→小结三个步骤，逐步使学生掌握计算机的专业英语知识。
- 译文：很多同学在学习英语的时候，往往非常依赖译文，这样既不利于教师的教学，也不能培养学生通过工具书独立解决问题的能力，因而本书在译文的安排上采用了循序渐进的思想，使学生能逐渐扔掉译文这个“拐杖”。

2. 学以致用

与其他计算机英语教材不同的是，本书不仅重视学生对专业英语的学习，更侧重实际应用能力的提高。因而既选编了学生较为感兴趣的实用软件、实用编程、实用操作等内容，还提供了很多最新、最时尚的计算机技术文章。并且这些内容都相对独立，可以自由选择感兴趣的篇章进行学习。

3. 原汁原味

本书所有文章均选自国外的计算机教材、计算机杂志以及计算机网站上的内容，这里既包括学术性较强的科技文章，同时考虑到学生主要通过互联网来阅读英文技术文章，还收录了一些比较口语化的“网络文章”。

4. 精简概括

“关键术语”概括了计算机领域的一些常用词汇，而在“小结”中，则以句子的形式将该学科的重点内容进行概括。从而可以使学生对计算机英语有一个更全面更清楚的了解。

5. 英语技能

学习计算机英语,不仅需要了解计算机和掌握一定的专业术语,而且还要求具有一定的英语技能。本书的“技巧篇”则从英语学习的角度,介绍最为实用的一些英语知识。从口语、写作、翻译、语法、应试等多个方面进行学习。

6. 强化训练

本书共分四个阶段进行学习,在每一阶段都有相应难度的测试题目。将同一题型的题目集中训练,可以使学生有一个整体上的掌握,并能更加灵活的运用所学到的知识。

7. 画龙点睛

为了使学生能在整体上对本书有一个全面系统的理解和掌握,在“点睛篇”中,对重要的专业术语进行了归纳和总结,既可以锻炼学生的阅读能力,还便于学生在学习过程中随时查阅。

编 者

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基础篇

Step 1

★ 循序渐进

基础篇 • Step 1	课文（译文 • 注释）	阅读材料 A（译文 • 注释）	阅读材料 B（课外）
基础篇 • Step 2	课文（译文 • 注释）	阅读材料 A（注释）	阅读材料 B（课外）
提高篇 • Step 3	课文（译文 • 注释）	阅读材料（泛读）	
提高篇 • Step 4	课文（注释）	阅读材料（泛读）	

★ 学习提示

- ◎ 基础篇是计算机英语学习的基础阶段，内容详细、结构完整。主要包括课文、阅读材料 A、阅读材料 B、关键术语、小结等部分，侧重于基本术语和基本句式的掌握。
- ◎ Step 1 从初学者的角度出发，在课文和阅读材料 A 中都提供了译文和注释，使学生对计算机英语有一个初步的了解和掌握。
- ◎ 阅读材料 B 作为课外阅读材料，学有余力的学生可在课后借助工具书进行自学，只要了解文章的基本意思即可。

Lesson 1 Introduction to Computers

Text

Buying a Computer

Overview

Buying a computer is an important decision. There are many makes and models, and many people willing to give advice about what to buy and where to buy it. To make the most of your shopping experience, and sense of the variety of choices facing you, you'll want to do your homework before heading out. And, whether buying new or used, know what you want the computer to do for you and how much you can afford to spend.

Buy from a Reputable Dealer

Buying your computer from a reputable dealer means you're more likely to get a better warranty and better service. The computers they carry have succeeded because of the high-quality of their machines and their service.

What to consider before buying a Computer

How will you use the computer? Do you plan to write papers for a class using word processing¹ software, keep track of² your finances or business on a spreadsheet, send electronic mail (e-mail) to relatives, surf the World Wide Web³, or just play computer games? Knowing how you'll use your computer will help you determine what type of minimum requirements the computer needs to have.

Bigger programs require more memory

Keep in mind⁴ that the size of the software you plan to run will dictate how much memory your computer should have. Consider how you will use your computer, then ask about the software you'll need. A salesperson should be able to tell you how many megabytes of memory you'll need based on your planned computer use. Typically, you'll need a minimum of 128 megabytes of memory to adequately run most programs. Most computer systems come with preloaded software.

How much should you spend?

With computers, it's a good rule of thumb⁵ to buy as much as you can afford. You don't have to buy the biggest, fastest or most powerful computer on the market, but you should buy the best system you can—

¹ word processing 字处理

² keep track of 记录

³ World Wide Web 万维网

⁴ keep in mind 记住

⁵ rule of thumb 经验法则

that includes monitor¹, microprocessor², memory³, hard disk drive⁴, keyboard⁵, printer⁶, etc.

Laptop⁷ vs. Desktop⁸ models

After you've made all the decisions about what you want in a computer, you also can choose what type of model you'd like: laptop or desktop. Laptop models are portable, and if you travel a lot and need to bring your computer along, this is the obvious choice. Desktops have larger screens and are easily expandable.

Buying local or mail order

You have two options when buying a computer: You can purchase your equipment locally or through mail order. They both have advantages. If you buy from an electronics dealer in your area, you can often get free demonstrations, and you can ask questions and buy additional equipment. Mail order computers are generally less expensive. If you have questions, you can call the company's customer service number and speak with a technician on the telephone. If you need to return the computer for repairs, you may have to ship it back to the manufacturer (save the original box and packing materials). Investigate both local and mail-order sources and buy from the one you feel most comfortable with.

Computer buyer's checklist

Before you walk into a computer store or call a mail order source, go over the list of the items (hardware and software) that you might consider purchasing. Ask the salesperson questions about the computer you are interested in and jot your notes in the space below.

Processor Type _____

Processor Speed in MHz _____

Motherboard _____

RAM⁹ (memory) _____

Cache¹⁰ _____

Hard Drive Capacity _____

Sound Card¹¹ _____

Monitor: Is it included in the price? _____

Monitor size _____

Video Card _____

Case _____

Keyboard and Mouse _____

¹ monitor 监视器, 显示器

² microprocessor 微处理器

³ memory 存储器, 内存

⁴ hard disk drive 硬盘驱动器

⁵ keyboard 键盘

⁶ printer 打印机

⁷ laptop computer 膝上型计算机

⁸ desktop computer 台式计算机

⁹ RAM (Random Access Memory) 随机存取存储器

¹⁰ cache 高速缓冲存储器

¹¹ sound card 声卡

Printer: Is it included in the price? _____

Type of Printer (dot matrix, inkjet, laser¹) _____

Modem² (internal, external, speed) _____

Can you set up a fax or voice mail³ on the modem? _____

Is there a toll-free technical support phone number? _____

What cables are needed to set up the system? _____

【Exercises】

Write T (true) or F (false) for each statement.

1. If you buy your computer from a reputable dealer, you may get a better warranty and better service.
2. You should buy the most expensive computer on the market.
3. If you travel a lot and need to bring your computer along, you can choose desktop model.
4. Before buying a computer, you should go over the list of the items that you might consider purchasing.

【Vocabularies】

afford [ə'fɔ:d]	v. 担负得起费用 (损失、后果等)
reputable ['repjutəbl]	a. 声誉好的
dealer ['di:lə]	n. 商人
warranty ['wɒrənti]	n. 担保, 保证
surf [sɜ:f]	v. 在……冲浪
dictate ['dik'teit]	v. 命令, 强制规定
megabyte ['megebaɪt]	n. 兆字节 (信息量单位)
adequate ['ædikwit]	a. 充分的, 足够的
inventory ['ɪnvəntəri]	n. 清单 (目录) 中的物品
portable ['pɔ:təbl]	a. 手提 (式) 的, 便携 (式) 的
expand [ɪk'spænd]	v. 扩展, 扩充
option ['ɒpʃən]	n. 选择, 选择权
advantage [əd'vɑ:ntɪdʒ]	n. 优势, 优点
demonstration [,dɛmən'streɪʃən]	n. 示范, 演示
technician [tek'nɪʃən]	n. 技术专家, 技术员
manufacturer [,mænju'fæktʃərə]	n. 厂商
investigate [ɪn'vestigeɪt]	v. 调查, 研究
jot [dʒɒt]	v. 略记, 草草记下

¹ dot matrix printer 点阵打印机; inkjet printer 喷墨打印机; laser printer 激光打印机

² modem 调制解调器

³ voice mail 语音邮件

Reading Materials A

Benefits of Using Computers

It is sometimes hard to believe that the first personal computer¹ (PC) was introduced roughly 20 years ago. Today, computers are everywhere—in our offices, homes, appliances, automobiles, and occasionally even our bodies. Computers have profoundly changed our lives, mostly for the better. The pace of computer innovation and change will only increase in the future. From time to time², it is useful to step back and take stock of the benefits that computers provide to users.

First, computers are good for storing and manipulating both structured and unstructured data. Structured data are highly regular or repeating data, the types of data for which databases are designed. Unstructured data are generally unique or non-repeating data, the types of data for which word processing and spreadsheet software, for example, are designed. If a computer-based solution is to be useful in a particular situation, the application must be relatively easy to use, the data must be worth storing, and the computer-based process must not slow the user down very much.

Second, computers are useful for organizing files (e.g. documents, spreadsheets and databases). Over the past several years, the cost of storage media (e.g. hard drives) has declined dramatically. It is often cheaper and more efficient to use a computer as a file cabinet than it is to use a traditional file cabinet. Files may be placed in folders³. Folders may be placed in other folders. Generally, the user's ability to organize files is limited only by her ability to dream up⁴ useful hierarchical structures⁵. The user may move files and folders around until the best hierarchy is found.

Third, computers allow the user to easily format information. Most users have worked in a word processor or spreadsheet program to change the appearance and positioning of file elements. For most file types, it is relatively easy to change where and how information appears within particular files.

Fourth, computers are useful for archiving information. Paper documents become worn over time and may be misplaced or lost. In contrast, a computer file is permanent, unless the file is deleted or the computer is lost. If the user backs up the computer on a periodic basis, the risk of information loss is entirely removed. Many computer users do not back up their information as often as they should, and far too many heartaches and inefficiencies occur as a result. The client-server computing⁶ model facilitates the back up process, because most servers may be configured to automatically back themselves up on a periodic basis. It is very difficult to lose information using such an arrangement.

Fifth, computers allow users to share, or not share, applications and files with others. Generally, it is possible to restrict access to information at four levels: the PC level, the file level, the server level, and the

¹ PC (Personal Computer) 个人计算机, 个人电脑

² from time to time 时常, 有时

³ folder 文件夹

⁴ dream up 凭空设想出

⁵ hierarchical structure 层次结构

⁶ client-server computing 客户机/服务器计算

message level. Many PCs have a password-protected screen saver¹ that pops up when the computer is started or after a few minutes of inactivity. Only users that know the password can get past the screen saver. Many types of files may be password-protected, and users may only gain access to the file if they know the file-specific password. Users on a LAN or an access-restricted website must log in before they gain access to the network. Login may be accomplished using a variety of approaches, including passwords, tokens, etc. Often, the user's identity determines what applications and files are made available to the user. A bank ATM² provides a good example of server-based access restriction using a token (the card) and a password (the PIN³). Messages may be encrypted such that the information contained in a message is uncrackable gibberish to anybody other than the intended recipient. For example, e-commerce⁴ websites usually encrypt the user's credit card information. This is a good example of message-level access restriction. Of the four general access restriction approaches, the server-based and message level approaches offer the greatest protection. When used in combination, it is virtually impossible (from a technological and/or cost perspective) for an outsider to gain access to protected information.

Finally, computers are often convenient and efficient. If the user's computer is loaded with the right applications and tools, the user may accomplish a myriad of tasks without getting up from the computer. This makes the user more productive. The Internet greatly extends the convenience and efficiency of computer-based processes—Internet servers may be accessed from any Internet-enabled client machine.

Reading Materials B

Using Ergonomics at the Computer

Step 1: Working Properly

You'll never learn to love (or even tolerate) a computer if it causes you discomfort or pain. If you plan to spend hours at the keyboard, it's worth taking time to make the experience as comfortable as possible. Setting up your workstation properly isn't just about feeling good (although that's a worthy goal). It's also a way of preventing painful and potentially debilitating conditions like carpal tunnel syndrome, tendonitis, repetitive motion disorder, and chronic back pain.

Step 2: Your Monitor

The top edge of your monitor should be at eye level or a little below, so you're looking down just slightly. (You may need to prop up the monitor with a large book or a monitor stand.) The front edge should be 20 to 30 inches from your eyes.

Step 3: Desk Height and Posture

Your wrists should never be higher than your elbows. Ideally, your elbows should be bent at a 90-degree angle and your wrists should be straight, not flexed upward or bent downward. If you can't

¹ screen saver 屏幕保护程序

² ATM (Automatic Teller Machine) 自动取款机

³ PIN (Personal Identification Number) 个人身份号码, 个人识别号

⁴ e-commerce 电子商务

achieve this position using your desk, your desk is too high (or your chair seat too low). Try a typing desk or a keyboard drawer that allows the keyboard to sit lower than the desktop. Your feet should touch the floor or a footrest and the angle between your thighs and spine should be 90 degrees or a bit more.

Step 4: Proper Mousing

Keep your mouse close to the keyboard so you don't have to reach far to use it. This will minimize strain on your shoulders. Also, try not to sit for hours with your hand on the mouse; let go of the mouse when you're not using it. If you use the mouse even more than the keyboard, put the mouse directly in front of you and the keyboard slightly off to the side. If you do start developing strain in your mouse arm or shoulder, consider using a touch pad.

Step 5: Proper Wrist Position

One of the worst things you can do to your wrists is leaning the heel of your hand on the desk with your wrist flexed backward as you type. Train yourself to hold your wrists up while you're typing (like your piano teacher taught you) or rest them on a wrist rest. Some mice conform to the shape of your hand and may result in less strain. You can also alleviate wrist strain by adjusting the angle of your keyboard. You can angle most keyboards so the back is slightly higher than the front.

Step 6: Ergonomic Keyboards

Part of the problem with most computer keyboards is that they force you to hold your hands at an unnatural angle to your arms; your hands are both more horizontal to the desk than they'd like to be and rotated slightly outward at the wrist. Microsoft makes an ergonomic keyboard in which the left-hand and right-hand keys are slightly separated and angled outwards. (The angle between the keys cannot be adjusted.) There are similar keyboards available from third-party vendors.

Step 7: Rest Your Eyes

Many people also experience some eye strain after staring at a computer screen for a few hours. The best approach is to rest your eyes periodically by focusing on a distant object once in a while and blinking often. Also make sure you have proper lighting. Avoid overhead lights; they almost always reflect off your screen. The best source of lighting is a desk or floor lamp or track lights that are not directly aimed at your screen. Sunlight streaming in the windows leads to glare as well.

Step 8: Find a Good Chair

Finally, if you have back problems (or want to avoid them), a good chair is essential. Look for one that provides support for your lower back and is fully adjustable. (You should be able to change both the height of the seat and the angle of the seat and the back.)

Key Terms

计算机基本术语	
中央处理器	CPU (Central Processing Unit)
存储器, 内存	memory
数据	data