计算机专业英语

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English

English

English

English

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内容简介

计算机专业英语是计算机知识学习与英语能力培养的综合课程，是中等职业技术学校计算机专业学生的重要的专业课程。本书根据此课程的特点，突出实用性与知识性，收集了大量计算机领域的最新的技术资料，根据中职学校学生的特点，从易学性和实用性入手，内容难度适中，以词汇的掌握和短文的阅读理解为主要内容，加入了屏幕英语和常用的缩略词的注释。

本书分为 7 个单元，包括计算机基础知识、计算机硬件、计算机软件、编程语言、数据库、多媒体、网络，所涉及的计算机专业知识丰富，并注意与计算机技术专业课的协调性。每章配有相关习题，用于提高读者的应用能力。

本书可作为中等职业技术学校计算机及相关专业的"计算机专业英语"课程的教材，也可作为广大计算机英语初学者的参考用书。

前　言

　　人类进入 21 世纪以来，计算机技术的发展最为迅猛，其对各行各业的影响程度也是不可估量的。计算机专业英语是计算机学科的一门重要工具课程，英语作为计算机业的行业性语言，有着其他语言不可替代的功能。无论是学习使用计算机语言，还是学习使用和维护计算机硬、软件产品，都离不开计算机英语。大量最新的计算机技术资料用英文发表，要求计算机专业技术人员必须具有熟练阅读英文计算机专业技术文献的能力，及时了解计算机发展的新动向。

　　计算机专业英语是计算机专业的一门必修课，学好计算机专业英语非常重要。然而，要想更好地掌握计算机专业英语，就需要了解计算机专业英语这门课程的特点。计算机专业英语和普通的英语课程并不相同，它更注重专业词汇的掌握，快速阅读能力的提高，而不是句型、语法的分析。计算机专业英语的句型、语法相对简单，在很多资料中，为了满足人们对快速阅读理解文章的需要，往往采用简单句来组织文章，甚至有些句子根本不符合语法规则。因此，学习计算机专业英语应更注重词汇的学习，词汇掌握了，句子的意思就不难理解了。本书根据专业英语的这一特点，引入了大量的词汇，而忽略了语法的讲述、句型的分析，使读者能更加快速地掌握计算机英语这门课程，提高阅读能力。

　　本书搜集了最新英文原版的计算机专业技术资料，简洁易懂的英语短文、术语，丰富的词汇和常见的计算机屏幕英语，遵循最新、实用的原则，选择了适合于中等职业技术学院学生的文章来组成课文。内容包括计算机基础知识、计算机硬件、计算机软件、编程语言、数据库、多媒体、网络方面的知识。在内容编排上，注意与计算机技术其他专业课程的协调性，注重实践性和实用性，难度适当，每章配有相关文章、翻译、习题及其屏幕英语。不仅有利于了解计算机领域的最新技术发展和相关的专业知识，而且能在阅读中掌握并积累计算机专业英语词汇，提高阅读能力，实现计算机专业能力与英语能力相结合的目的。

　　本书的特点：从易用性和实用性入手，采用最新的计算机技术资料，引入大量专业术语，提高阅读能力。

　　本书由刘京俐老师担任主编，关丽霞老师、武雪梅老师和徐江红老师担任副主编。参加编写的还有刘博、博雪妹、刘瑜、杨昕、杨文学、吴介方、孙惠满、刘辉、王丽华。本书在编写过程中参考了大量的文献资料，是相互协作的结果。

　　由于时间仓促，编写水平和经验有限，书中难免存在疏漏之处，恳请各位读者在使用本教材的过程中给予关注，并将意见及建议及时反馈给我们，以便修订时改进。

<div style="text-align: right">编　者</div>

目　录

参考译文

Unit 1

Computer Basics

1.1 Introduction to computer

Are you new to computers? Do you wonder what they do and why you would want to use one? This article will give an overview of computers: what they are, the different types, and what you can do with them.

What are computers?

Computers are machines that perform tasks or calculations according to a set of instructions, or programs. The first fully electronic computers, introduced in the 1940s, were huge machines that required teams of people to operate. Compared to those early machines, today's computers are amazing. Not only are they thousands of times faster, they can fit on your desk, in your lap, or even in your pocket.

Computers work through an interaction of hardware and software. Hardware refers to the parts of a computer that you can see and touch, including the case and everything inside it. The most important piece of hardware is a tiny rectangular chip inside your computer called the central processing unit (CPU), or microprocessor. It's the "brain" of your computer—the part that translates instructions and performs calculations. Hardware items such as your monitor, keyboard, mouse, printer and other components are often called hardware devices, or devices.

Software refers to the instructions, or programs, that tell the hardware what to do. A word processing program that you can use to write letters on your computer is a type of software. The operating system (OS) is software that manages your computer and the devices connected to it. Two well-known operating systems are Windows and Mac OS.

ENIAC

Introduced in 1946, ENIAC (Electronic Numerical Integrator and Computer) was the first general-purpose electronic computer. It was built for the United States military to calculate the paths of artillery shells. Physically, ENIAC was enormous, weighing more than 27 000 kilograms (60 000 pounds) and filling a large room. ENIAC used about 18 000 vacuum tubes, each the size of a small light bulb. The vacuum tubes burned out easily and had to be replaced constantly.

Types of computers

Computers' range in size and capability are not the same. At one end of the scale are supercomputers, very large computers with thousands of linked microprocessors that perform extremely complex calculations. At the other end are tiny computers embedded in cars, TVs, stereo systems, calculators, and appliances. These computers are built to perform a limited number of tasks.

The personal computer (or PC) is designed to be used by one person at a time. This section describes the various kinds of personal computers: desktops, laptops, handheld computers, and Tablet PCs.

Desktop computers

Desktop computers are designed for use at a desk or table. They are typically larger and more powerful than other types of personal computers. Desktop computers are made up of separate components. The main component, called the system unit, is usually a rectangular case that sits on or underneath a desk. Other components, such as the monitor, mouse and keyboard, are connected to the system unit(See PIC 1.1).
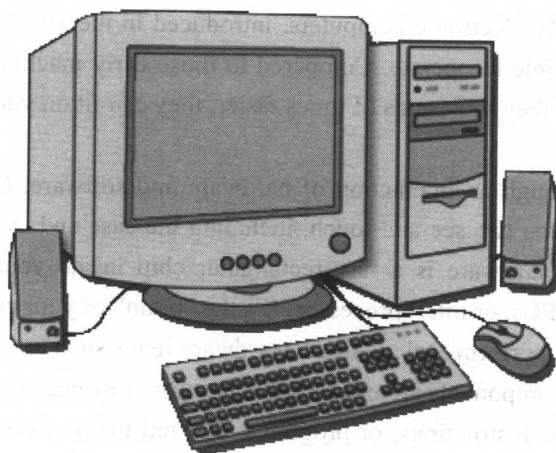
PIC 1.1　Desktop computer

Laptop computers

Laptop computers are lightweight portable computers with a thin screen. They are often called notebook computers because of their small size. Laptops can operate on batteries, so you can take them anywhere. Unlike desktops, laptops combine the CPU, screen and keyboard in a single case. The screen folds down onto the keyboard when not in use(See PIC 1.2).

PIC 1.2   Laptop computer

Handheld computers

Handheld computers, also called personal digital assistants (PDAs), are battery-powered computers and small enough to carry almost anywhere. Although not as powerful as desktops or laptops, handhelds are useful for scheduling appointments, storing addresses and phone numbers, and playing games. Some have more advanced capabilities, such as making telephone calls or getting access to the Internet. Instead of keyboards, handhelds have touch screens that you use with your finger or a stylus (a pen-shaped pointing tool)(See PIC 1.3).
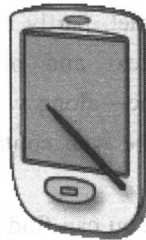
PIC 1.3   Handheld computer

Tablet PCs

Tablet PCs are portable computers that combine features of laptops and handhelds. Like laptops, they're powerful and have a built-in screen. Like handhelds, they allow you to write notes or draw pictures on the screen, usually with a tablet pen instead of a stylus. They can also convert your handwriting into typed text. Some tablet PCs are "convertibles" with a screen that swivels and unfolds to reveal a keyboard underneath(See PIC 1.4).
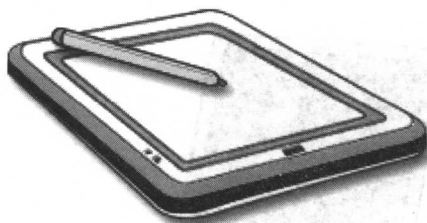
PIC 1.4　Tablet PC

What can you do with computers?

In the workplace, many people use computers to keep records, analyze data, do research, and manage projects. At home, you can use computers to find information, store pictures and music, track finances, play games and communicate with others—and those are just a few of the possibilities.

You can also use your computer to connect to the Internet, a network that links computers around the world. Internet access is available for a monthly fee in most urban areas, and increasingly, in less populated areas. With Internet access, you can communicate with people all over the world and find a vast amount of information.

Here are some of the most popular things to do with computers:

The web

The World Wide Web (usually called the Web) is a gigantic storehouse of information. The web is the most popular part of the Internet, partly because it displays most information in a visually appealing format. Headlines, text and pictures can be combined on a single webpage—much like a page in a magazine—along with sounds and animation. A website is a collection of interconnected webpages. The web contains millions of websites and billions of webpages.

Surfing the web means exploring it. You can find information on the web about almost any topic imaginable. For example, you can read news stories and movie reviews, check airline schedules, see street maps, get the weather forecast for your city, or research a health condition. Most companies, government agencies, museums and libraries have websites with information about their products, services, or collections. Reference sources, such as dictionaries and encyclopedias, are also widely available.

The web is also a shopper's delight. You can browse and purchase products—books, music, toys, clothing, electronics and much more—at the websites of major retailers. You can also buy and sell used items through websites that use auction-style bidding.

E-mail

E-mail (short for electronic mail) is a convenient way to communicate with others. When you send an E-mail message, it arrives almost instantly in the recipient's E-mail inbox. You can send E-mail to many people simultaneously, and you can save, print and forward E-mail to others.

You can send almost any type of file in an E-mail message, including documents, pictures, and music files. And with E-mail, you don't need a stamp!

Instant messaging

Instant messaging is like having a real-time conversation with another person or a group of people. When you type and send an instant message, the message is immediately visible to all participants. Unlike E-mail, all participants have to be online (connected to the Internet) and in front of their computers at the same time. Communicating by means of instant messaging is called chatting.

Pictures, music and movies

If you have a digital camera, you can move your pictures from the camera to your computer. Then you can print them, create slide shows, or share them with others by E-mail or by posting them on a website. You can also listen to music on your computer, either by importing (transferring to your computer) music from audio CDs or by purchasing songs from a music website. If your computer comes with a DVD player, you can watch movies.

Game

Do you like to play games? Thousands of computer games in every conceivable category are available to entertain you. Get behind the wheel of a race car, battle frightening creatures in a dungeon, or control civilizations and empires! Many games allow you to compete with other players around the world through the Internet. Windows includes a variety of card games, puzzle games and strategy games.

Money management

Many financial programs can help you track monthly expenses, calculate tax payments, and monitor investments. You can also pay your bills electronically, which ensures that payments are received on time.

Exercise

1. Answer the following questions according to the text above.
(1) What is computer? Try to describe it by words in this passage.
(2) What is ENIAC? Try to describe it by words in this passage.
(3) What can you do with computers?
2. Fill in the blanks with the information given in the text.
(1) Computers range in_____ and _____. This section describes the various kinds of personal computers: _____, _____, _____ and _____.
(2) Desktop computers are designed for use at a_____. Desktop computers are made up of separate components, such as_____, _____, _____ and_____.

(3) Laptop computers are often called _____.

(4) Handheld computers also called _____.

(5) Tablet PCs are_____ computers that combine features of _____and _____.

(6) A website is a collection of interconnected_____. The web contains millions of _____ and billions of _____.

(7) You can send almost any type of file in an E-mail message, including _____, _____ and _____.

Key words

computer 计算机

perform task 执行任务

calculation 计算

instruction 指令

program 程序

electronic computer 电子计算机

hardware 硬件

software 软件

chip 芯片

central processing unit (CPU) 中央处理器

microprocessor 微处理器

monitor 监视器，显示器

keyboard 键盘

mouse 鼠标

printer 打印机

component 组件

device 设备

word processing program 字处理程序

operating system (OS) 操作系统

ENIAC (Electronic Numerical Integrator and Computer) 电子数字积分计算机

data 数据

capability 性能

supercomputers 超级计算机

personal computer (PC) 个人计算机

design 设计

access 访问

shut down 关机

scan 扫描

hard drive 硬盘驱动器

prompt 提示

user 用户

click 单击
password 密码
cancel 取消
function 功能
quit 退出
display 显示，显示器
screen 屏幕
desktop computer 台式机
system unit 系统单元
laptop computer 膝上型计算机
notebook computer 笔记本电脑
handheld computer 手持式计算机
tablet PCs 平板计算机
network 网络
information 信息
World Wide Web 万维网
webpage 网页
website 网站
E-mail 电子邮件
document 文档，文件
file 文件
online 在线
digital camera 数码相机
slide show 幻灯片
management 管理
financial program 财务程序

1.2　Material turning your computer off and on

You turn the power on to start and off to stop.

On

Almost all computers are made with a power switch in the front. However, some older machines may have a switch on the back of the box.

Normally, after you turn the computer on, it will "boot up" (or load the startup software and the operating system) and bring you to the computer's desktop (a place where you can access the computer's services).

(1) If the computer wasn't shut down properly, it will probably run a program to scan the hard drive for errors and try to fix them if found. (Windows users: If the computer prompts you

to fix a problem, allow it to do so and choose "Skip Undo" if it becomes an option.) (Macintosh users: You won't have to do anything except click "Done" or "OK" to continue.)

(2) If the computer prompts you to enter a password, do so if you know it and click "OK". If there isn't supposed to be a password, click "OK" to go on (hopefully). If that doesn't work, you will need to find out what the password is.

Off

When you have quit your programs and are ready to shut down the computer, click on the proper sequence (below) for your machine.

Windows: Start → Shut Down → Shut down the computer? → Yes

Macintosh: Special > Shut Down

Your computer may display an extra screen, but will ultimately do one of two things:

(1) Turn it off (including the power). You'll need to turn off any devices that need to be turned off (printers, monitors, speakers, etc.).

(2) Display a screen saying it's OK to turn the power off (or shut down). Go ahead and turn the power off. You'll need to turn any devices off that need it (printers, monitors, speakers, etc.) .

Exercise

1. Answer the following question according to the text above.

What will you do if the computer wasn't shut down properly?

2. Fill in the blanks with proper words.

(1) Almost all computers are made with a power switch in the _____.

(2) If the computer prompts you to enter a password, do so if you know it and click "_____."

(3) When you have_____ your programs and are ready to _____the computer, click on the proper sequence for your machine.

Key words

power switch 电源开关

boot up 启动

startup 启动

load 载入，装载

desktop 桌面

shut down 关机

service 服务

fix 修复

hard drive 硬盘驱动器

skip undo 跳过

quit 退出

speaker 音箱

Screen English

1. Acknowledge and accept conditions of the message.
   承认并接受该信息的条件。

2. All data on the specified hard disk will be lost.
   指定硬盘上的所有数据将会丢失。

3. All files in directory will be deleted.
   目录里的所有文件将被删除。

4. Another file already exists by this name.
   已经存在一个同名文件。

5. A read-only file cannot be changed or saved.
   只读文件不能修改或保存。

6. A password is needed to connect to this network device.
   连接网络需要一个密码。

7. A serious disk error has occurred while writing to drive A.
   写磁盘 A 时发生了严重的磁盘错误。

8. A shortcut key or a name for the macro is required before recording.
   需要一个快捷键或宏名才能记录。

9. In addition to adding and subtracting numbers, the calculator also displays and manipulates text.
   除了加减数字外，计算器还可显示及处理文本。

10. Accept the configuration shown above.
    接受以上所显示的配置。

11. Access denied.
    拒绝访问。

12. Are you sure to quit Setup?
    确实要退出安装吗？

13. Are you sure you want to delete these 10 items?

确实要删除这 10 个项目吗?

14. Attempt to remove the current directory.
    试图删除当前目录。

15. Be sure that the printer is connected properly and use the Control Panel to verify that the printer is properly configured.
    务必使打印机正确联机,并通过控制面板验证打印机配置是否正确。

16. Before you can send a fax, you must specify your name and fax number.
    必须指定姓名和传真号才能发送传真。

17. Boot sector infection warning.
    引导扇区感染病毒警告。

18. Cannot change attributes.
    不能改变属性。

19. Cannot create temporary file.
    不能创建临时文件。

20. Cannot verify the update setting for the linked object.
   不能验证该链接对象的更新设置。

Unit 2

Computer Hardware

The first commercially successful personal computer, the Apple II, was introduced in 1977. Since then a lot has changed, but the basics of today's computer hardware remain strikingly similar to personal computers built over 20 years ago.

Computer

"Computer hardware" refers to the physical components of a computer, as opposed to the software operating system and programs that run on a computer. The key physical components include (See PIC 2.1):
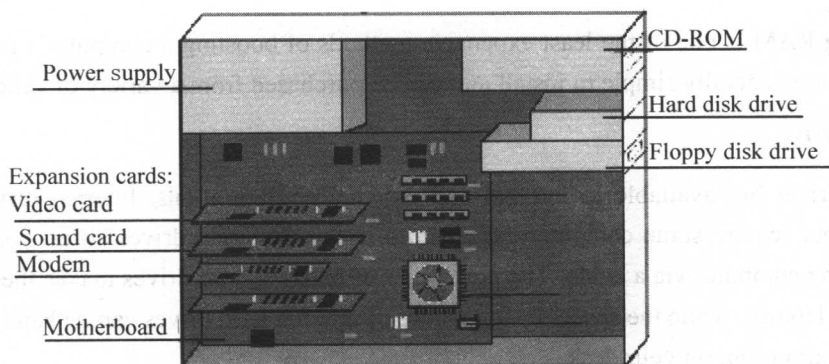
Components Inside a Computer
(Wires not shown)

PIC 2.1   Hardware

CPU: The Central Processing Unit is the core of your computer. It performs the calculations, allocates memory, and coordinates the activities of all software running on the computer.

RAM: Random Access Memory is used by the CPU. More powerful RAM means the CPU can handle more tasks at once.

Hard Drive: The hard drive stores your operating system files, applications, and the files you create with applications.

CD and DVD Drives: Useful for playback of training videos, data backup, playing music and movies, these drives are standard on almost all new computers and can be purchased as external devices as well.

Input Devices: The keyboard and mouse are input devices. They send signals to the CPU,