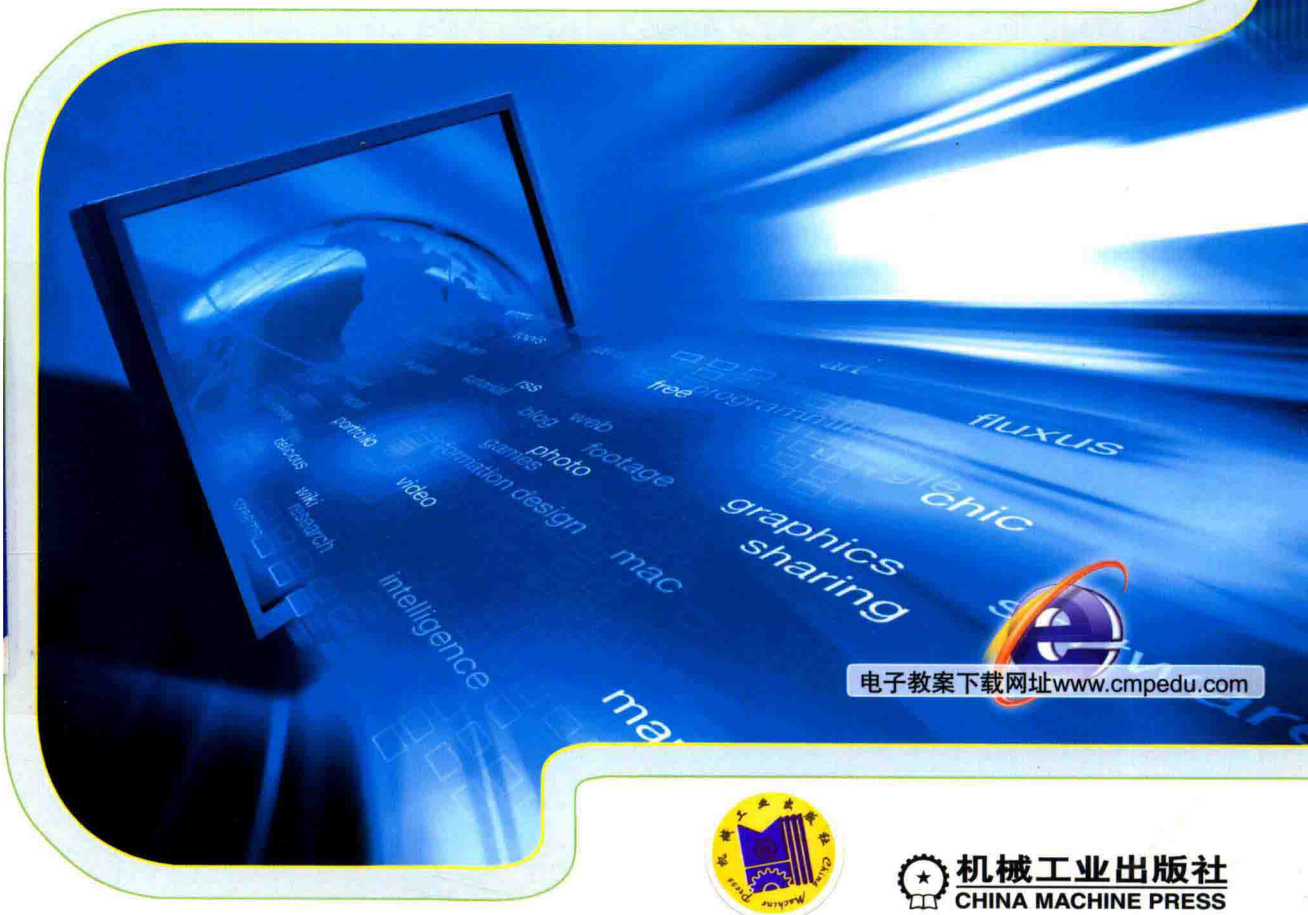
全国高等职业教育规划教材

计算机专业英语实用教程

梁晓晖　编著



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西安邮电学院图书馆
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机械工业出版社

本书从“实用”的角度出发，以读者的学习、工作的实际需要为着眼点，采用最新的行业资料为载体，对计算机专业英语的典型语法、词法及相关行业领域的关键字进行了全面细致的介绍。

本书共由 4 个单元及附录组成，正文部分含英文版软硬件安装指南、软件开发指南、行业规范及软件开发过程中出现的英文错误提示等，内容涵盖计算机硬件、计算机软件、数据库、软件工程等多个领域的专业知识。每一单元由 4 个小节和 1 篇阅读材料组成，前者配有参考译文，而后者则作为练习与学习效果检测之用。每个单元力求全面地涵盖相关领域的关键字。附录由“参考译文”、“常用计算机专业英语词汇表”、“经典计算机专业英语语法”和“常见屏幕英语及释义”组成。

本书既可作为高职高专院校计算机软件及计算机应用相关专业的教材，也可作为软件研发相关领域，尤其是从事英美软件外包工作的软件专业人士的参考书籍。

本书配套授课电子课件，需要的教师可登录 www.cmpedu.com 免费注册、审核通过后下载，或联系编辑索取（QQ：1239258369，电话：010-88379739）。

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出版说明

根据《教育部关于以就业为导向深化高等职业教育改革的若干意见》中提出的高等职业院校必须把培养学生动手能力、实践能力和可持续发展能力放在突出的地位，促进学生技能的培养，以及教材内容要紧密结合生产实际，并注意及时跟踪先进技术的发展等指导精神，机械工业出版社组织全国近60所高等职业院校的骨干教师对在2001年出版的“面向21世纪高职高专系列教材”进行了全面的修订和增补，并更名为“全国高等职业教育规划教材”。

本系列教材是由高职高专计算机专业、电子技术专业和机电专业教材编委会分别会同各高职高专院校的一线骨干教师，针对相关专业的课程设置，融合教学中的实践经验，同时吸收高等职业教育改革的成果而编写完成的，具有“定位准确、注重能力、内容创新、结构合理和叙述通俗”的编写特色。在几年的教学实践中，本系列教材获得了较高的评价，并有多个品种被评为普通高等教育“十一五”国家级规划教材。在修订和增补过程中，除了保持原有特色外，针对课程的不同性质采取了不同的优化措施。其中，核心基础课的教材在保持扎实的理论基础的同时，增加实训和习题；实践性较强的课程强调理论与实训紧密结合；涉及实用技术的课程则在教材中引入了最新的知识、技术、工艺和方法。同时，根据实际教学的需要对部分课程进行了整合。

归纳起来，本系列教材具有以下特点：

1）围绕培养学生的职业技能这条主线来设计教材的结构、内容和形式。

2）合理安排基础知识和实践知识的比例。基础知识以“必需、够用”为度，强调专业技术应用能力的训练，适当增加实训环节。

3）符合高职学生的学习特点和认知规律。对基本理论和方法的论述要容易理解、清晰简洁，多用图表来表达信息；增加相关技术在生产中的应用实例，引导学生主动学习。

4）教材内容紧随技术和经济的发展而更新，及时将新知识、新技术、新工艺和新案例等引入教材。同时注重吸收最新的教学理念，并积极支持新专业的教材建设。

5）注重立体化教材建设。通过主教材、电子教案、配套素材光盘、实训指导和习题及解答等教学资源的有机结合，提高教学服务水平，为高素质技能型人才的培养创造良好的条件。

由于我国高等职业教育改革和发展的速度很快，加之我们的水平和经验有限，因此在教材的编写和出版过程中难免出现问题和错误。我们恳请使用这套教材的师生及时向我们反馈质量信息，以利于我们今后不断提高教材的出版质量，为广大师生提供更多、更适用的教材。

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前　言

“计算机专业英语”是计算机应用及相关专业，尤其是软件开发专业的一门非常有用的专业基础课，它对于相关领域学习者的日常工作乃至职业发展都有很大的帮助。

十多年前，编者在计算机程序设计类课程的教学中，经常遇到用自己的英文知识而非计算机专业知识为学生解答问题的情况（即把屏幕上的英语翻译为汉语，学生就立即明白该怎么做）。那么，如何让这种英语水平阻碍专业学习的状况得到彻底改变呢？编者希望通过“计算机专业英语”这门课程来解决这个问题，于是开始讲授这门课程。

在讲授这门课程的过程中，编者曾经使用过多部教材，虽然它们各有千秋，但是总觉得有些知识和编写方法未能达到预期效果。于是，在讲授这门课程长达 11 年之后，编者按照“学生易学，老师易教，真正发挥计算机专业英语在专业上的正向促进作用”的原则编写了本书。

在编写本书的过程中，编者主要从 3 个方面进行了考虑。

① 用户需求。编者本人就是计算机专业出身，换句话说，就是“用户”，非常明白自己在计算机专业英语方面的需求。通过多年的教学和项目研发实践，编者将这些“需求”归纳为简单的几点。

- 为了便于日常办公，需要读懂英文版的软、硬件安装指南；
- 为了便于程序调试，需要读懂系统给出的各种英文提示；
- 为了便于探索研究，需要读懂前沿的英文专业文献与书籍。

② 讲授方式。编者非常熟悉理工科学生的思维方式和学习特点，即喜欢运用逻辑思维来解决实际问题，更倾向于公式、推理和举一反三，最惧怕被单词的海洋淹没。

③ 学情现状。在实际的教学中，大多数计算机专业英语教学要面向英语基础比较薄弱的学习者，所以计算机专业英语教材要特别注意选材的难度，不要让学习者在学习之前先被吓倒。

因此，本书具有如下 3 大特点。

1．实用性

从实用的角度出发，在内容安排上主要选取一些围绕“用户需求”展开的题材，既要反映行业领域的最新知识，又要与实际应用密切相关。本书涵盖了计算机硬件、计算机软件、数据库、软件工程等多个领域的内容，包括英文版软硬件安装指南、软件开发指南，以及软件开发过程出现的英文错误提示等。本书所追求的目标是“所学即所用”。

2．理工视角

主要从纯理工科的视角来剖析计算机专业英语的语法，力求将常见的句法和词法现象公式化，并在附录中对其进行归纳和总结，使读者对知识的掌握能够达到提纲挈领的程度，从而使学习达到事半功倍的效果。

3．难度适中

尽量选取一些难易适中的专业资料作为教学素材，以此为基础进行讲解，以期能够让大家比较轻松地掌握计算机专业英语的语法特点。内容覆盖面较广，可弹性定制学习内容。本书涉及的知识面广泛且知识体系全面，所选文章涉及了主题领域的绝大多数专业词汇及语法现象。教师可以弹性授课，选取最适合自己专业需要的章节来进行讲解，兼顾多个专业方向的学情特点。

此外，为了检验学习效果，本书在每一单元中均提供了一篇没有附带参考译文的阅读材料，可作阅读练习和翻译练习使用。为了方便读者查阅，本书在附录中列出了常用的行业术语、缩略词、专业英语语法和常见屏幕英语及释义。

本书的构思、编写、统稿和校对均由梁晓晖完成。由于编者水平有限，不当之处在所难免，敬请读者批评指正。

编　者

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Unit 1 Computer Hardware

1.1 Introduction

.Text.

A computer is an electronic device that manipulates information or data. It has the ability to store, retrieve, and process data. You can use a computer to type documents, send E-mail, and surf on the Internet. Your can also use it to handle spreadsheets, accounting, database management, presentations, games, and more.

Computers come in all types and sizes. There are primarily two main sizes of computers. They are portable computers and desktop computers.

The portable computer comes in various sizes and is referred to as laptops, notebooks, and hand-held computers. These computers generally denote different sizes, the laptop being the largest, and the hand-held being the smallest size. This passage will mainly talk about the desktop computer although portable computer issues are also discussed in various areas.

A PC (Personal Computer) is a system, consisting of many components. Some of those components, like Windows 7, and all the other programs, like Microsoft Word, are software. The stuff that can actually be seen and touched, and would likely be broken if thrown out of a fifth-story window, is hardware.

The term computer hardware refers to the various electronic components that are required to use a computer along with the hardware components inside the computer case. As we all know, a computer equipment is consisted of several common components. These include:

- The main computer box.
- A monitor - Looks like a television screen.
- A keyboard.
- A mouse.
- Speakers.
- An optional printer.

Not everybody has exactly the same hardware. But those who have a desktop system, like the example shown in Figure 1.1 probably have most of the components shown in that same figure. Those with notebook computers probably have most of the same components. Only in the case, the components are all integrated into a single book-sized portable unit.

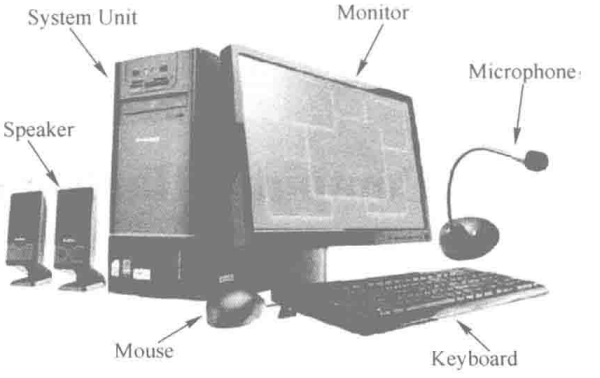

Figure 1.1 A Computer

The system unit is the actual computer which is also called the computer case. Everything else is called a peripheral device. A computer's system unit probably has at least one floppy disk drive, and one CD or DVD drive, into which you can insert floppy disks and CDs or DVDs. There's another disk drive called the hard disk inside the system unit, as shown in Figure 1.2, which can't be removed, or even seen. But it is there. And everything that is currently "in your computer" is actually stored on that hard disk. (We know this because there is no place else inside the computer where you can store information!)

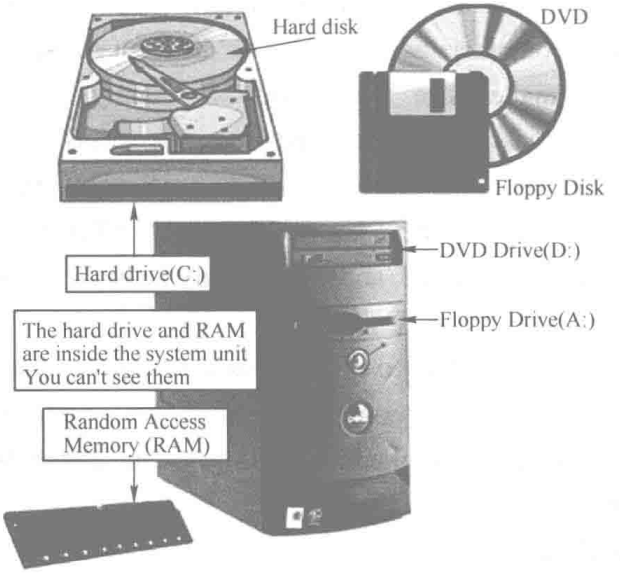

Figure 1.2 System Unit

The floppy drive and DVD drive are often referred to as *drives with removable media* or *removable drives* for short, because you can remove whatever disk is currently in the drive, and replace it with another. A computer's hard disk can store as much information as tens of thousands of floppy disks, so don't worry about running out of space on your hard disk any time soon. As a rule, we usually store everything created or downloaded on the hard disk. Use the floppy disks and DVDs to send copies of files through the E-mail, or to make backup copies of important items.

.End.

Key Words

data	数据
document	文档
spreadsheet	电子表格
database	数据库
notebook	笔记本电脑
desktop	桌面，台式计算机
component	组件
software	软件
hardware	硬件
keyboard	键盘
mouse	鼠标
display screen	显示器
speaker	音箱
microphone	麦克风，话筒
system unit	系统单元
computer case	计算机机箱
peripheral device	外设，外围设备
floppy disk	软盘
floppy disk drive	软驱，软盘驱动器
hard disk	硬盘
removable media	可移动介质
download	下载
backup	备份

Grammar

Word Building（构词法）

（1）动词+able=形容词

例如：move 移动（动词） movable 可移动的（形容词）

write 写入（动词） writable 可重写的（形容词）

（2）re-前缀，表示重复

例如：remove 重复移动（动词） removable 可重复移动的

rewrite 重写（动词） rewritable 可重复写入的（形容词）

Exercises

Answer the following questions according to the text.

1) What can we do with a computer?

2) What's the main component of a desktop computer?

1.2 Computer Components

.Text.

1.2.1 Basic Components of a Computer

Computers are made of the following basic components.

1. Case with hardware inside

① **Power supply** The power supply comes with the case, but this component is mentioned separately since there are various types of power supplies. The one you should get depends on the requirements of your system.

② **Motherboard** This is where the core components of a computer reside, which are listed below. Also the support cards for video, sound, networking and more are mounted into this board.

- **Microprocessor** This is the brain of a computer. It performs commands and instructions and controls the operation of the computer.
- **Memory** The RAM in a computer system is mounted on the motherboard. It is memory that must be powered on to retain its contents.
- **Drive controllers** The drive controllers control the interface of a computer system to the hard drives. The controllers let the hard drives work by controlling their operation. On most systems, the controllers are included on the motherboard; however, you may add additional controllers for faster or other types of drives.

③ **Hard disk drive(s)** This is where files are permanently stored in the computer. Also, normally, the operating system is installed here.

④ **CD-ROM drive(s)** This is normally a read only drive where files are permanently stored. There are now read/write CD-ROM drives that use special software to allow users to read from and write to these drives.

⑤ **Floppy drive(s)** A floppy is a small disk storage device that today typically has about 1.4 Megabytes (MB) of memory capacity.

⑥ **Other possible file storage devices** include DVD devices, Tape backup devices, etc.

2. Monitor

This device, which operates like a TV set, lets the users see how the computer is responding to their commands.

3. Keyboard

This is where the user enters text commands into the computer.

4. Mouse

A point and click interface for entering commands which works well in graphical environments.

1.2.2 The Case

The case is the outside component of a main computer box which provides protection for the parts inside and provides a fan and a power supply that are used to both cool the working parts inside and provide power to them.

Figure 1.3 below shows a typical case. It may help you understand where your connections for your monitor, keyboard, mouse, and other devices are if you need to hook them up. For more specific information please refer to your computer owner's manual.

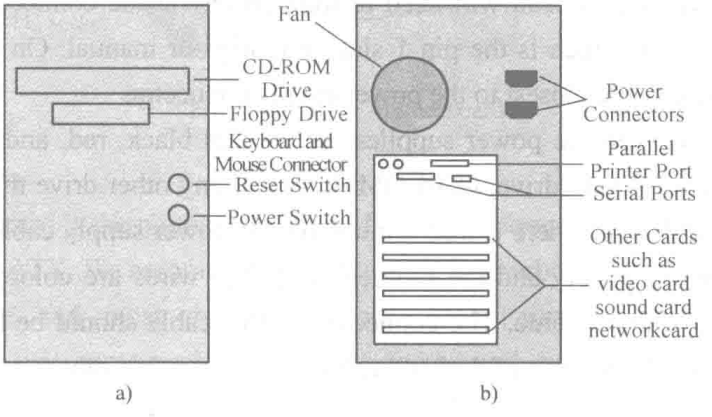

Figure 1.3 A Typical Computer with Tower Case

a) Front View b) Rear View

Figure 1.4 below shows a typical layout of the components inside the computer case.

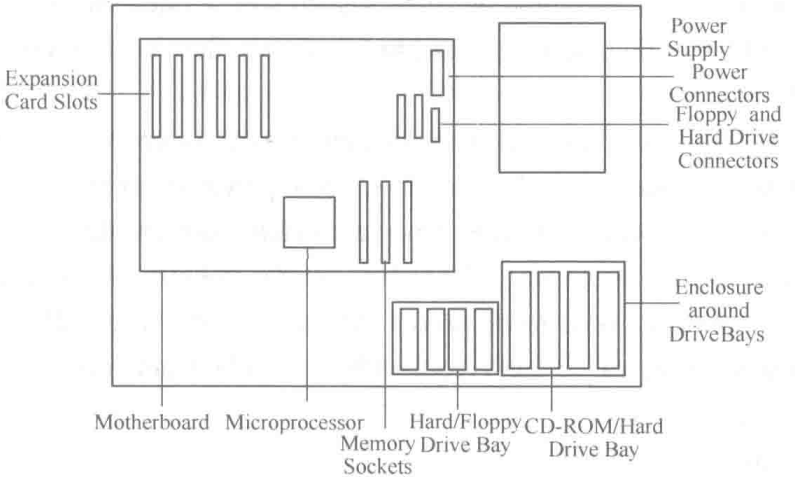

Figure 1.4 Inside the Case

In Figure 1.4, the front of the computer is at the bottom and the rear is at the top. At the front

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