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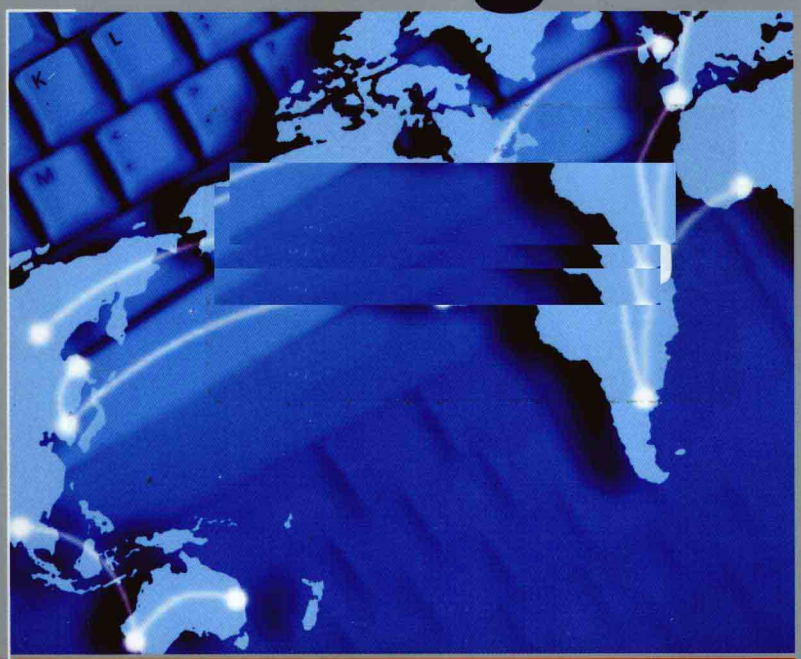
剑桥信息与通信技术英语

Professional English in Use



ICT

For Computers and the Internet

Santiago Remacha Esteras & Elena Marco Fabré

人民邮电出版社
POSTS & TELECOM PRESS

Professional English in Use

Intermediate to advanced

剑桥信息与通信技术英语

Santiago Remacha Esteras
Elena Marco Fabré

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剑桥信息与通信技术英语

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内 容 提 要

本书以主题单元的形式，融合计算机和英语两方面的知识，提供了计算机信息技术所特有的词汇、句法和对话功能，为读者介绍了信息通信技术的最新信息，包括计算机系统、数据处理、电子表格和数据库、多媒体应用、电子邮件、网页设计和互联网安全等。

本书是为英语达到中高级水平的学习者量身定制的，适用于计算机与互联网相关专业的从业人员和学生。由于计算机的广泛普及，本书同样适用于那些在家中使用计算机并想提高自身计算机英语知识的非专业人士。

本书的目的在于促进读者与计算机的人机互动，让读者在这个数字化的世界里能够更加有效便捷地进行交流和沟通。

此为试读，需要完整PDF请访问：www.ertongbook.com

Thanks

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Picture research by Suzanne Williams.

Proofreading by Ruth Carim.

Development of this book has made use of the Cambridge International Corpus (CIC). The CIC is a computerized database of contemporary spoken and written English, which currently stands at one billion words (see page 7).

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Cambridge International Corpus

In writing this book, use has been made of related material from the Cambridge International Corpus.

The Cambridge International Corpus (CIC) is a very large collection of English texts, stored in a computerized database, which can be searched to see how English is used. It has been built up by Cambridge University Press over the last ten years to help in writing books for learners of English. The English in the CIC comes from newspapers, best-selling novels, non-fiction books on a wide range of topics, websites, magazines, junk mail, TV and radio programmes, recordings of people's everyday conversations and many other sources. The CIC currently stands at one billion words.

- The Corpus helps us to get a representative picture of how English is used, both in writing and in speech.
- It is constantly being updated so we are able to include new words in our books as soon as they appear.
- It is 'real' English so we can ensure that examples in our books are natural and realistic.

Professional English in Use

Professional English in Use ICT is part of a new series of **Professional English in Use** titles from Cambridge University Press. These books offer vocabulary reference and practice for specialist areas of professional English. Have you seen some of the other titles available in the series?

Introduction

Who is this book for?

ICT stands for Information Communications Technology, and describes the technologies we use in our daily lives to communicate. This book therefore looks particularly at the language of computing and the Internet but you'll also find topics such as mobile phones and video conferencing.

Professional English in Use ICT is designed for **intermediate to advanced level learners** who need to use the English of computing and the Internet for **study and work**. Computers have evolved so quickly that thousands of new jargon words are used to describe devices that didn't exist before. That's why this book is also suitable for people who use computers **at home** and want to improve their general knowledge of English and computers.

You can use this book on your own for **self-study**, or you can use it with a teacher **in the classroom.**

Why study ICT Vocabulary?

There are social, linguistic and educational reasons for studying this type of language.

Just read the technical specifications of your PC or explore a few websites and you will soon realize that **English is the language of computers and the Internet**. For example, lots of professionals, from engineers to desktop publishers, have to read technical documentation in English. In fact, in many companies English has become essential for working with computers. Besides, ICT English offers peculiar vocabulary, syntax and discourse **functions** that can be beneficial for developing your linguistic competence.

We hope this book will facilitate your interaction with computers and help you communicate more effectively in this digital world.

How is the book organized?

The book contains:

- **40 thematic units** plus **one introductory unit**, each occupying two pages. The left-hand page presents and explains ICT lexical areas. The right-hand page allows you to practise and extend your vocabulary.
- An **answer key** to the exercises.
- An **index**, which lists all the words and phrases introduced in the book, with the unit numbers where they appear; it also shows you how they are pronounced.

The units cover a wide range of topics from multimedia PCs and Internet issues to mobile phones and robots. It does not, however, require specialist knowledge of computers on either the part of the learner or teacher.

How are the units sequenced?

The introductory unit provides learners with some tips and techniques for learning vocabulary. Then the topics go from computers today to computers tomorrow. Unit 1 is about living with computers; Units 2–9 deal with hardware components; Unit 10 with health and safety; Units 11–18 with software and jobs in computing; Units 19–29 range from computer networks and the Web to e-commerce; Units 30–32 are about future developments; Units 33–36 deal with word-formation processes and collocations. Finally, Units 37–40 focus on some typical language functions in ICT English.

The left-hand page

This page introduces the **new words and expressions** for the unit. It is divided into **sections** indicated by letters (A, B, C), with simple, clear titles. Lexis is presented, and shown in **bold**, using different techniques:

- A short definition of a computer term
- A paragraph explaining an ICT concept or describing a computer device
- A diagram or picture illustrating a technical process, how computers work, etc.
- A situation where some words and uses are presented in context
- An authentic or adapted text from an original source

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The right-hand page

This page contains **exercises** to practise the lexical items presented on the left-hand page.

Sometimes the exercises concentrate on using words presented on the left-hand page in typical contexts. Other exercises take the form of a crossword or other type of puzzle, or a diagram, which will help you remember computer terms.

There are also matching exercises and word-building activities which revise the use of prefixes, suffixes and compounds. Some units contain true/false exercises and texts to complete.

In some exercises you will be asked to recognize the new word in order to do a task.

A lot of the sentences are taken from the Cambridge International Corpus, from computer magazines and from websites, so they are related to the learner's own experience.

'You and computers' activities

These are an important feature of the book. The main aim is to personalize and develop the language in the unit. There are two types of activities:

- *Follow-up activities*
  These give you the chance to put into practice the words studied in the unit, and to develop your language skills by writing about or discussing topics relating to your studies or professional situation.
  Self-study learners can do these as written work. In the classroom, they can be done as a speaking activity.
- *Activities based on the* Professional English in Use ICT *website*
  These are based on links to external websites which have been carefully selected for their interesting topics and accessible language. You will be asked to look up words, give definitions, answer reading comprehension questions, etc. Answers are provided on the *Professional English in Use ICT* website. See www.cambridge.org/elt/ict.

Cartoons

The **cartoons** about computers and the Internet are intended to liven up the technical content of the book. We hope you enjoy them!

How should I use this book?

- The book presents ICT topics in a gradual development, from computer essentials to more sophisticated issues, so we recommend that you go through the units in sequential order. This will help you understand the basic aspects first and then proceed to more complex matters like networks.
- You may prefer to study only those units you are interested in. For example, you may want to focus on particular units like Internet security and online banking.
- A third possibility is to use the Index at the back of the book. You can use it to look for specific ICT terms and then go directly to the units in which they appear.

Don't forget!

- Use a notebook or a file on disk to write down important words and expressions.
- The *Professional English in Use ICT* website at www.cambridge.org/elt/ict gives you more opportunities to develop your knowledge through the Web. The site is related to *Infotech*, a comprehensive English course for computer users, by Santiago Remacha Esteras, published by Cambridge University Press.
- If you need access to a dictionary, you can visit the Cambridge dictionaries website at www.dictionary.cambridge.org or an online computer dictionary on the Web, e.g. www.webopedia.com.

0 Learning vocabulary: tips and techniques

A Guessing meaning from context

Some ICT terms are difficult, but others are universally accepted. You probably know terms like *modem*, *online*, *chat*, *email*, *website*, *virus* and *hacker*; they are part of our everyday life.

When you meet an unknown word, first try to guess the meaning from the context – the surrounding words and the situation.

Read the text on the right and see how words have meaning in relation to other words.

- You know that a *PC* is a type of 'computer' and *digital music* relates to 'music on computers'.
- You can guess that *are digitizing* is a verb because it derives from 'digit', it is in the form of the present continuous, and it goes with the subject 'families' and the object 'home movies'.
- Words change their shape by adding prefixes and suffixes; for example, we add the prefix *inter-* to *net* and form *Internet*, and we add the suffix *-age* to *store* and form *storage*. (See Units 33 and 34.)

The birth of a revolution

Kids use PCs to do homework, access information via the Internet for research, communicate with pals, play video games and collect digital music. Parents, too, use the PC for communication and entertainment but also let it handle mundane tasks like balancing the checkbook, monitoring investments, preparing tax returns, and tracking the family's genealogy. With the advent of more powerful PCs with greater storage capacity, families are digitizing home movies and photos are stored on the home computer. *Miami Herald*

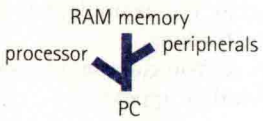
B Organizing vocabulary

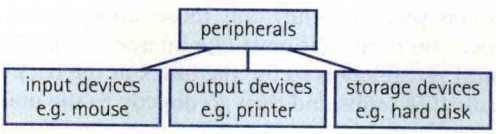
Read the text again. You can organize words in your notebook in different ways.

	How?	Examples
Meaning	definition	*The Internet is a global network of computers.*
	lexical family	*digit (root), digital, digitally, digitize, digitizer, digitized*
	synonyms	*handle = manage; advent = arrival*
	translation	*storage = almacenamiento (Spanish)*
Word class	(n), (v), (adj), etc.	*communication (n); communicate (v)*
Word building	prefixes	*Internet; research*
	suffixes	*information; investment; powerful*
	compounds	*chequebook (cheque + book)*
Collocations	word partners, phrases	*access information; handle tasks*

BrE: chequebook
AmE: checkbook

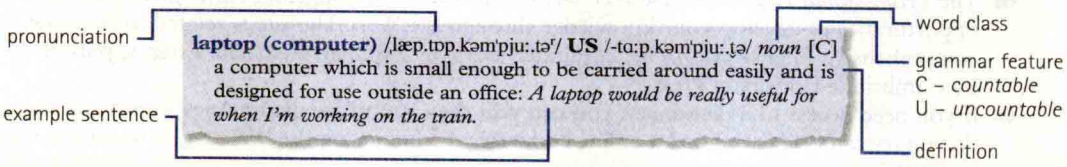
Word trees and spidergrams can help you build up your own mental maps of vocabulary areas. You can make diagrams to classify things.





C Using a dictionary

A monolingual dictionary gives you a lot of information about words. Look at this entry.



Use a bilingual dictionary if you find it easier. You may like to look at some Cambridge dictionaries at www.dictionary.cambridge.org. For ICT, you can also use an online computer dictionary.

(Cambridge Advanced Learner's Dictionary)

0.1 Look at the words in the box. Are they nouns, verbs or adjectives?

financial	Internet	electronic	print	design	microchips

0.2 Read A opposite. Complete this text with words from exercise 1. Use the context to help you.

0.3 Match the words in exercise 1 with the following definitions.

1 tiny pieces of silicon containing complex electronic circuits
2 to make or draw plans for something
3 relating to money or how money is managed
4 involving the use of electric current in devices such as TV sets or computers
5 the large system of connected computers around the world
6 to produce text and pictures using a printer

A digital era

Computers have changed the way we do everyday things, such as working, shopping and looking for information. We (1) ..... houses with the help of PCs; we buy books or make flight reservations on the (2) ..... ; we use gadgets that spring to life the instant they are switched on, for example the mobile phone, the music player, or the car ignition, all of which use (3) ..... . Many people now work at home, and they communicate with their office by computer and telephone. This is called 'teleworking'.

With the appropriate hardware and software, a PC can do almost anything you ask. It's a magical typewriter that allows you to type and (4) ..... any sort of document. It's a calculating machine that makes (5) ..... calculations. It's a filing cabinet that manages large collections of data. It's a personal communicator that lets you interact with friends. It's a small lab that helps you edit photos and movies. And if you like (6) ..... entertainment, you can also use it to relax with games.

0.4 Organize these words as in B opposite.

mobile phone	interact	communicator	teleworking
calculating	calculations	typewriter	

■ Meaning	definition	(1) ..... : working at home, while communicating with your office by computer or telephone
	lexical family	calculate, calculator, (2) ..... (3) .....
	synonyms	gadgets = small devices
	translation	switch on = (4) .....
■ Word building	prefixes	(5) .....
	suffixes	(6) .....
	compounds	(7) ..... (8) .....
■ Collocations	word partners	print a document; make calculations

0.5 Look at this dictionary entry. Put these labels in the correct place.

1 pronunciation
2 definition
3 example sentence
4 grammar feature
5 word class

a ..... b ..... c .....

data /ˈdeɪ.tə/ **US** /-t̬ə/ *group noun* [U]
information, especially facts or numbers, collected for examination and consideration and used to help decision-making, or information in an electronic form that can be stored and processed by a computer: *The data was/were collected by various researchers. Now the data is being transferred from magnetic tape to hard disk.*

d .....

e .....

(Cambridge Advanced Learner's Dictionary)

You and computers

Find a dictionary and look up the meaning of these words. 1 hardware 2 software

1 Living with computers

A Computers: friend ...

People who have grown up with PCs and microchips are often called the digital generation. This is how some people answered when questioned about the use of computers in their lives.

'I have a **GPS, Global Positioning System**, fitted in my car. With this navigation system I never get lost. And the **DVD recorder** is perfect for my children's entertainment.'

'I use an **interactive whiteboard**, like a large touchscreen monitor, at school. I find computers very useful in education.'

'**Assistive technology**, for people with disabilities, has helped me a lot. I can hardly see, so I use a **screen reader**, a program that reads aloud onscreen text, menus and icons.'

'This new **HMD, head-mounted display**, allows me to watch films, and enjoy **virtual reality**, the artificial environment of the latest video games.'

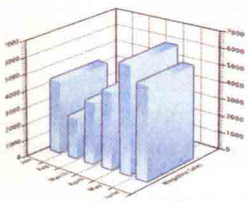
'The upgraded **wireless network** at my university is great: we can connect our laptops, PDAs and Wi-Fi cell phones to the network anywhere in the campus. Communication is becoming easier and easier.'

B ... or foe?

- Our society has developed **technological dependence**. When computers are down, our way of life breaks down: planes stop flying, telephones don't work, banks have to close.
- Computers produce **electronic waste**, plastic cases and microchips that are not biodegradable and have to be recycled or just thrown away.
- They are responsible for health problems, e.g. **computer addiction**, an inappropriate and excessive use of computers.
- **Cybercrime**, crime committed with the help of computers, is creating serious problems.
- Citizens may feel a **loss of privacy** because of unauthorized use of personal data or receiving unwanted electronic messages.

C Things we can do on the computer

A publication


A business graph

Web pages and email

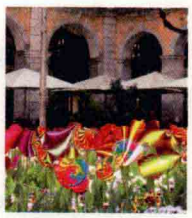


Photo editing

A secretary: 'I use computers to do the usual office things like **write letters** and **faxes**, but what I find really useful is email. We are an international company and I **send emails** to our offices all over the world.'

A publisher: 'We use PCs to produce all sorts of texts in digital format. We **publish e-books** (electronic books) and interactive e-learning programs on CD, and we help a local company to **design** an **online newspaper**, displayed on the Web.'

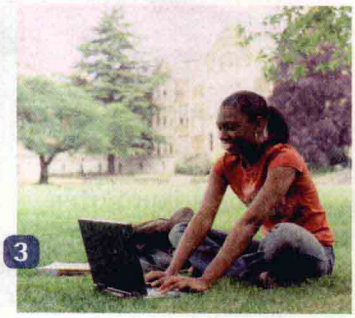
A bank manager: 'We use financial software to **make calculations** and then generate graphs or charts. We also use a database to **store information** so that it can be easily searched.'

A home user: 'I like to **retouch photos** on my computer; I improve them by making a few touches and then save them on a CD. I also enjoy looking at music portals on the Web. I **surf the Web** every day and I often **download files**, I copy music files from the Net to my PC.'

1.1 Complete these sentences with words from A opposite.

1 The .... is a piece of software that interfaces with your PC and allows you, via keyboard commands, to get any text information read to you in synthetic speech.
2 A .....-..... ..... , as popularized by virtual reality, lets the user immerse him/herself in a synthetically generated environment.
3 An .... is a touch-sensitive device where a special pen or your finger can act as a mouse.
4 Tony Adams is now the proud owner of a dark silver Vogue, complete with leather interior, ... navigation, and a .... with LCD TV screens.

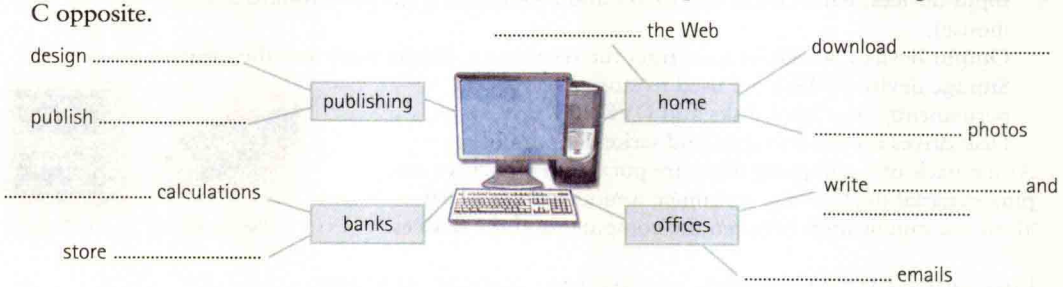
1.2 Which computer use in A do these pictures illustrate?



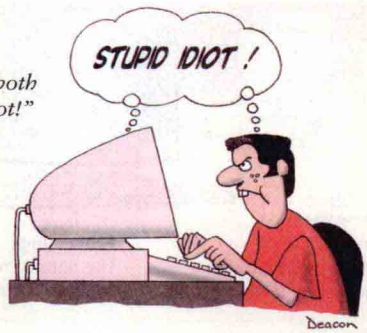
1.3 Read B opposite. What problem do these sentences refer to?

1 We are sorry to announce that most flights are delayed or cancelled.
2 He should go to a psychologist. He spends hours surfing the Web.
3 Technology changes so quickly that we have to scrap computers when they become obsolete.
4 I've been getting emails about offers for lots of different products.
5 My computer system has been broken into and some useful information has been destroyed.

1.4 Some words often appear together in IT. Complete these computer uses with word partners from C opposite.



Computer and man both thinking "Stupid Idiot!"



You and computers

Make a list of the ways you use computers at work and in your free time.

2 A typical PC

A Computer essentials

B Parts of a computer

A computer is an electronic machine that accepts, processes, stores and outputs information. A typical computer consists of two parts: hardware and software.

Hardware is any electronic or mechanical part of the computer system that you can see or touch.

Software is a set of instructions, called a program, which tells a computer what to do.

There are three basic hardware sections.

1 The **CPU** is the heart of the computer, a microprocessor chip which processes data and coordinates the activities of all the other units.

2 The **main memory** holds the instructions and data which are being processed by the CPU. It has two main sections: **RAM** (random access memory) and **ROM** (read only memory).

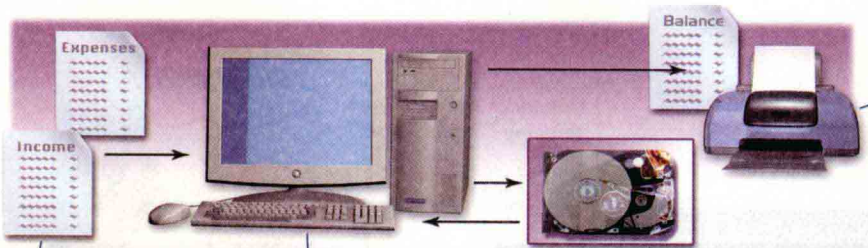
3 **Peripherals** are the physical units attached to the computer. They include:
Input devices, which let us enter data and commands (e.g. the keyboard and the mouse).
Output devices, which let us extract the results (e.g. the monitor and the printer).
Storage devices, which are used to store information permanently (e.g. hard disks and DVD-RW drives).
Disk drives are used to read and write data on disks.

At the back of a computer there are **ports** into which we can plug external devices (e.g. a scanner, a modem, etc.). They allow communication between the computer and the devices.

USB connector

USB ports

C Functions of a PC: input, processing, output, storage



Output
We can see the result on the screen or in printed form.

Input
We enter data with a keyboard, a webcam, etc.

Processing
The data is manipulated according to program instructions.

Storage
We keep data and programs in memory systems where they are available for processing.

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