

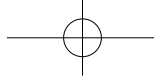
Unit 1

A Basic Introduction to Information Technology

Learning Objectives

In this unit, you will:

- have an overview of IT degree programs and their career prospects:
- learn about the history of information technology:
- learn how to write a paragraph with a topic sentence supported by examples:
- learn how to infer the meanings of unknown words in reading through context clues.



The First Industrial Revolution used water and steam power to mechanize production. The Second used electric power to create mass production. The Third used electronics and information technology to automate production.

—Klaus Schwab (*German engineer and economist*)

The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential.

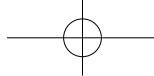
—Steve Ballmer (*Former CEO of Microsoft*)



Preview

The information technology (IT) industry has become one of the most robust industries in the world. IT, more than any other industry or economic facet, has increased productivity, particularly in the developed world, and therefore is a key driver of global economic growth. Economies of scale and insatiable demand from both consumers and enterprises characterize this rapidly growing sector.

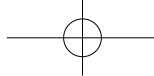
Both software development and the hardware involved in the IT industry include everything from computer systems, to the design, implementation, study and development of IT and management systems. Owing to its easy accessibility and the wide range of IT products available, the demand for IT services has increased substantially over the years. The IT sector has emerged as a major global source of both growth and employment.



Pre-reading Activities

1. The following are some common IT careers and their job responsibilities. Match each of the careers with its job responsibility.

- | | |
|------------------------------------|---|
| (1) Computer programmer | A. This person is concerned with facets of the software development process, including the research, design, programming, and testing of computer software. |
| (2) Software developer | B. This person analyzes an organization's computer systems and recommends ways to make the business run more efficiently. |
| (3) Technical consultant | C. This person is responsible for the upkeep, configuration, and reliable operation of computer systems, especially multi-user computers, such as servers. |
| (4) Chief information officer | D. This person designs, writes and tests computer programs. |
| (5) Chief technology officer | E. This person provides help and advice to consumers or organizations that are using computer software or equipment. |
| (6) System administrator | F. This person works in the classroom and the computer lab to give students the skills they need to enter the technology industry with confidence. |
| (7) Computer systems analyst | G. This person is responsible for the information technology and computer systems that support enterprise goals in a company. |
| (8) Information technology trainer | H. This person sets all technology goals and policies within an organization. |



2. Work in pairs and discuss the following questions.

- (1) Do you think studying IT courses will be different from studying other courses in college? Why or why not?
- (2) In the future, which IT career do you expect to engage in? Why?

Text A

What Does It Mean to Study Information Technology?

1. A degree in information technology can prepare you for an exciting career in a variety of **industries**. As information technology (IT) plays an increasingly important role in business, employers search for skilled workers with experience in **handling** information technology hardware and software.

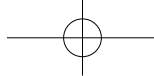
2. Whether you are a student graduating directly from high school or a working **professional yearning** for **upward mobility**, the right technology degree program waits for you. From traditional colleges and universities to **accredited** online and distance learning degree programs, you can take advantage of educational opportunities that suit every **budget** and **schedule**.

3. So, what is information technology? IT is the study of how computers process and manage all manner of information. IT professionals work in all kinds of industries, designing hardware, software, communications networks, Internet applications, and more. Because of the broad range of opportunities **available** to information technology professionals, a degree in information technology can help nearly anyone with an interest in computers find a job they are qualified for in an industry they find exciting.

4. Students who earn information technology degrees can **excel** at a variety of jobs right out of college. Graduates with strong people skills can work at information technology services help desks or at customer service call centers. **Creative** specialists can design **microchips** or new software. Skilled multi-taskers can **juggle** the management of an entire computer network for a company.

5. The broad information technology field allows students to bring their general computer knowledge into a variety of **specialized niches**. The world of information technology is always growing and changing, so learning how to keep up with the pace of technology is one of the most important things students learn when **enrolled** in a degree program.

6. The fast pace at which technology changes means that many different types of people are required to specialize in a variety of different areas, providing plenty of opportunities for



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everyone. It is much easier to keep up with one **aspect** of technology than with all of them. Therefore, it is important for specialists in different fields to communicate with each other. They have to be able to communicate with their **colleagues** in a clear, patient fashion. This requires good people skills and excellent communication abilities, whether it is in-person, over the phone, or via e-mail.

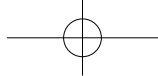
7. Students who **pursue** college degrees in information technology tend to be natural problem solvers. While computers help **streamline** business to an amazing degree, they can also slow things down if they aren't working **properly**. Thinking on your feet, and being able to **identify**, locate, and fix problems in a **timely** fashion are essential skills for working professionals in the information technology industry.

8. Information technology professionals also tend to spend a lot of time at the **keyboard** and in front of the computer screen. This means having good **manual dexterity**, typing skills, and hand-eye **coordination**. Students who pursue degrees in information tend to already have these skills. If they don't, they'd better develop them quite rapidly.

9. Here are some examples of the skills and **characteristics** students enrolled in information technology degree programs typically **possess**:

- **Troubleshooting**
- Problem solving
- Typing skills
- Communication abilities
- Computer **literacy**
- Patience
- Manual dexterity
- **Logical** thinking
- **Critical** thinking
- Creative thinking
- Technical writing skills
- Interest in changing and developing technologies

10. Working professionals in any industry can benefit from information technology training. Staying current on trends in technology and the changing online environment can increase job **security** and upward mobility. Employers consider people with advanced computer knowledge and experience an essential part of keeping their companies **competitive** in the Internet Age.



初级 IT

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11. Imagine this situation: Two men work for a large **construction** materials supplier. Both men have been at the company for the same number of years, and both are committed, **dedicated** workers. A **managerial** position has opened up, and both are under consideration for the **promotion**. The men seem equally qualified as far as experience, attitude, and dedication. But, one man recently earned an accredited online degree in information technology. Which employee do you think will get the promotion?

12. A degree in information technology won't get you every promotion you want, but it can give you the edge you need over others competing for the same position. No matter what industry you work in, you can rest assured that your company uses information technology in a number of ways. From streamlining order-processing systems to increasing customer service, information technology is moving to the leading **edge** of the industry in general.

(754 words)



New Words

industry	<i>/'ɪndəstri/</i>	<i>n.</i>	1. [C] the people and activities involved in producing a particular thing, or in providing a particular service 行业 2. [U] (branch of) manufacture or production 工业
handle	<i>/'hændl/</i>	<i>vt.</i>	to deal with, manage or control (people, a situation, a machine, etc.) 对付、管理或控制
		<i>n.</i>	[C] part of a tool, cup, bucket, door, drawer, etc., by which it may be held, carried or controlled (工具、杯、桶、门、抽屉等的) 柄; 把手; 拉手
professional	<i>/prə'feʃnl/</i>	<i>n.</i>	[C] 1. person who does a job that needs special training and a high level of education 专门人员; 专业人士; 专家 2. person who does a sport or other activity as a paid job rather than as a hobby 职业运动员; (从事某活动的) 专业人员
		<i>a.</i>	1. connected with a job that needs special training or skill, esp. one that needs a high level of education 职业的; 专业的 2. showing that sb. is well trained and extremely skilled 娴熟的; 训练有素的; 精通业务的
yearn	<i>/jɜ:n/</i>	<i>vi.</i>	to desire strongly or with compassion or tenderness; be filled with longing 渴望; 盼望