

## SECTION FOUR: WORKPLACE

### TECHNOLOGY

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**ACTIVITY:** Reading, followed by Q&A

**TIME:** 30 min.

**LEARNING OUTCOME:** Participants will isolate 2-4 ways in which technology is affecting members of their profession.

#### DESCRIPTION:

- Instruct participants to use the Technology materials in their Resource Package to complete the exercise on **page 43** of their workbook. Have them hand in their work and return it the next day.
- Mention some emerging technologies that may have an impact on the engineering profession and society in general.

According to Human Resources and Skills Development (HRSD) new and emerging sectors in the economy include;

- Aerospace
- Biotechnology in: agriculture; forestry; fishing;
- Pharmaceuticals
- Call Centres
- Environment-related technologies
- Multimedia
- Telehealth
- Tele-learning

Also in the “2020 Engineering forum” held in 2001 the following areas of engineering were identified as areas of increasing activity in the next 20 years:

- New Materials and Biomaterials

## Lesson Plan (cont.)

- Informatics
- Surface Science
- Nanotechnology
- Imaging
- Biotechnology
- Proteomics and Genetics (Protein Engineering and Genetics Engineering)
- Microarrays or Gene Chips
- Metabolic Engineering
- Catalysis
- Advanced Microscopy
- Sensors

These new and emerging sectors will continue to rely on traditional occupations although the duties for many jobs may be broadened and will acquire new skills.

Internet usage is increasing around the world. E-commerce for Business-to-Business (B2B) and Business to Consumer are transforming key business processes.

*Futurists predict that someday the three most powerful technologies –the telephone, television and computer- will merge into one “ media appliance” that will be inexpensive and available to everyone. No one knows what’s going to happen when these three technologies merge, but everyone agrees about one thing- incredible changes in how we live, work, shop and use our leisure time will take place.*

**THE WORKPLACE:  
IMPACT OF TECHNOLOGY**

Using the articles from the Resource Package for your profession, answer the following questions.

1. Identify all types of technology referred to in the articles. For each type of technology, indicate whether it is something you are familiar with.

TYPE OF TECHNOLOGY	FAMILIAR?
	Y / N
	Y / N
	Y / N

2. What technological changes are affecting members of your profession? Are they affecting them in a positive way, a negative way, or both?

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3. How do you think technology will change the work of engineers in the future?

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