MODULE 3
CHOOSING A CAREER
A. Being an Engineer

Part I

Word List

занимающий полный рабочий день	full-time
подавать заявление	apply for
применять, использовать	apply
опытный, квалифицированный	skillful
инновация, новшество	innovation
успешный	successful
неполный рабочий день	part-time
побуждающий	challenging
разрабатывать	develop
информативный, полезный	informative
находить, открывать	discover
достойный награды, полезный	rewarding
бесперспективный	dead-end
стрессоустойчивый	stress-resistant
терпеливый	patient
ошибиться в выборе профессии	mistake one's vocation
внедрять	implement
требующий (усилий)	demanding
заинтересованный	motivated
утомительный	tiring
проектировать	design
на проекте	on a project
устройство	device
разнообразный	varied
выдающийся, замечательный	brilliant
самоуверенный	self-confident
оставлять, покидать	leave
незаинтересованный	indifferent
предоставлять	provide
выгодный	lucrative
на пике	at the peak of
приверженный (чему-л.)	committed
военный	military
полный энтузиазма	enthusiastic
угрожающий	threatening
многообещающий	promising
решение	solution
справедливый	just
изделие	product

политический	political
небрежный	sloppy
работать в компании	work for a company
квалифицированный	well-qualified
на переднем крае, в авангарде	at the cutting edge
целеустремлённый	ambitious
решать	solve
опытный	experienced
перспективы	prospects
понимать	conceive
приём, способ	process
надёжный	reliable
ответственный	responsible
добиваться	pursue
погубить, испортить	ruin
тактичный	tactful
искать	look for

"The secret of success is making your vocation your vacation" Mark Twain – author and humorist

I. Being a successful specialist means not only being competent in the professional field but also being familiar with various terms you may come across. The words "job", "work", "career" and "vocation" may seem similar, but actually, they have different meanings. Find the words in the list that may describe each notion.

Job	Work	Career	Vocation

II. Choose the words and phrases that can help characterize the duties of an engineer.

III. It is considered that people of completely different professions should possess the same qualities to succeed. In the wordlist find the words that may characterize a qualified engineer, teacher (or both).

Engineer	Teacher	Both

IV. Dave and Michael are both engineers. Dave is a prosperous one while Michael is often characterized as a failure. The characteristics are mixed in the table. Order them to describe Dave and Michael.

Dave	Michael
unfair	nervous
irresponsible	broad-minded

skillful	incompetent
motivated	imaginative
boring	indifferent
stress-resistant	ignorant
absent-minded	responsible
experienced	just

V. Now, without looking into the wordlist or tables above try to make a portrait of an ideal engineer.

VI. Think what you are going to say on the following topics for discussion. Write down the words and phrases that can help you to describe them.
1. Your friend seems to be losing interest in the profession.
2. An engineer is a completely useless profession.
3. All the professions demand the same qualities to possess to become successful.
4. Becoming a successful engineer is extremely simple.
5. Your friend can't choose what to become: an engineer or an accountant.

VII. Express your attitude to the following situations.

1. Imagine: you have noticed that your friend, a student of the Belarusian State University of Informatics and Radioelectronics, finds himself disappointed and needs somebody to persuade him that he is actually on the right way and should look upon the advantages of his future profession. Try to make up the argument to persuade him.

2. Some say an engineer is a useless profession, which is of no help to ordinary people (unlike a doctor or a teacher). Others believe that engineers play an important role in the development of the society. Whose opinion do you share and why?

3. At school students start thinking about their future profession. Some see themselves doing creative jobs while others prefer technical professions. However, there are some schoolchildren, who believe that there is no difference what to choose as long as all the professions require the same set of qualities. Do you agree with the latter?

4. Becoming a successful engineer is extremely simple: you don't have to study much and the material you have to cover is not complicated. Moreover, this material is limited: as soon as you read everything, you will become a prosperous specialist. Do you agree?

5. Your friend can't make up his mind what to become: an engineer or an accountant but inclines to choose accounting (book-keeping) because believes that engineering is extremely routine and deals with sitting and calculating or drawing something. Do you agree with the friend and what is "being an engineer" in your opinion?

VIII. Express your opinion concerning the duties of people and the qualities they are likely to possess to perform their work properly.

Model:

- Shop assistants communicate with the customers but they don't need to be polite.

- I disagree. Since shop assistants always communicate with the customers, they should be polite.

1. Managers work with papers only and don't need to be familiar with the variety of computer programs.
2. Programmers don't bear any responsibility and they don't have to pay attention to details.
3. Computer-aided design isn't changing rapidly and design engineers shouldn't keep abreast of new research
4. Programmers don't have to be patient because the process of developing a program never takes a long time.
5. Economists don't have to come up with new ideas and they don't have to expose themselves to continuing education.
6. Scientists don't need to understand complex theories which means they don't have to be intelligent.
7. Managers always deal with people but they don't have to possess excellent communication skills.
8. Economists try to prevent errors in calculations but this doesn't mean they should be accurate.

IX. Express your opinion about your future profession taking into account the duties and the qualities needed to be in demand in the job market.

Part II

An engineer is not just the notion or position. It's common knowledge that becoming a qualified and needed specialist presupposes a deep understanding of many aspects of this profession like, for examples, the activity itself or the qualities required to succeed in this field.

I. Jack has been working as an engineer for more than 10 years and he expresses his idea of this profession. Read his point of view and decide whether an engineer is a beneficial profession.

I'm both an innovator and a researcher; a problem solver and an inventor. All are the terms that aptly describe the characteristics of an engineer. As engineers we might develop the next generation of the iPad, or a medical device that will help doctors treat an illness. It might be a spacecraft that will carry humans to Mars, or a system that can bring clean water to an underdeveloped region. We may discover a new power source that is sustainable and provides clean energy, or a device that can detect toxic agents and chemicals, or design a new building that is earthquake safe.

Using basic foundations in mathematics and science, we, engineers, apply our technical knowledge to conceive, design and implement new processes, products and systems that make our everyday lives possible. I should admit that engineers are those at the cutting edge of technology who through innovation, creativity and change provide for our safety, health, security, comfort and recreation.

Being an engineer is challenging and rewarding: it is coming up with solutions to problems that no one else knows the answer. Being an engineer is being part of a profession that makes life better for humanity. Being an engineer is finding the answers to the challenges that confront society. Being an engineer is about making a difference and if that sounds exciting it might be the right career choice for you.

II. Is the following information true or false? Prove.
1. Jack believes that engineering presupposes inventing only.
2. Engineers are capable of solving both local and global problems.
3. Engineers' work is based on mathematics and science.
4. Jack thinks that engineers are unique in finding the answers to certain questions.
5. From Jack's point of view, engineering is important but extremely boring.

III. Do the following statements correspond to the text? Prove.
1. Engineers are involved in many branches of human activities.
2. Engineers work with theoretical knowledge only.
3. Engineers' activity contributes to the welfare of the society.
4. Engineers keep up with the technical progress.
5. "Engineer" is a term combining several senses.

IV. Find and enumerate the possible results of engineers' activity.

V. Jack states some achievements and benefits of being an engineer. Prove that:
a) engineers can solve many problems;
b) it is a rewarding job.

VI. Try to compress and summarize the information of each paragraph. Present the short report on being an engineer.

VII. Share your opinion about being an engineer. The following phrases might help you.

The way I see it...	If I am not mistaken...
From my point of view...	I think / believe / suppose...
If you want my honest opinion...	Personally, I think...
It seems to me that...	I am sure / certain / convinced that...
I might be wrong but...	In my opinion…

VIII. Tim is an engineer with the experience of more than 20 years. He has been asked to describe his profession and qualities he needed to succeed. Read his opinion and make the conclusion whether an engineer is an easy profession.

First of all, I should say that no one will argue that nothing is as important as finding a career that provides you with enjoyment and satisfaction. It's about me, I do love my job, it makes me happy every day, but there are always two sides of the coin.

Do you know why golf balls have dimples on them? Do you know what a laser is or how a computer works? An engineering education helped me understand how these, and many other things in the world, work.

I've been working as an engineer for 20 years and found out that in order to succeed you are expected to develop some special qualities. An engineering education will "exercise" your brain, developing your ability to think logically. These skills are valuable and rescued me several times throughout my life.

One of the greatest ongoing challenges I've faced is the evolution in technology. Computers and equipment evolve, standards and information are ever changing in the world and most of the time I need a professional engineer certification renewal after some years. This is an endless journey.

My colleagues will prove that stress level for an engineer is usually high as compared to the average stress level for different jobs. There are always deadlines and pressure of completing the job as per requirement.

Just about everything that we, engineers, do benefits society. We develop transportation systems, design the buildings we live in, the machinery that produces our food, and the medical equipment that keeps us healthy. On the other hand, some our engineers are also involved in the production of pesticides, cigarettes, liquor, etc.

All the projects I've worked on are extremely complex. I have need to possess a high level of attention to detail to ensure nothing important is forgotten. If the success or failure of a project falls upon me, attention to detail is one of the most important attributes one can possess.

IX. Is the following information true or false? Prove it.

1. Tim sees only positive sides of being an engineer.
2. Tim found the answers to many curious questions.
3. Some qualities engineers possess may appear useful both at work and in private life.
4. The evolution of technology does not disturb engineers.
5. An engineer is a profession that keeps you calm and preserves your nerves.
6. Engineers can both benefit and do a lot of harm to society.
7. Attention is not of much importance for a skillful engineer.

X. Tim describes many aspects of the engineering profession. What adjectives from the box below characterize it? For each paragraph of the text find the suitable adjective/adjectives.

Strong, stress-resistant, open-minded, responsible, well-qualified, skillful, careful, punctual, attractive , dangerous, skillful, threatening, informative	

XI. Is it tough to be an engineer? Choose the suitable points and expand the idea using Tim's point of view.

complicated	easy
face constant deadlines	have deep understanding of things
possess high level of attention	help the society
threaten the society	obtain valuable skills
need certification renewal	beneficial

Model. *I think it's a complicated job because engineers face constant deadlines and pressures.*

XII. Have a look at Tim's opinion once again and make up your mind:
a) Is Ted happy to be an engineer?
b) Is he dissatisfied with his occupation?

XIII. Make a list of adjectives characterizing the profession of an engineer presented by Tim and divide them into 3 groups in accordance with your own opinion. Support your idea.

Crucial	Important	Doesn't matter

Model. *Being strong doesn't matter for me as a future engineer.*

XIV. What is your opinion about being an engineer? Use the following table to help you.

Being an engineer is ….	but	…
	and	…
The profession of an engineer is….	or	…
	yet	…
	as well as	
If you choose to be an engineer…	however	
	therefore	
	Nevertheless	
	Moreover	

XV. In pairs define what qualities are the most significant for a successful career of an engineer? Work in pairs and choose 3 most important personal qualities and 3 most important professional qualities or skills for the job of an engineer. How can people gain and develop them? In groups prepare the presentation and give proofs and examples of your viewpoint.

Part III

Many occupations and responsibilities have been often divided into men's and women's: men are usually involved into physical and logical jobs while women are considered to be more creative. But today, living in the 21st century, we can notice many unexpected examples, like men in teaching and women in engineering.

I. Read the letter written by Jane and say what troubles her.

Being brilliant in Math and Physics at school I made up my mind and eventually was admitted to the Department of Engineering Science of the University of Oxford. I was looking forward to the classes but eventually I got completely demotivated. Let me explain, why. You see, I am the only girl in our group and it's the problem that depresses me. No, I am good at most subjects, I pass all the exams with flying colors, but I constantly face the problem of distrust.

My group-mates look down on me, they don't believe a girl can become a well-qualified and skillful engineer. The boys claim engineers should be extremely responsible and stress-resistant, they don't think women can possess these qualities. It would be better if they laughed at me, but they just ignore me. The worst is the fact that I started to believe their so-called arguments, at least most engineering discoveries were made by men.

Now I am so frustrated that ready to give up. It looks like engineering is not my cup of tea and I should have probably chosen something more womanlike, for example, teaching…

II. Explain why Jane is unhappy about her university studies.

III. Object to the arguments of Jane's group-mates against women in engineering.

IV. Make Jane change her point of view and encourage her to continue studying to become an engineer (qualities needed, discoveries made by women…)

V. Do you think such a problem exists in Belarus?

Part IV
I. Explain the following proverb.
    A Jack of all trades is master of none.
II. Choose the closest equivalent to the proverb.
    1. Expert of everything, master of none.
    2. Starts ten things, finishes none.
    3. You aim for everything, but you hit nothing.
    4. Being master in one job is better than being average in nine jobs.
    5. Knows everything, yet doesn't know anything.

III. Think of the situations when we can characterize someone as "a Jack of all trades".

IV. Think of the Russian equivalent to this proverb.

B. The Challenge of Choosing a Career

Part I

Word List

слепой выбор	blind choice
широкая перспектива	broad outlook
выбор карьеры	career option
решение, выбор	decision
желание	desire
совет	piece of advice
возможность	possibility
профессия	profession
источник вдохновения	source of inspiration
страстное увлечение чем-либо	strong passion for
внезапная вспышка	sudden flash
добиваться, заниматься (чем-л.)	pursue
широкий диапазон, круг, область	wide range
цель, намерение	aim
склонность, способность	aptitude
возможность	opportunity
сложный	complicated
текущий	current
навыки, умение	skills
сложный; искушённый	sophisticated
связать свою будущую профессию с	base my future profession on
сложная задача, проблема	challenge
заставлять	compel
успокоить	relieve
заимствовать, перенимать	borrow
выбрать между	choose between
совпадать	coincide
поощрять кого-то	encourage somebody
записывать (в члены)	enroll
восхищать, очаровывать	fascinate
понимать, разгадать	figure out
увлечься	get absorbed
заинтересовываться	get interested in
оправдывать надежды	justify the hopes
испытывать недостаток, недоставать	lack
специализироваться в	major in

принять решение	make up one's mind
выбирать (решить)	opt
сожалеть	regret
изучать, исследовать	research
управлять	run
считать само собой разумеющимся	take for granted
отчётливо представлять себе	visualize

*I. The problem of choosing the future profession has always been very important and difficult matter because it determines our future life in many ways. It is one of the most important decisions for every person. Find in the list the words/phrases explaining why plans for future is a problem that worries not only you, but your friends, parents and teachers. *

II. Read the texts and find more phrases about choosing a career.

1. When choosing a future career, we should consider different factors. In my opinion, money is one of the most important factors when you make a choice. There are highly paid jobs and low-paid jobs. Training, promotional prospects and conditions should be also taken into account.

2. On the other hand, it's good when you get satisfaction from your job. It is very important to choose a profession that suits your interests. In my opinion, a job should be interesting and socially important. Some jobs are considered to be more suitable for men and others for women. You should also decide whether you want to work indoors or outdoors.

3. To make the right choice, you should take into account your traits of character. There are so many people who influence us in choosing our occupation. Parents and friends play a very important role in our choices.

III. Name the factors you should take into consideration while choosing your future career.

IV. Write down the words that can help you to describe the following situations.

1. It is really hard for some people to choose a profession.

2.You have decided that your future profession will be closely connected with computers.

3.You friend has decided that he is not suitable for the profession of a programmer.

4.You can take an interest in your work even if you don't like it.

5.The best career advice to give to the young is 'Find out what you like doing best and get someone to pay you for doing it.'

V. The problem of choosing the future profession has always been very important and difficult matter. There are often some obstacles, which prevent us from reaching our goals and making our dreams come true. A lot of people are unhappy because of their career.Why?

VI. Imagine that you have decided that your future profession will be closely connected with computers. Tell your partner why you think you're capable of working with them, and explain what qualities needed in this work you have.

VII. Years ago your friend dreamed of becoming a programmer, but once he decided that he is not suitable for this profession. So, he has changed his mind. Find out what made him change his mind. Persuade him that he possesses the qualities needed in this work.

VIII. You can take an interest in your work even if you don't like it. Do you really think so?

IX. Confucius was a Chinese philosopher, teacher and political figure known for his popular aphorisms. One of them is: 'Choose a job you love, and you will never have to work a day in your life.' Do you agree?

X. There are so many people who influence us in choosing our occupation. Tell us who helped you to make your choice. Use the model.

> ***Model:*** *Who advised you to become an engineer? (my brother)*
> *It was my brother who advised me to become an engineer.*

1. Who convinced you to choose the career of a programmer? (my father)
2. Who persuaded you that you possessed the qualities needed in the work of a designer? (my teacher)
3. Who recommended you to become a computer operator? (my friend)
4. Who inspired you to choose a profession of a teacher? (my classmate)
5. Who suggested you studying nanoelectronics? (my cousin)
6. Who advised you to major in robotics? (my mother)

XI. Ask your partner how he/she has chosen his/her career path.

Part II

I. The problem of choosing the future profession has always been very important. For most people choosing a career is not an easy task. Here is what Tom, a secondary school student, thinks about it. Was his professional choice difficult?

My aim in life is to become a successful Mechanical Engineer. I believe that engineering is the answer to understanding the world around us in a greater sense. As to me, I had to choose between my strong passion for math and science and my interest in humanitarian affairs. Deciding between both career options was a challenge, to say the least. Perhaps, the strongest deciding factor in making a decision to pursue an engineering degree was my high school teachers. They encouraged me to explore the field because they saw my aptitude and strong skills in math and science.

As I look back onto the past, I can see why I had such interest in these subjects. When I was learning English in elementary, math, unlike English, was something I understood. It was a language of its own, of numbers that I was intrigued by. I gained curiosity not only with math while in my early years, but also with the world around me. I fascinated myself by wondering how the things worked. In my later years in school, I found that science and math were my majors then. So I've made up my mind that after my higher schooling I want to go to Mumbai or Delhi IIT (India Institute of Technology) to pursue my Engineering in the field of Mechanics. I want to serve this world with my talent because I believe that I have what it takes.

My Father and Elder sister both are Engineers. My Father is an Electric Engineer and my sister is a Civil Engineer. They are my biggest source of inspiration. Becoming an Engineer is not compelled by my parents. Being an Engineer is my personal choice. I believe that Engineering is a very noble profession that one can choose. I want to opt for the field of Mechanical Engineering because I find it quite interesting than other fields. I have chosen this field because this is what I want to be in my life.

II. Is the following information true or false? Prove.

1. Tom thinks that parents have a great influence on the professional choice of their children.

2. Tom was lucky — he found what he loved to do early in life.

3. At school Tom was good both at science and languages.

4. Tom's school teachers directed him into the field of science.

5. Tom is going to become a Mechanical Engineer because his siblings work in that field.

6. One of the reasons of Tom's decision to become an engineer is his wonder how things work.

III. Find in Tom's story the sentences that help you to explain:

a) why Tom had to choose between science and humanitarian affairs;

b) how Tom's school teachers helped him to decide on a career path;

c) why Tom believes that being an engineer is his personal choice;

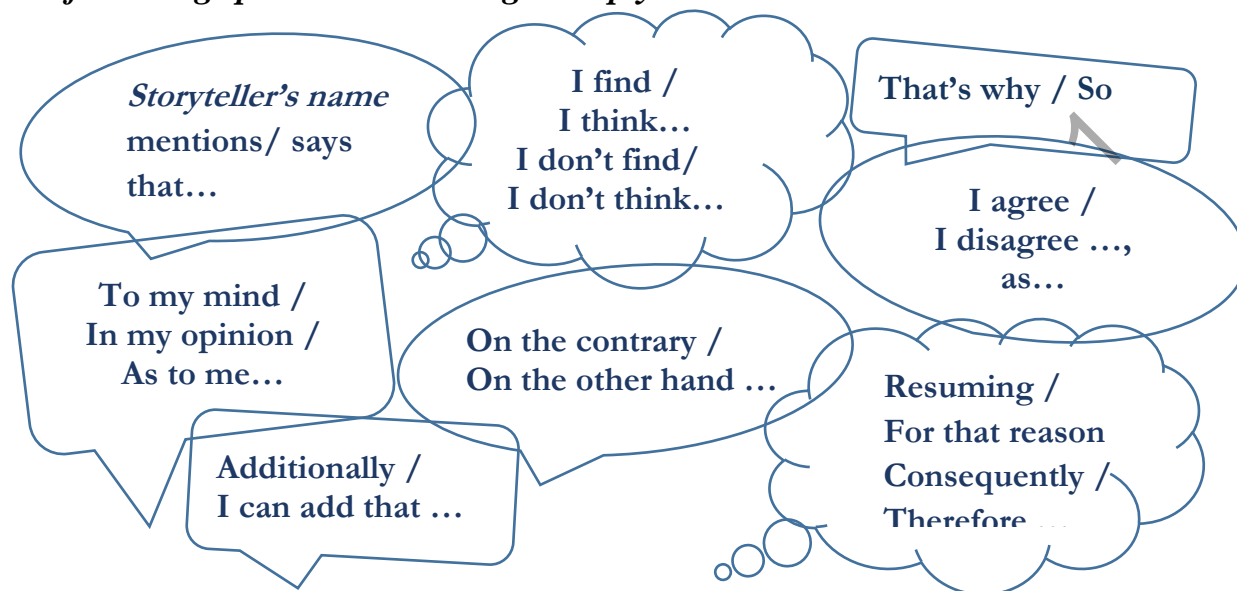d) why Tom made up his mind to become an engineer.

IV. Search in Tom's opinion the phrases which would be the best continuation of the following statements.

1. Making a choice between science and humanitarian affairs was a challenge because_____.

2. After finishing high school Tom wants to _____.

3. While learning at school Tom had aptitude for _____.

4. He's greatly inspired by _____.

V. In pairs discuss what you think about Tom's attitude to:
- person's professional choice;
- the importance of engineering;
- how people surrounding you can influence one's professional choice;
- the career in the field of engineering;
- the challenge of finding one's professional niche.

The following speech bubbles might help you.

Storyteller's name mentions/ says that…

I find / I think… I don't find/ I don't think…

That's why / So

I agree / I disagree …, as…

To my mind / In my opinion / As to me…

On the contrary / On the other hand …

Resuming / For that reason Consequently / Therefore …

Additionally / I can add that …

VI. Read Mark's point of view on the profession of an engineer and say if it differs from Tom's.

I liked figuring out how things worked and creating new things, even as a kid. I was good at and enjoyed math and physics, but not so much that I specifically wanted to become a mathematician or physicist (part of that is that I enjoyed answering questions more than asking them). I liked the idea of a profession that paid well and had good prospects for advancement. Also, I lacked the athletic skills to be a professional athlete, the musical talent to be a professional musician, or the inherited wealth to sit back and do nothing with my life.

Growing up on a small farm, I was always fascinated by the machinery and mechanisms we now take for granted in our automated production of food. You do not have to go back very many generations to realize that all of this mechanization and automation was done manually by hand for several thousand years before. It was learning about these cool machines that fueled my desire to be an engineer, to design and build equipment and systems to efficiently produce a desired result. I am still amazed at the ingenuity of our forefathers in designing equipment and machines – from combines to internal combustion engines to jet engines to rockets, etc. – without the technology and tools we have today. This is truly inspiring as an engineer to realize the technologies that will be developed in our lifetime and how we can play a small part in creating these new innovations!

VII. Define whether the following statements are true or false. If they are wrong, explain why and correct them.

1. Mark has always been wondering realizing that all the machinery was produced manually.

2. Mark did enjoy math and psychics and wanted to dedicate his professional future to these fields of science.

3. According to Mark's opinion, the profession of an engineer is a prospective and highly paid one.

4. Mark finds a real inspiration while realizing to be a part of machinery production.

5. Mark's father encouraged his interest from when he was young.

6. Mark thoroughly examined his abilities and understood that he could become a professional sportsman.

VIII. Within Mark's story find the equivalents to the following statements.

1. You should take promotion opportunities into consideration when choosing a job.

2. I didn't come into a fortune and that's why I couldn't afford to sit doing nothing.

3. People underestimate the value of the machinery and mechanisms in automated production of food, they became used to them.

4. "How does this thing work" mentality made my intention to become an engineer stronger.

5. I'm surprised at the resourcefulness and inventiveness of engineers of the past generations.

IX. In Mark's story find the sentences that help you to explain:
a) why he didn't want to study exact sciences;
b) what attracted him in engineering;
c) why he chose to be an engineer.

X. Taking into the consideration Mark's point of view about his professional choice, choose the best title to his story or think of your own one and explain your choice.
1. To Be a Part of Creating Innovations Process
2. Engineer is a Noble Profession
3. My Way of Decision-making to Become an Engineer.
4. My Source of Inspiration.

XI. Read Sophia's way of decision-making to become an engineer. Is Sophia satisfied with her professional choice?

Like most kids in high school, I struggled to figure out what I wanted to do in life. I tried to take a wide variety of classes to figure that out, e.g. law, psychology, physics, math. I even volunteered for an entire year at a local hospital to see if I could see myself as a doctor. Nothing interested me. In fact, I was getting very, very bored with school. The only thing that I liked was physical education and physics. Physics was actually my worst mark out of the three

sciences in high school. What fascinated me about physics was the ability to visualize and solve problems in the natural world around me.

A month before graduating, I had a heart to heart discussion with my physics teacher about loving physics but not wanting to be a physics teacher (no offense to my teacher). He told me about engineering. So I immediately jumped onto that idea and decided to major in environmental engineering. It took two weeks to decide what to do, redo my university application and enroll myself to summer school to make sure I had all the pre-requisites for engineering. I was excited and relieved to finally figure out what to do and never gave a second thought whether engineering was the right profession for my personality and skill set.

I was very lucky because I had no problem finding a job straight out of university. The first five years were fun, but demanding. Sometimes I worked all-nighters and I averaged 50-60 hour work weeks. If I were to go back in time, I would still have done engineering. I don't regret about that decision at all.

XII. Choose the statements which are true according to Sophia's story.
1. It was challenging for Sophia to figure out her professional way.
2. Sophia really understood her calling to this career once she left school and all of the text books behind.
3. Sophia possesses an inherent appreciation for problem-solving.
4. Sophia still hesitated over a choice when she left high school.
5. A physics teacher was that very person directing Sophia into the field of physics.
6. Sophia concerned material aspect of the future profession.

XIII. Choose the correct answers.
1. What steps did Sophia cope with to find her niche?
a) she identified and analyzed her natural strengths;
b) she made a list of the things she enjoyed most;
c) she talked to her school teacher about possible career choices;
d) she took a career test to gain a broader perspective of her interests and aptitudes;
e) she tried a temporary job.
2. What was she interested in while being a schoolgirl?
a) Exact sciences;
b) She liked to care for people when they were ill;
c) She enjoyed solving a difficult problem or lab experiment;
d) physical games and sports;
e) Physics was her favourite subject and she was good at it.

3. Why has Sophia made her decision to become an engineer?
a) she followed the footsteps of her relative;
b) she considered being a physics teacher. But her school teacher dissuaded her from it;
c) she was inspired by a school teacher;

d) she was drawn to the field by her curiosity for how things work;
e) she loves solving problems.

XIV. *Speak out your personal opinion on one's professional choice and field of engineering.*

Part III

It isn't uncommon for parents to steer their children in certain directions when it comes to studies and an eventual career—medicine, law, finance, etc. For a myriad of reasons, parents want the best for us—and that includes the best career they can think of for us. While some of us may have pursued the career our parents wanted us to, some of us didn't. And that's ok. As long as you are doing what you love to do or working towards that, both you and your parents should be happy.

I. *Read the letter written by Abby and say what troubles her.*

Hello, I recently won a scholarship to study Electrical Engineering at the best university in my country, and won another one for Architecture at another university.

I feel like I can like both professions equally, because I loved physics (especially electrical) in high school and achieved the highest score possible in my country - 100%.

The problem is I love to draw, and won art competitions too, so my father told me not let my talent go to waste and study architecture since it requires me to be creative and use my talents as well. So now I feel like architecture might be better for me.

Does Electrical engineering require creativity and artistic talents?

The problem is that all my relatives are against EE for some reason, even my physics teacher told me that Architecture is better for girls???! and my father's friends are as well.

Is EE really that bad? Can someone please tell me if they enjoy their profession and what they do?

What drew me to EE is my love for technology, and my dream is to be able to invent something useful, and also I like the field of VR, robotics and alternative energy.

And to be able to work in these fields which is better Computing or electrical engineering?

II. *Explain why the choice of a career is so difficult for Abby.*

III. *Object to the arguments of Abby's parents and teacher against engineering.*

IV. *Encourage her to become an engineer (qualities needed, discoveries made by women…)*

V. *Do you think such a problem exists in Belarus?*

Part IV
I. Explain the following proverb.

Every man is the architect of his own fortunes.

II. Choose the closest equivalent to the proverb.

1. If you work hard then you'll never become a successful person.
2. A person must try hard to become a successful person.
3. Any man is free to have a desire to raise high in the life.
4. What guides and controls human life are the stars.
5. Fortune favors the brave.

III. Think of the Russian equivalent to this proverb.

IV. Think of the situations when we can tell somebody this proverb.

C. My Future Speciality

Part I

Word List

получать, достигать	achieve
советовать	advise
анализ	analysis
подход	approach
посещать	attend
плата, панель	board
блог, сетевой дневник	blog
вычислять	calculate
вызов; бросать вызов	challenge
код	code
коммуникация, общение, обмен информацией	communication
создавать	create
решающий момент	crunch
клиент	customer
устранять конструктивные недостатки, отлаживать (*программу*)	debug
зависеть от	depend on
разрабатывать	develop
документация	documentation
эффективный, действующий	effective
работоспособный, продуктивный, эффективный	efficient
встретить (*трудность*)	encounter
усиливать	enhance
полный энергии, увлеченный	enthusiastic
выход; выбираться, избегать (*чего-л.*)	escape
вычислять	figure out

сосредотачиваться (*на чем-то*)	focus
разочаровывающий	frustrating
функция; функционировать, действовать	function
собирать	gather
удовлетворение	gratification
аппаратное обеспечение	hardware
внедрение, воплощение	implementation
индустрия, сфера деятельности	industry
проницательность	insight
интенсивный	intense
интерфейс	interface
межличностный	interpersonal
клавиатура	keyboard
знание	knowledge
изучать	learn
рычаг; выравнивать	leverage
характер	nature
сеть	network
возможность	opportunity
страстный	passionate
настойчивость	persistence
штепсельная вилка; подключать к электросети	plug
квалификация	qualification
требование	requirement
награда; вознаграждать	reward
удовлетворение	satisfaction
делиться	share
навык	skill
программное обеспечение	software
выносливость	stamina
команда	team
тестировать	test
искать и устранять неисправности	troubleshoot
букв: дергать, здесь: экспериментировать, проверять	tweak
здесь: браться (за какое-л. дело и т.п.)	undertake
пользователь	user
трудовой процесс, потоки работ	workflow
разнообразие	variety

I. Engineers, scientists and teachers have many different job responsibilities. Which verb and noun combinations from the word list express some of them? Fill in the table.

Engineers	Scientists	Teachers

Develop software…		

II. Which noun combinations (e.g. team work, user interface) can be formed from the vocabulary list to describe some responsibilities of:
- a manager,
- a teacher,
- a cloud service provider
- a tester

III. The field of engineering is divided into a large number of specialty areas where engineers design, evaluate, develop, test, modify, install, inspect and maintain a wide variety of products and systems. Read these stories and find more phrases characterizing job responsibilities of engineers. Put them down.

1. To put my job into a single sentence, I figure out how to arrange transistors and wires to make them perform useful work. I do that by writing code in a Hardware Description Language (HDL). Even though the HDL model is my main responsibility, I probably only spend 5-10 hours per week writing code for it.The rest of my time is spent investigating problems found by HDL simulation. Once the cause is identified, a fix has to be designed, implemented, and tested.

2. I work as a research and test engineer for a major engine manufacturer. Currently, my project entails a lot of engine testing, so I am mostly doing field work in the engine labs.When the data collection is finished, I am the one who analyzes the results and puts them in a nice form using programs like Excel and MATLAB. Occasionally, we have a failure on the engine, and it's my job to determine both why the part failed and what we have to do to ensure it won't fail again.

3. My main responsibilities consist of designing and writing/implementing new functionality as the business or the customers require. This can include database design, process design or sometimes, no design at all.

4. My role in the business I work for is being a programmer-analyst. In the first few months of my career, I've been assigned simple programming tasks like changing a description in a file or correct very simple or even pre-analyzed bugs. Quickly, the complexity of the tasks increased, and the indications were less detailed: I had to analyze the problems myself. Of course, I have meetings with my group, sometimes presentations, sometimes discussions, over what we want the product to become over time.

IV. Name the major job responsibilities of an engineer.

V. Choose the words from the word list you need to discuss the following situations.
1. Many people in Belarus want to start a career in IT.
2. Some believe IT specialists are paid too much money.
3. The job of a software designer has its advantages and disadvantages.
4. Good engineers often work overtime.

VI. Express your attitude to the following situations.

1. Many Belarusians change their jobs to start a career in IT. Why?
2. Some believe people in IT are paid too much. Do you agree?
3. Your friend wants to become a software designer and needs your advice. Tell him or her about the advantages and disadvantages of this career.
4. You work for an IT company. Your boss asks you to work every Saturday for a year to help the company remain competitive and promises a double payment for overtime. Will you accept the challenge? Why (not)?

VII. Explain the choice saying what activities these specialists perform. Use the ideas given below.

Model.
- Which job would you like to have?
- I'd like to work as a software engineer **as this job deals with** writing computer programs.

1. A hardware engineer designs and develops IT devices.
2. A blog administrator edits and deletes posts made by contributors to a blog.
3. A DTP operator uses page layout software to prepare electronic files for publication.
4. A network administrator manages the hardware and software that comprise a network.
5. A webmaster designs and maintains websites.
6. A computer security specialist works with companies to build secure computer systems.
7. A help desk technician helps end-users with their computer problems in person, by email or over the phone.
8. A researcher undertakes investigations in order to discover new facts or to get additional information.

VIII. Say what your brother's (father's, friend's, etc.) job is and why they have chosen it.

Part II

What does an engineer do day to day? Is it mostly calculating stuff or designing things or a lot time spent in the field with things like data gathering and measurements? Most of what engineers do can fall into four categories: Analysis, Problem Solving, Planning, and Communicating. Every engineer's day will consist of a different mix of these functions, depending on their role, level, industry, and interest...

I. Ever wondered what it's like to be a software developer? Claire Lock is a software developer and talks us through an average working day, explains the

pros and cons of the job and passes on advice to any wannabe software developers.Do you find his job creative?

My working day usually starts at 8 am when I arrive at the office. The team then has its daily meeting at 9:45am and discusses the work we will be doing that day, along with any possible issues we may encounter.

More often than not, my work will be focused on a particular project. The type of work I undertake on any given day will differ depending on what stage a project is currently at. For example, at the start of a project I may be involved in requirement gathering, after that would be active development and implementation, then testing and documentation. This keeps the job interesting because the nature of the work changes as a project progresses.

I usually take lunch around 12 and then work through until 4:30pm, when I'll take some time to plan the following day before heading home."

The best thing about my job is the variety. One day I may be attending requirement meetings, the next I'll be coding a custom workflow and the day after that I may be writing a report. This helps to keep things fresh and interesting. I really enjoy problem solving, coming up with a solution to a complex requirement or problem gives me great job satisfaction.

As satisfying as problem solving can be, it can also be incredibly frustrating when the solution to a problem escapes you. The longer it takes, the more frustrating it can be!

I think one of the best things about working in IT is that it's always changing and that you are constantly learning new things, no matter how experienced you are.

One of the most important skills for a software developer is problem solving. It's also vital to have good communication and team working skills so you can work effectively with your colleagues to achieve a common goal and to be enthusiastic and passionate about what you do.

I would advise anyone who wants to become a software developer to do everything you can to give yourself an advantage. Read blogs and books and try things out in your own time. I'd also recommend studying to achieve a Microsoft qualification too as that could give you the edge in your next interview.

II. Define whether the following statements are true or false. If they are false, explain why and correct them.

1. Claire has flexi-time which means if she needs to come in late or leave early she can start the day pretty much when she likes.

2. Every week all the developers get together to talk about what developments are going on, any interesting future work coming up or someone will give a talk on something they've learned which might benefit the rest of the team.

3. Depending on where they are in the project defines what task Claire does that day.

4. At the start of a project Claire may be involved in testing the changes they've made, fixing any bugs that have been found.

5. For Claire's job it's important to stay on top of technical happenings and news so she has to keep learning new technologies and techniques.

III. It goes without saying that you'll need some IT skills to get started as a software developer. You'll need to:
- have a good understanding of IT so you can quickly learn about new IT packages and techniques;
- have good communications skills;
- enjoy problem solving;
- be able to work as an individual and as part of a team;
- be able to work to tight deadlines;
- work in a logical manner;
- demonstrate good attention to details.

Which of the skills are mentioned in Claire's story?

IV. Find in Claire's story the sentences that help you to explain:
- the good points of being a software developer;
- the bad points of being a software developer.

V. What do you think about Claire's advice to any wannabe software developers?

VI. Do you think that a software developer is women's profession?

VII. Read what Jim Grant, an electrical engineer, says about his work. What do you think about his profession?

So, what is life as an engineer like? What do I do in a typical day? Considering that engineers aren't typically known for their communication skills, I spend a considerable amount of time communicating via emails, in meetings and on conference calls.

The engineering work I do includes design, implementation and testing of my part of a given project. I design both hardware (electronics – think circuit boards) and software for each project. I review the requirements of the project (what does this need to do?) and come up with a solution. If I hit a roadblock, it is common practice for me to go talk to other engineers in my group to see if they can offer some suggestions.

One of the great things about working with electronics is that I generally get to "play" with my design in the lab and tweak it. You can't really do that if you design roadways for a living. So, when I design a circuit board, someone (a technician or factory) will build the board and send it to me. Then the fun of troubleshooting starts. The board gets plugged in and tested. Then, if something doesn't work as expected, I get to play detective and try to figure out what is going on. Although it can be tricky to troubleshoot when the design isn't working, I usually learn a lot from the effort. Troubleshooting sometimes requires me to be clever and creative to get to the root of the problem.

Once my design works for me and I send it out for its intended user, I still have to support it. This usually results in my trying to troubleshoot problems with it remotely. This can be challenging and frustrating, but if you can fix a problem that is happening at a factory on the other side of the world you feel like you can fix anything!

VIII. Is the following information true or false? Prove.
    1. Engineers aren't usually believed to be good communicators.
    2. Jim's work as an engineer is intense.
    3. One of the most interesting things about working with electronics is that I usually get to "toy" with the design in the lab and wrench it.
    4. Debugging sometimes makes the speaker smart and creative to find to the root of the problem.
    5. The speaker's job habitually ends after sending out the working design.

IX. Find phrases in the text that are similar to the following ones.
    1. Remote troubleshooting can be difficult and disturbing
    2. An engineer spends much time talking by electronic messaging
    3. He studies the assignment and finds a solution
    4. The pleasure of debugging begins after the prototype is made.
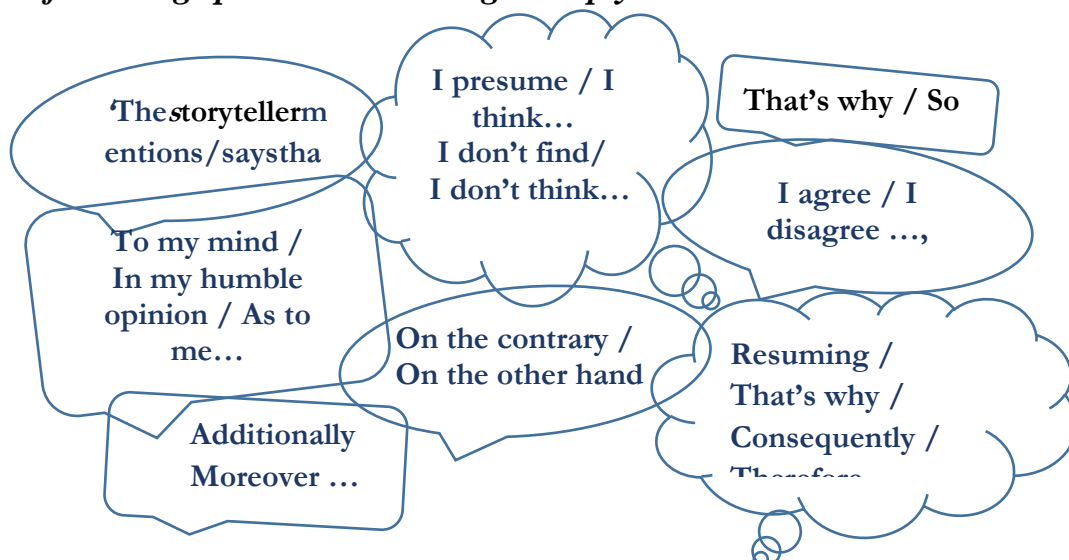   5. Often the servicing requires solving problems from a distance.

X. Find phrases confirming that
    1. An Engineer's work is challenging.
    2. Sometimes bug removal job is like that of a police officer.
    3. This engineer's job includes different responsibilities.
    4. This engineer can learn from his / her mistakes.

XI. In pairs discuss what the speaker thinks of
    -the need to support the designed product remotely;
    - apossibility to troubleshoot with no need to go to the place of the problem;.
    - equipment testing and troubleshooting;
    - designing things in the lab;
    - talking to colleagues.
The following speech bubbles might help you.

'The storyteller mentions / says tha

I presume / I think…
I don't find /
I don't think…

That's why / So

I agree / I disagree …,

To my mind /
In my humble opinion / As to me…

On the contrary /
On the other hand

Resuming /
That's why /
Consequently /
Therefore

Additionally
Moreover …

1. Some Myths and Facts about Engineers
2. Engineering Detective
3. A Typical Day of an Engineer
4. The Toughest Job I've Had
5. I'm a Road Designer

XIII. Choose one phase from each paragraph that describes it best of all.

XIV. Using some phrases from the text above speak about your speciality.

Part III

Today's workers have to spend more time and effort at work, especially if the job is prestigious. From the other hand, burnout on the job can make one sick and miserable. Do you think this problem may happen to you?

I. Read the letter written by Antony and say what troubled him.

I was beyond exhausted. I had taken on a new job because it promised greater prestige and more income. But then I was working late nights as well as weekends, sometimes up to 80 hours a week. The work environment was chaotic and all the responsibility fell on me.

I was one of those thousands working people rapidly burning out. Many of us wanted fame and fortune, but found much stress and very little free time instead. I understood I had to do something. I said to myself: 'What have I done? If I don't make a change, I'm dead.'

I contacted my former employer and asked if he would take me back, and he did. I was embarrassed to face my former coworkers after I had talked about moving on to 'greener pastures.' And I took a significant reduction in salary.

But I gained peace of mind, and I had more time for my family and other things that I truly value.

From that experience I learned to evaluate my priorities, to simplify my life, to say no to work when necessary and to find time for rest.

II. Explain why Antony was unhappy about his new job and what was his solution to the problem.

III. If you were Antony how would you deal with the challenge of burnout at a well-paid and prestigious job?

IV. Suggest what else Antony could do to find a solution to the problem (e.g. talk to the new boss about the amount of responsibilities, try to do sports or sleep more in his free time etc.)

V. Do you think such a problem exists in Belarus?

Part IV

I. Explain the following proverb.

　　　If a job is worth doing it is worth doing well.

II. When, do you think, this proverb may be used:
　　a) before taking anything important up;
　　b) after finishing something incredibly important?

III. Choose the best Russian equivalent to the proverb.
　　1. День гуляет, два больной, а на третий — выходной.
　　2. Не умеешь не берись.
　　3. Хорошее начало полдела откачало.
　　4. Терпение и труд все перетрут.

D. Attending a Conference

Part I

Word List

созывать конференцию	call a conference
посещать конференцию	attend a conference
организовывать	arrange
проводить конференцию	hold a conference
председатель	chairman
повестка дня	agenda
доклад	paper
тезисы докладов	abstracts of papers
принимать	accept
представлять	introduce smb to smb
приглашение (на)	invitation (to)
ежегодный	annual
участник	participant
представитель, делегат	representative
трибуна	podium
презентация проекта	project presentation
приобретать	acquire
успех, достижение	advance
руководитель	advisor
применимый, подходящий	applicable
подход (к решению проблемы, задачи)	approach
избегать	avoid
быть объятым страхом	beterrified
выгода, польза; извлекать пользу	benefit
общий	common
иметь дело (с)	deal (with)
выдающийся, известный	distinguished

сомневаться относительно чего-либо	have doubts about smth
умелый, квалифицированный	efficient
ободрять; поддерживать (в чём-л.)	encourage
улучшать (знания, навыки)	enhance (knowledge/skills)
обмениваться мнениями	exchange opinions
знакомый	familiar
привлекать, вовлекать	involve
узнавать	Gettoknow
держать в курсе дела	keepup-to-date
отсутствие (чего-л.) ; не хватать, недоставать	lack
средство для достижения цели	leveraging
встречаться, знакомиться	meet
нервный	nervous
установление (деловых) контактов	networking
сомневаться, не решаться	hesitate
выдающийся, видный, известный	prominent
познакомиться с кем-л.	make the acquaintance of smb
разочарование	disappointment
воспользоваться чем-л. в своих интересах	take advantage of
принимать участие	take part
брать слово (для выступления)	take the floor
выступать перед публикой	speak in public
говорить на профессиональные темы	talk shop
студент (обычностаршегокурса)	undergraduate
быть в центре внимания	be the centre of attention
робкий; стеснительный	shy
нерешительный	indecisive
неинтересный, скучный	boring
пустая трата времени	waste of time
вести исследовательскую работу	do research

I. A conference is an important event in a researcher's life. At these conferences, scientists present research papers, share new ideas and discuss their implications. Graduate and undergraduate students may have similar opportunitiesof participation if they are sufficiently involved in helping professors with their research. Yet some students ignore this opportunity. Find in the list the words or phrases explaining why some people attend or avoid attending conferences. Fill in the table.

Pros	Cons
- to listen to the speakers - an amazing professional development opportunity	- first-year student - no free time

II. These are not all the reasons for attending conferences. Read these short stories and find more phrases about the importance of scientific conferences. Put them down into the table given above.

1. Attending a conference is a professionally rewarding experience. In addition to socializing with colleagues from other institutions and a trip to a possibly exotic locale, the two main reasons to attend a conference are to hear presentations and to converse with other researchers.

2. Depending on the type of conference, it's possible also to gain career advice. Some conferences will even facilitate interview sessions with potential employers, and allow you to upload your resume to a company's websites.

3. I met scholars from different universities, and my business network expanded accordingly. I had the opportunity to exchange ideas, share resources, participate in debates and develop friendship with people from all over the world.

4. I am new in this research field. The reason I need to attend a conference is to present the results of my research, to receive feedback from colleagues, to learn about recent developments, to develop my self-esteem, confidence level and motivation for my research.

III. Name the most convincing arguments for attending a conference.

IV. Think what you are going to say on the following topics for discussion. Write down the words and phrases that can help you to describe them.

1. Many universities hold their own conferences each year.
2. You have received information about a forthcoming conference.
3. Your friend has been invited to a scientific conference.
4. Attending a conference is waste of time.
5. Three main reasons for attending a conference are networking, learning and excitement.

V. Express your attitude to the following situations.

1. Many universities hold their own conferences each year. Why? Explain your viewpoint.

2. Imagine that you have received information about a forthcoming conference. Invite your partner and discuss how you are going to participate in it.

3. You friend has been invited to a scientific conference. Find out what holds him back. Persuade him to attend the conference.

4. Attending a conference is waste of time as it can't bring anything good. Speak out your viewpoint on whether you agree with it or not.

5. There are many reasons for attending a conference. Some people think that the main ones are networking, learning and excitement. Do you agree with them? Give your personal opinion about it.

VI. Disagree if I'm mistaken. Express your point of view on the importance of participation in a scientific conference. To express your disagreement use phrases in the table below:

> No, I don't think …
> I can't agree…
> I disagree, I'm afraid, …
> I don't agree.
> I don't think that's right.
> Surely not.
> No way!
> Nothing of the kind.
> I'm afraid you are wrong.

Model:

Student 1: My academic advisor invited me to join to participation at academic conference. I refused because found it as a waste of time.

*Student 2: I don't think so! Students should participate in conferences **so that they can get informed about the state-of-the-art**.*

- ✓ get informed about the state-of-the-art
- ✓ get practice in presenting in public
- ✓ get reactions and feedback from peers
- ✓ have their paper published in the conference proceedings
- ✓ take part in the discussions
- ✓ present your own research
- ✓ meet others working in the same domain
- ✓ listen to presentations and get knowledge
- ✓ converse with other researchers
- ✓ share and pick up new ideas
- ✓ establish personal relationships
- ✓ socialize with colleagues from other institutions

VII. Explain the reason for attending an academic or professional conference following the model. To give your opinion use phrases in the table below:

> I think…
> I believe…
> In my opinion…
> Personally, I believe…
> To my mind …
> It seems to me…
> As I see it, …
> It seems to me…
> From my point of view…
> I'm convinced that…

Model: - This may be a stupid question, but why do we go to conferences?

- I think it's worth attending a conference so that you can start to build relationships with other researchers in the field.

1. Conferences are often a place for students to present their Honors thesis project.

2. I definitely recommend that undergrads take advantage of any opportunities they have to present their work at an undergraduate research conference.

3. If you are presenting, you get the opportunity to share what you are doing in a formal way.

4. Your presentation may promote discussions and useful feedback from professors afterwards.

5. After participating at my first conference, I became to be involved in different projects.

6. What I learned—in addition to the subjects presented at the conference—is that going to conferences is a vital component of professional development.

7. One of the main reasons why students attend conferences is to learn about other research in their field, and to bring their own work to the attention of others.

8. The major reason is that I can see the people who've written papers I've read.

III. What is your main reason for attending a conference:
   – ***Learning,***
   – ***Networking,***
   – ***Personal growth and development,***
   – ***Speakers,***
   – ***Rejuvenation of working process,***
   – ***Other?***
In pairs, swap your opinions with your partner.

Part II
I. There is a great variety of jobs.Brian Killen is a system analyst. Here is what he does in his day-to-day. Do you think his job is demanding?

Our work atmosphere is extremely casual. I work in an office where the set hours are Monday through Friday, from 8:30 a.m. until 5:00 p.m. However, the truth is that I usually work fifty to sixty hours per week. During crunch time it can be seventy hours per week. It's a very intense job, definitely not low key.

Our days are influenced by the projects we are working on at the time, and the projects run on one- to two-year cycles. At the beginning of a project, there is a lot of thinking, designing, and talking to customers. The latter half of a project is spent sitting at the keyboard and writing code all day. What I like best is creating the products for people to use. What I like least is the turnaround time for a product. It takes two years to see end results—to feel the full gratification of the job.

To serve in this position effectively, you need experience in designing user interfaces, software engineering skills, programming skills, networking, protocol development, C++language, patience, the ability to work in a team setting, good

communication and interpersonal skills, attention to detail, stamina to work on a project for years, persistence, and insight into where the industry is going.

To enhance my professional knowledge and skills I read as many journals that pertain to my area of interest as I can. Besides, I try to attend as many seminars and conferences in the field as possible. Attending a conference is a professionally rewarding experience. In my opinion networking is one of the most popular reasons for attending a conference. And who doesn't like the opportunity to get to know and meet new people who work in the same industry? There's an incredible amount of sharing, learning and leveraging that can happen. Listening to presentations informs you of what others are doing (sometimes more clearly than the paper). I always return from a conference with new ideas and approaches that make me more effective and efficient at work.

II. Find in the story the sentences to prove the following ideas. If the statements are wrong, correct them.

1. Brian works in a formal, intensive working atmosphere.
2. The whole process of project-making can be divided into two major steps.
3. Being profitable to society and creating useful products is the greatest job-satisfaction for Brian.
4. Working as a system analyst doesn't require to be a flexible and multi-faceted performer.
5. Reading scientific literature and participation in thematic conferences assist in improvement of competence level and finding one's source of inspiration.
6. Networking is a key point while attending the conference.

III. Find and use the phrases within the text, which would be the proof and best continuation of the following statements.

1. Our future depends on our performance as _____.
2. Project working-out is only a setting stage of the whole process as_____.
3. The ability to work in a team setting, good communication and interpersonal skills are essential in this sphere as _____.
4. Self-investment is essential in the sphere of computer science because _____, and can be put into practice while _____.
5. Participation in conferences cranks up enthusiasm for fresh take as_____.

IV. Find in the text Brian's idea about the following aspects.

1. Turnaround time for a project;
2. Personal requirements for the job of a system analyst;
3. Knowledge enhancement (ways, results);
4. Result-oriented approach.

V. Taking into consideration Brian's story about his job of a system analyst, choose the best title to the text and explain your choice.

1. Not to rest on one's laurels
2. My professional choice
3. Day-to-day realities of the system analyst job
4. Participation in conferences refreshes your professional vision.

VI. Do you agree with Brian's statement "attending a conference is a professionally rewarding experience"?

VII. Speak out your personal opinion whether it is worth participating in conferences and seminars. Speak on its pros and cons.

Part III

The Belarusian State University of Informatics and Radioelectronics regularly hosts prestigious international conferences in the fields of microwave technologies, telecommunications, micro- and nanoelectronics, medical electronics, artificial intelligence and information security. Such University international conferences gather leading scientists from Russia, France, Singapore, China, Germany, Italy, Japan, Belgium, the USA, Spain and many other countries.

I. Inform your group-mates about the conference for BSUIR students, undergraduates, and postgraduates which is going to be held at our University.

II. Read the post of a first-year undergraduate student and say what worries him.

I'm a second-year undergraduate student in physics. Since starting my studies I've tried to get involved in research as much as possible. Recently, the guys I work with encouraged me to submit an abstract about my current project (which is the first serious one that I've taken on) for an upcoming conference. I did and I got accepted with a poster. But now I have some doubts about participating in this conference.

I still remember my negative experience of attending a conference. I was one of those people who actually would rather die than speak in front of an audience, so I was fully dreading this experience. Even after practising the talk innumerable times and having my professor go through all my slides (his advice, which I still carry to this day: write down what you plan to say, especially if you are a better writer than speaker), I was still terrified to death while thinking about my speaking-out in front of the audience (feel that you share this). Before my project presentation started, I was fired up and even turned as red as a beet… I tried to breathe in and out deeply but then after my name was called and that meant that it was the high time to go on and take the stage, I got so nervous that it made my flesh creep. I couldn't say a word. It was awful. My advisor had to walk up to the podium and help me through the talk. But, closer to the end I got relieved of feeling the support and it became easier to speak out.

Now my question is: how should I approach this to benefit the most? Or maybe there is no need for me to go there at all?

I'm under the impression that most of the typical advantages of attending a conference such as networking, or keeping up-to-date with recent advances aren't really applicable to me as I simply lack the necessary knowledge. So far I've only taken a basic mechanics course and I have some working knowledge that I've acquired while working at the lab but nothing beyond that.

III. Say what you have learnt about the conference he participated in.

IV. Convince the student of the need for attending conferences.

V. Share your experience about attending an academic conference.

VI. In pairs interview your partner about scientific conferences using the questionnaire. Ask follow-up questions to find out more information.

HAVE YOU EVER PARTICIPATED IN A SCIENTIFIC CONFERENCE?

YES	NO
When and where was the conference held?	Why?
What kind of conference was it?	Would you like to take part in a scientific conference?
What was the theme of your report?	Would you like to make a report or give a poster presentation? Why?
Were you asked any questions?	What themes interest you most of all?
Were you nervous?	Do you think it will be easy or difficult?
Was it useful for you? Why?	Do you think this experience might be useful in your future career?
Are you going to take part in other scientific conferences?	

Part IV

I. Explain the following proverb.
No man is born wise and learned.

II. Choose the best Russian equivalent to the proverb.
1. Кто мудрости и знаниям горазд, тому не пропасть.
2. Без терпенья нет ученья.
3. Мастером нельзя родиться, мастерству надо учиться.
4. Учиться грамоте никогда не поздно.

III. What situations do you think this proverb may be used in?

E. Project

I. Define the meaning and develop the idea of the following quotes said by experts in Engineering. Do you agree with them?

1. Engineering stimulates the mind. Kids get bored easily. They have got to get out and get their hands dirty: make things, dismantle things, fix things. When the schools can offer that, you'll have an engineer for life.

Bruce Dickinson

2. "But remember this, Japanese boy... airplanes are not tools for war. They are not for making money. Airplanes are beautiful dreams. Engineers turn dreams into reality."

Hayao Miyazaki, The Wind Rises

3. "Don't worry if it doesn't work right. If everything did, you'd be out of a job."

(Mosher's Law of Software Engineering)

4. There is no demand for women engineers, as such, as there are for women doctors; but there's always a demand for anyone who can do a good piece of work."

Edith Clarke

II. A good presentation or report requires a lot of preparatory work. Here are some rules which will help you to make presentation and be a success at a conference.

Step 1: Introduction
Introduce yourself and **attract** the attention of the audience. Strategies that you can use include the following:
  • Ask questions to stimulate thinking
  • Share a personal experience
  • Begin with a joke or humorous story
  • Project a cartoon or colorful visual
  • Do something memorable
It's necessary to **define the purpose** of your report to help the audience to follow you.

Step 2: Body
To present your ideas convincingly, you will need to illustrate and support them. Strategies to help you do this include the following:
  • Present facts
  • Read quotes from experts
  • Relate personal experiences
  • Provide vivid descriptions

Step 3: Conclusion
Summarize and reinforce **the main ideas** you communicated **shortly** and **precisely**.

III. Prepare the presentation on the topic "Is an Engineer a Good or Evil?" Speak about the necessity of the profession of an engineer. Follow the steps and useful pieces of advice given above.(tasks I,II)

IV. Do you agree that parents serve as a major influence in their children's career development and career decision-making? Give examples out of your own experience. Do you agree with the following "Three Gold Rules" for parents? Why / why not?

1. Be involved, but not in control
2. Advise, but do not decide
3. Support, but do not dominate.

What other factors do influence the decision of young people in choosing a profession? Prepare the presentation on the topic "Parents' Role in Choosing a Career".

V. Prepare a presentation on the position of a woman in Engineering and Programming. Do you find the position of an engineer/programmer suitable for women? Prove you point of view including the following points in your presentation (see details of presentation making in task II):

1. Introduction (opening)
2. Main body
3. Conclusion