#### МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РОССИЙСКОЙ ФЕДЕРАЦИИ

Федеральное государственное бюджетное образовательное учреждение высшего образования

«Забайкальский государственный университет» (ФГБОУ ВО «ЗабГУ»)

Институт	
Факультет историко-филологический	
Кафелра иностранных языков	

# **УЧЕБНЫЕ МАТЕРИАЛЫ** для студентов заочной формы обучения

#### по иностранному (английскому) языку

наименование дисциплины (модуля)

# для направления подготовки (специальности) 18.03.02 Энерго- и ресурсосберегающие процессы в химической технологии, нефтехимии и биотехнологии

код и наименование направления подготовки (специальности)

# Направленность ОП <u>Энерго- и ресурсосберегающие технологические процессы и аппараты</u>

Общая трудоемкость дисциплины (модуля)

	Распреде	Распределение по семестрам		
Виды занятий	1	2	3	Всего
	семестр	семестр	семестр	часов
1	2	3	4	5
Общая трудоемкость	108	72	108	288
Аудиторные занятия, в т.ч.:				
лекционные (ЛК)				
практические (семинарские) (ПЗ, СЗ)	34	32	51	117
лабораторные (ЛР)				
Самостоятельная работа студентов (СРС)	38	40	21	99
Форма текущего контроля в семестре*	экзамен	зачет	экзамен	72
Курсовая работа (курсовой проект) (КР, КП)				

# **Краткое содержание курса** (1 семестр)

- 1. **Topics.** Engineering in our life. Engineering education. Types of Engineering. Engineering Career.
- 2. **Grammar.** Noun. Article. Adjective. Adverb. Pronoun. Numeral. Verb to be, to have. There + to be.

### Форма текущего контроля

## ВЫПОЛНЕНИЕ КОНТРОЛЬНЫХ ЗАДАНИЙ И ОФОРМЛЕНИЕ КОНТРОЛЬНЫХ РАБОТ

Каждое контрольное задание предлагается в трех вариантах. Вы должны выполнить один из трех вариантов в соответствии с последними цифрами студенческого шифра: студенты, шифр которых оканчивается на 1, 2 или 3, выполняют вариант № 1; на 4, 5 или 6 - № 2; на 7, 8, 9 или 0 - № 3.

Выполнять письменные контрольные работы следует в отдельной тетради. На обложке тетради напишите свою фамилию, шифр, предмет, номер контрольной работы Контрольные работы должны выполняться чернилами, аккуратно, четким почерком. При выполнении контрольной работы оставляйте в тетради широкие поля для замечаний, объяснений и методических указаний рецензента.

Материал контрольной работы следует располагать в тетради по следующему образцу:

	Левая страница		Правая страница
Поля	Английский текст	Русский	Поля
		текст	

### Контрольные работы, предусмотренные рабочей программой

#### КОНТРОЛЬНАЯ РАБОТА № 1

#### Вариант 1.

**TASK 1.** Преобразуйте предложения в форму множественного числа:

- 1. There is a desk in this classroom.
- 2. His boot is large.
- 3. Does this lady speak English?
- 4. An apple isn't a vegetable.
- 5. Put that cup on the table.
- 6. My brother has a map.
- 7. This boy isn't my son.

#### **TASK 2.** Перефразируйте, употребляя притяжательный падеж:

- 1. the house of Mr. Smith
- 2. a doll of the girls
- 3. a toy of a baby
- 4. the bags of those women
- 5. a garage of her cousin
- 6. the policy of the company

#### 7. the wives of Henry the Eighth

#### **TASK 3.** Вставьте артикль, где необходимо:

- 1. I live in ... big flat in ... centre of ... Chita. My flat is on ... ground floor. There are ... three rooms in my ... flat. ... rooms are large. There is ... kitchen and ... bathroom in my flat.
- 2. On ... fifth of ... October I visited my ... friend. He is ... engineer. He has ... big family. He has got ... wife, ... two sons and ... daughter.
- 3. There is not ... table in ... middle of ... living-room. ... table is in ... corner. ...table is brown.
- 4. Nick has ... lot of books at ... home. ...books are interesting. They are in ... bookcase.
- 5. Will you go for ... walk tomorrow? We will have ... good time.

# **TASK 4.** Раскройте скобки, употребив нужную степень наречия/прилагательного.

1. Winter is (cold) season of the year. 2. Moscow is (large) than St. Petersburg. 3. Which is (long) day of the year? 4. The Caucasus are (high) mountains in Europe. 5. (Long) day has an end. 6. It is one of (important) questions of our conference. 7. Friendship is (strong) than steel. 8. Who knows him (well) than you? 9. They have (little) interest in this work than we. 10. Health is (good) than wealth. 11. Ann worked (well) of all. 12. He was going home (slowly) than usually. 13. Time is (good) doctor. 14. She is (young) child in this family. 15. What is (near) way to the Drama theatre? 16. Text two is (interesting) than text one. 17. Peter is tall but his brother is (tall). 18. You made (many) mistakes than others. 19. He is (popular) singer in Great Britain. 20. This room is (comfortable) than that one. 21. It's (warm) day of the week.

## TASK 5 Заполните пропуски нужной формой глагола «to be»

- 1. He ... born in 1984.
- 2. His name ... Mike.
- 3. I ... a first year student.
- 4. They ... ill last week.
- 5. We ... at home tomorrow.

## ${\bf TASK~6}$ Преобразуйте данные предложения, употребляя оборот «there + be»

- 1. Our family has three children.
- 2. Some students were in the lab.

- 3. Our higher school has five faculties.
- 4. Many people will be at the stadium tomorrow.
- 5. Many large industrial enterprises are in the South now.

### TASK 7 Заполните пропуски нужной формой глагола «to have»

- 1. As a rule we ... 4 lessons a day.
- 2. Last week my father ... a lot of work.
- 3. Tomorrow student will ... to live.
- 4. I ... never been to Italy.
- 5. They ... a good rest next summer.

### **TASK 8.** Прочитайте и письменно переведите текст:

## What is Engineering?

Are you interested in making a **contribution** in the physical world? Are you good at solving problems? Do you like to understand how things work and how to make them better? Would you like to see your ideas for products become reality? If you answer yes to these questions, then odds are that you will want to become an engineer.

So, what exactly is an engineer? An engineer is someone who **applies** mathematics and the principles of science, especially chemistry and physics, to solve problems and meet the needs of society for products and services. Solving these problems and finding new solutions require creativity and persistence.

You may be concerned that you don't meet the stereotypical image of an engineer. Actually, most people don't even know what engineers are, so when you ask them about their stereotypical image, they often tell you about their image of a scientist. The image is often of a white male with out-of-control hair, glasses with tape holding them together over his nose, wearing a white **lab coat** with a pocket protector (possibly filled with leaking pens) over a **plaid** shirt, pants that are too short, white socks, and untied shoes.

Engineers and engineering have been around for a long time, although many of the theorems that you will study during your years in college have been developed since the 1700s. The Egyptians were master engineers-witness the pyramids. The Romans built aqueducts to bring water into Rome, another significant engineering achievement. The Great Wall of China is a good example of a man-made feature on earth that is visible from space – this too is a great engineering accomplishment. Historically, most of the major engineering accomplishments have been in the field of what is called civil engineering today – although this is changing rapidly.

"Keys to Engineering Success" Jill S. Tietjen, Kristy A. Schloss

# **TASK 9.** Ответьте устно и письменно на следующие вопросы. Ответ должен быть развернутым и подробным.

- 1. What a chemist is, what a chemist does, and what type of salary and career opportunities you can expect as a chemist.
- 2. What reasons make you choose to be a chemist: interest, curiosity; risk excitement; moral inclination sense of community; good heath; diligence and being good with the hands?

#### Вариант 2.

### **TASK 1.** Преобразуйте предложения в форму множественного числа:

- 1. This is a child.
- 2. That isn't a path.
- 3. There is an umbrella on her arm-chair.
- 4. This toy is in the box.
- 5. She has a beautiful dress.
- 6. That gentleman knows my father.
- 7. Does this deer live in the wood?

#### **TASK 2.** Перефразируйте, употребляя притяжательный падеж:

- 1. coal deposits of the world
- 2. the influence of the sun
- 3. the arrival of the ships
- 4. the children of my aunt Kate
- 5. milk of a cow
- 6. the visit of Peter and Ann
- 7. the orders of our boss

#### **TASK 3.** Вставьте артикль, где необходимо:

- 1. ... sunlight gives us ... heat. Some of ... heat warms ... atmosphere, and some of ... heat escapes back into ... space.
- 2. ... archaeologist discovered ... large tomb from ... sixth century A.D. in ... Somerest. It is ... tomb of ... important person, probably ... king. All ... archaeologists ask ... same question. is this ... tomb of ... King Arthur? They have not opened ... tomb yet. They have to work slowly, and it may be ... month before .... archaeologists know ... answer.
- 3. Many people think that ... idea of ... take-away meals come from ... USA. But it came from ... Britain. ... original British take-away meal was ... fish and ... chips.
- 4. Today ... people have ... telephones everywhere: in ... house, in ... office, in ... car. You can see ... people walking round ... streets with ... telephones.
- **TASK 4.** Раскройте скобки, употребив нужную степень наречия/прилагательного.

1. This map is too small. I need a (big) one. 2. He isn't very strong. His brother is (strong). 3. It was a good film. In fact, it was (good) film I've ever seen. 4. Of course, your story is interesting but I prefer (interesting) ones. 5. I wasn't well yesterday but today I feel (well). 6. She was (beautiful) o them. 7. Which of them runs (quickly) — Mike or Sam? 8. My room is not large. Yours is (large). 9. Who knows him (well) that you? 10. That Sunday was a cold day. Perhaps, it was (cold) day of the year. 11. I agree, your task is difficult but mine is (difficult) of all. 12. He is a popular writer, one of (popular) in the world. 13. There are many long rivers in our land. Which of them is (long) one? 14. This week I have (little) work than usually. 15. Which of the lakes is (deep) - the Ladoga or the Baikal? 16. It was (bad) day in his life. 17. What is (near) way to the railway station?

### **TASK 5.** Заполните пропуски нужной формой глагола «to be»

- 1. My friend ... a doctor.
- 2. Last week they ... in Moscow.
- 3. Who ... this man?
- 4. I ... a well known writer in the future.
- 5. Peter ... your friend.

# **TASK 6** Преобразуйте данные предложения, употребляя оборот «there + be»

- 1. This city has many monuments.
- 2. A bench was under the tree.
- 3. Nobody was in the park.
- 4. The dictionary has a lot of new words.
- 5. This book will have over 500 pages.

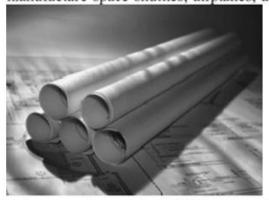
## TASK 7 Заполните пропуски нужной формой глагола «to have»

- 1. Now my parents ... a little house.
- 2. I ... four lessons yesterday.
- 3. They ... five exams next summer.
- 4. She ... many good friends now.
- 5. They ... a good time last week-end.

## **TASK 8.** Прочитайте и письменно переведите текст:

## What do engineers do?

One of our engineering colleagues says that "Engineers make the world work". Engineers design and build bridges, buildings, and tunnels. They design, test, and analyze cars, pumps, and heating and air conditioning systems. They design, build, and manufacture space shuttles, airplanes, and helicopters. They design, operate, and modify



power plants, gas pipelines, airports, and dams. They design computers, software, telecommunications devices, telephones (wireless and wired), fiber optics, and storage routing devices. They design the processes and equipment to manufacture VCR's, TV's, refrigerators, ovens, and toasters, as well as the appliances themselves. They create machines that cut fabrics to make our clothing, furniture, and draperies. Almost every product and process

that you use in your daily life has been affected in some manner by an engineer.

You will find that engineers have had **input** into almost every activity that you undertake during the course of a typical day. Let's look at just a few of them.

Engineers were involved in the design of your electric alarm clock – from it's display, to it's electrical connection, to the manufacturing of the battery that keeps

it working when the power is off, to the sound the alarm makes, to its size, its packaging, its ability to stay in one piece when dropped on the floor, the materials of which it is constructed, and its manufacturing. Engineers were also involved in the design of all of the related equipment and process controls for the manufacturing of the alarm clock.

- Your refrigerator has been designed to be energy **efficient** and not to release chemicals into the atmosphere that are believed to cause depletion of the ozone layer. It turns itself on and off as dictated by its **internal thermostat**. If you have a frostless model, a fan turns on regularly to keep the frost from **adhering** to the walls. All of these features were designed, tested, and manufactured to specifications that were established by engineers.
- The streets and roads you use to get from your home to school and work were designed and built by engineers. The water you drink and bathe in was made potable by engineers.

"Keys to Engineering Success" Jill S. Tietjen, Kristy A. Schloss

**TASK 9.** Ответьте устно и письменно на следующие вопросы. Ответ должен быть развернутым и подробным.

- 1. What is engineering?
- 2. What does engineer look like?
- 3. What is the main goal of engineers in their activity?
- 4. Is your future career connected with engineering?

#### Вариант 3.

### **TASK 1.** Преобразуйте предложения в форму множественного числа:

- 1. There is a new school in our town.
- 2. The woman is sitting in the room.
- 3. This hobby is not bad.
- 4. This is my foot.
- 5. There was a desert here.
- 6. Was there a leaf on the ground?
- 7. This is an orange.

### **TASK 2.** Перефразируйте, употребляя притяжательный падеж:

- 1. the room of these people
- 2. the son of her mother
- 3. the friend of Susan
- 4. the ball of my children
- 5. the hobby of these students
- 6. the cottage of my parents
- 7. the speech of the Minister of Foreign Trade

## **TASK 3.** *Вставьте* артикль, где необходимо:

- 1. ... lot of people think that ... Scotland is ... part of ... England but this is ... untrue. ... Scotland is ... part of Great Britain. There are ... five million Scots and ... most of them live in ... southern half of ... country.
- 2. ... Oxford is ... most popular tourist city in ... Britain. ... Oxford is famous for ... university, which is ... oldest in ... Britain. ... Oxford is not only ... university city, but ... market too.
- 3. ... forester, with his dog, was riding through ... thick forest. Suddenly his horse stopped. ... forester felt that ... something frightened ... horse. He saw ... pack of ... wolves. His dog run over to ... wolves, sniffed and disappeared with them in ... forester remembered ... day when he found ... wolf-cub. He picked ... cub up, brought it home and put it in ... dog house. Soon ... cub grow up. Then ... forester took ... young wolf to ... place where he found him. Now ... forester

understood why ... wolves didn't attack him and ...dog. His ... friend was among them. ... forester's dog returned home ... next morning.

### **TASK 4.** *Найдите и исправьте ошибки.*

1. Moscow is largest than Rostov. 2. You are not as strong as my father. 3. Ann is better student in our group. 4. This is the most interesting story than that one. 5. The near spring is, the long the days are. 6. New flat was so comfortable as our old one. 7. Text 4 is least difficult than text five. 8. He was one of the more brilliant people in this city. 9. Who knows Peter gooder than you? 10. Russia is larger country in the world. 11. It is one of his better pictures. 12. The many friends you have, the richer you are. 13. Your dog is not as small as mine.

#### **TASK 5.** Заполните пропуски нужной формой глагола «to be»

- 1. Everybody ... present today.
- 2. The days ... short in winter.
- 3. In two years I ... ... a good engineer.
- 4. Many years ago my father ... a good pupil.
- 5. They ... absent yesterday.

# **TASK 6.** Преобразуйте данные предложения, употребляя оборот «there + be»

- 1. His house has a lift.
- 2. Many new streets will be in Rostov.
- 3. A week has 7 days.
- 4. Russia has many rivers and lakes.
- 5. Last month we had much work in the office.

## TASK 7. Заполните пропуски нужной формой глагола «to have»

- 1. Usually my mother ... much work about the house.
- 2. We ... dinner at home yesterday.
- 3. At present we ... no car.
- 4. The students ..... vacations in summer.
- 5. My friend ... a good idea.

## Choosing a Major

How will you choose your engineering major?

First, think about where you interests lie and what types of courses you like. What is it that you would spend your time doing, if you didn't have to do all of the other things in your life? What do you look forward to doing? How do you see yourself spending your time in your job after you **graduate**?

- Maybe you want to spend most of your time outside building roads, bridges, or buildings. If so, you probably want to look into civil or construction engineering.
- If your dream has always been associated with designing cars, then you may want to consider mechanical engineering.
- If your interests lie with computers, you have several choices, depending on your specific interest relative to computers. Do you want to make the computer itself, what is referred to as the hardware? Then you want to consider electrical or computer engineering. Does the process of logic and computer programming fascinate you? This is the software part, and you want to pursue either software or computer engineering or computer science.
- If you really want to enhance health and the human body through the design and application of equipment, then biomedical engineering could be for you.
- If chemistry fascinates you, you ought to look into chemical engineering.
- If you simply want to help clean up the environment making clean water and clean air the order of the day for all citizens of the world – consider environmental engineering.

"Keys to Engineering Success" Jill S. Tietjen, Kristy A. Schloss (p. 8).

**TASK 9.** Ответьте устно и письменно на следующие вопросы. Ответ должен быть развернутым и подробным.

- 1. What do engineers do?
- 2. How do you choose your engineering major?
- 3. What does engineering career start with?
- 4. What kind of professional activity are you going to choose?

Тексты и задания для дополнительного чтения и работы на практических занятиях (<u>для всех вариантов иметь в распечатанном</u> виде)

**Task 1.** Выберите правильный ответ

Definition		Term
1. Studies the separation, identification,	a.	Physical
and quantification of the chemical components of natural		Chemist
and artificial materials.		
2. Develops a fundamental understanding	<b>b</b> .	Inorganic
at the molecular and atomic level of how chemical reac-		Chemist
tions occur.		
3. Studies chemical processes in living	c.	Organic
organisms and governs all living organ-		Chemist
isms and living processes.		

4. Studies scientific structure, properties, composition, reactions, and preparation (by synthesis or by other means) of carbon-based compounds, hydrocarbons, and their derivatives.	d.	Analytical Chemist
5. Searches and uses new knowledge about chemicals to improve the way we live and develops products, such as synthetic fibers, drugs and cosmetics, and processes, including oil refining and petrochemical processing, that reduce energy use and pollution.	e.	Medical Chemist
6. His work is based on understanding the behavior and the analogues for inorganic elements, and how these materials can be modified, separated or used-often in product applications.	f.	Biochemist

**Task 2.** Выберите правильный ответ

engineering activities field engineer. These line. Thereby, a field industrial engineers.  5 of science of science engineering activity engineering activity impossible without operational requirement engineering activity a engineering types of disciplines not only a acquired this kind of	four 2 engine engine engineer 3 the The activity of a field ence, engineering, technol not only complement includes 7 a clear idea of 8 ents for products. Many and can be successively successively successively. Today engineer the successive of the successively successively. Today engineer the successive of the succes	r engineering profiles accer, design engineer, industeering activities form rate activity performed by resigneer 4 like ogical and social progress but also 6, technological of engineering problems to olved as a result of coopering activity requires known and engineer will be capable to chan professions.	strial engineer and her a circle than a search, design and this stimulates the . The four kinds of each other. Any arch engineers is capabilities and thread all stages of rative efforts of all owledge in related ring fields. Having
1) A includes	B means	C involves	<b>D</b> implies
2) A additional	B extra	C complementary	D supplementary
3) A directs	B channels	C levels at	D aims at
4) A performed	B introduced	C shown	<b>D</b> given
<ol><li>A development</li></ol>	<b>B</b> increase	C rise	<b>D</b> decrease
6) A fill	<b>B</b> interpenetrate	C saturate	<b>D</b> imbue
7) A search	<b>B</b> survey	C research	<b>D</b> exploration
<ol><li>A features</li></ol>	<b>B</b> properties	C qualities	<b>D</b> characteristics
<ol><li>A educational</li></ol>	B technological	C research	<b>D</b> scientific
(0) A connection	B link	C interface	<b>D</b> unit

**Task 3.** Прочитайте и устно переведите тексы, будьте готовы к беседе с преподавателем по прочитанным текстам.

#### What is a Chemical Engineer?

- Speak about the influence of engineers on human society.
- Do you agree with the following 'Scientists discover the world that exists; engineers create the world that never was'. If not, give your arguments.

About 1.6 million engineers are working, 31,700 of which are chemical engineers. Most engineers work in manufacturing industries or the profes-

sional, scientific and technical services industries including architectural, engineering and related services. The government employs 12 percent of engineers and 3 percent are self-employed.

Engineers are very creative people

- 'Scientists discover the world that
exists; engineers create the world that
never was'. Science and mathematics



are used by engineers to make the items we use every day. Products from the chemical and process industries ensure these are amongst the most successful and thriving types of business around the globe. Chemical engineers play a vital role in achieving that success.

A chemist is a scientist who studies the composition and properties of chemicals and the way chemicals interact with each other. Chemists search for new information about matter and ways this information can be applied. Chemists also design and develop instruments to study matter. Chemical engineers are highly valued by employers for their all—round skills and job prospects are excellent. Graduates are employed in many sectors, from fine chemicals and food products, to utility suppliers, polymers and the oil industry.

Chemical engineers use math, physics, and economics to solve practical problems. The difference between chemical engineers and other types of engineers is that they apply knowledge of chemistry in addition to other engineering disciplines. Chemical engineers may be called 'universal engineers' because their scientific and technical mastery is so extensive.

Chemical engineers research, design, and develop chemical processes and equipment, oversee the operation and maintenance of industrial chemical, plastics, pharmaceutical, resource, pulp, and food processing plants and perform duties related to chemical quality control, environmental protection

and biochemical or biotechnical engineering. Chemical engineers are employed in a wide range of manufacturing and processing industries, consulting firms, government, research and educational institutions.

#### What do Chemical Engineers do?

Imagine you are a chemical engineer. What would you tell someone interested in becoming a chemical engineer about your job? Please share information about your career so that someone thinking about becoming a chemical engineer can make an informed decision.

- What do you do as a chemical engineer?
- What is the best/worst part of your job?
- What training did you need? Was it easy/difficult to find a job as a chemical engineer?
- Are you happy being a chemical engineer? Prove it.
- What advice would you give someone interested in chemical engineering?
- You are allowed to use a spider-diagram given bellow.

There are a lot of different employment opportunities open to chemists. Some chemists work in a lab, in a research environment, asking questions and testing hypotheses with experiments. Other chemists may work on a computer developing theories or models or predicting reactions. Some chemists do field work. Others contribute advice on chemistry for projects. Chemical engineers input is valuable at every stage of a project from the initial idea, through to the product emerging at the end of the line and even to the market. Some chemists write. Some chemists teach. The career options are extensive.



Some chemical engineers make designs and invent new processes. Some construct instruments and facilities. Some plan and operate facilities. Chemical engineers have helped develop atomic science, polymers, paper, dyes, drugs, plastics, fertilizers, foods, petrochemicals... pretty much everything. They devise ways to make products from raw materials and ways to convert one material into another useful form. Chemical engineers can make processes more cost effective or more environmentally friendly or more efficient. Look at the spider—diagram you can see that a chemical engineer can find a niche in any scientific or engineering field.

Chemical Engineer's salaries are among the highest of all engineering disciplines because of the wide diversity of the field, there has been an increasing demand for chemical engineers, although the market has also known its ups and downs. Even though the engineering field as a whole will see average employment growth in the coming decade, chemical engineers are expected to see a decline in employment of 2 percent. Chemical companies

should continue to employ chemical engineers to research and develop more efficient professions to improve existing chemicals as well as new chemicals, but employment in the chemical manufacturing industry as a whole is expected to continue to decrease. The best job opportunities will be found in service-providing industries. Chemical engineers should find work in the professional, scientific and technical services, especially for research in energy and nanotechnology and biotechnology.

Task 4.Заполните пропуски словами из столбика, приведенного ниже

prototypes
potential solutions
reduce the risk
appropriate experience
establish the cause
applied mathematics
careful analysis
core contradiction
full-scale production
forensic engineering

### **Problem solving**

Engineers use their knowledge of science, mathematics, logic, and 1to find suitable solutions to a problem. Engineering is considered a branch of 2 and science. Creating an appropriate mathematical model of a problem allows them to analyze it (sometimes definitively), and to test 3
Usually multiple reasonable solutions exist, so engineers must evaluate the different design choices on their merits and choose the solution that best meets their requirements. Genrich Altshuller, after gathering statistics on a large number of patents, suggested that compromises are at the heart of "low-level" engineering designs, while at a higher level the best design is one which eliminates the 4 causing the problem.
Engineers typically attempt to predict how well their designs will perform to their specifications prior to 5 They use, among other things: 6, scale
models, simulations, destructive tests, nondestructive tests, and stress tests. Testing ensures that products will perform as expected.
Engineers as professionals take seriously their responsibility to produce designs that will perform as expected and will not cause unintended harm to the public at large. Engineers typically include a factor of safety in their designs to 7 of unexpected failure. However, the greater the safety factor, the less efficient the design may be.
The study of failed products is known as 8, and can help the product designer in evaluating his or her design in the light of real conditions. The discipline is of greatest value after disasters, such as bridge collapses, when 9 is needed to 10 or causes of the failure.

# **Task 5.** Выберите правильно обязанности инженера для каждой категории в таблице. Количество обязанностей указано в скобках

- The ability to maintain a sound theoretical approach in enabling the introduction of new technology.
- 2. The ability to assess and manage risks.
- Use a wide range of tools, techniques, and equipment (including software) appropriate to their specific discipline.
- 4. Use laboratory and workshop equipment to generate valuable data.
- 5. Develop, promote and apply safe systems of work.
- 6. Communicate effectively, using both written and oral methods.
- 7. Use Information Technology effectively.
- 8. Manage resources and time.
- Independent of mind, with intellectual integrity, particularly in respect of ethical issues.
- Enthusiastic, in the application of their knowledge, understanding and skills in pursuit of the practice of engineering.
- Specialist knowledge.
- 12. Business and Management techniques.
- 13. Understanding of professional and ethical responsibilities.
- The ability to apply professional judgement, balancing issues of costs, benefits, safety, quality, etc.
- 15. Understanding of the impact of engineering solutions on society.
- 16. Awareness of relevant contemporary issues.
- 17. The ability to solve engineering problems, design systems, etc. through creative and innovative thinking.
- 18. The ability to apply mathematical, scientific and technological tools.
- The ability to analyse and interpret data and, when necessary, design experiments to gain new data.
- 20. Work in a multi-disciplinary team.
- 21. Undertake lifelong learning for continuing professional development.
- 22. Creative, particularly in the design process.
- 23. Analytical in the formulation and solutions of problems.
- 24. Innovative, in the solution of engineering problems.
- Self-motivated.

An Engineer should be able to demonstrate (5):
An Engineer should be able to demonstrate (6):
An Engineer should be able to (3):
An Engineer should be able to (5):
An Engineer should be (6):

#### Формы текущего контроля

Перевод текста занимает значительное место в обучении иностранному языку. Во время работы над переводом студент должен уметь найти эквивалентную форму, чтобы передать содержание, и если он не может сделать это напрямую, то ему следует прибегнуть к переложению содержания, выраженного средствами одного языка, на другой язык, т.е. найти приемлемое перефразирование, не нарушая при этом грамматического, лексического и синтаксического рисунка текста.

Написание перевода осуществляется с помощью словаря. Использование компьютерных программ-переводчиков при работе с учебными текстами – недопустимо.

Упражнения — метод обучения, представляющий собой планомерное организованное повторное выполнение действий с целью овладения ими или повышения их качества. Без правильно организованных упражнений невозможно овладеть учебными и практическими умениями и навыками. Постепенное и систематическое упражнение и как его следствие — закрепляемые навыки — надежнейшее средство успешного и продуктивного труда. Достоинство данного метода состоит в том, что он обеспечивает эффективное формирование умений и навыков, а недостаток — в слабом выполнении побуждающей функции.

Рабочая программа по дисциплине предусматривает выполнение студентами устных и письменных упражнений из соответствующих разделов учебников и учебных пособий данных в программе.

Устные упражнения связаны с развитием культуры речи и логического мышления, познавательных возможностей студентов. Назначение устных упражнений разнообразное: овладение техникой и культурой чтения, устного счета, рассказа, логического изложения знаний и т. д. Устные упражнения постепенно усложняются в зависимости от уровня развития компетенций студентов.

Письменные упражнения (стилистические, грамматические, орфографические диктанты, конспекты, эссе и т. д.) составляют важный компонент обучения. Их главное назначение — формирование, развитие и упрочение необходимых умений и навыков.

Пересказ — изложение содержания прочитанного или услышанного текста. Пересказ может быть свободным (изложение своими словами) или близким к тексту. Пересказ текста является важным умением, которое в первую очередь показывает насколько хорошо, студент может

формулировать, анализировать понимать услышанное произведение, а также – насколько у него развита речь.

Рассмотрим подробнее этапы работы над текстом, которые в дальнейшем способствуют переходу от прочтения текста к его пересказу.

<u>Предтекстовый этап.</u> Задачи на этом этапе – дифференциация языковых единиц и речевых образцов, их узнавание в тексте, языковая догадка.

#### Задания:

- прочтите заголовок и скажите, о чем (о ком) будет идти речь в тексте;
- ознакомьтесь с новыми словами и словосочетаниями (если таковые даны к тексту с переводом); не читая текст, скажите, о чем может идти в нем речь;
- прочитайте и выпишите слова, обозначающие... (дается русский эквивалент);
  - выберите из текста слова, относящиеся к изучаемой теме;
  - найдите в тексте незнакомые слова.

<u>Текстовый этап.</u> Данный этап предполагает использование различных приемов извлечения информации и трансформации структуры и языкового материала текста.

#### Задания:

- прочтите текст;
- выделите слова (словосочетания или предложения), которые несут важную (ключевую информацию);
- выпишите или подчеркните основные имена (термины, определения, обозначения);
  - замените существительное местоимением по образцу;
  - сформулируйте ключевую мысль каждого абзаца;
- отметьте слово (словосочетание), которое лучше всего передает содержание текста (части текста).

<u>Послетекстовый этап.</u> Этот этап ориентирован на выявление основных элементов содержания текста.

#### Задания:

- озаглавьте текст;
- прочтите вслух предложения, которые поясняют название текста;
- найдите в тексте предложения для описания ...
- подтвердите (опровергните) словами из текста следующую мысль;
  - ответьте на вопрос;

- составьте план текста;
- выпишите ключевые слова, необходимые для пересказа текста;
- перескажите текст, опираясь на план;
- перескажите текст, опираясь на ключевые слова.

При подготовке пересказа текста мы рекомендуется соблюдать следующие правила:

- 1. После прочтения текста разбейте его на смысловые части.
- 2. В каждой части найдите предложение (их может быть несколько), в котором заключен основной смысл этой части текста. Выпишите эти предложения.
  - 3. Подчеркните в этих предложениях ключевые слова.
  - 4. Составьте план пересказа.
  - 5. Опираясь на план, перескажите текст,
  - 6. Опираясь на ключевые слова, расскажите текст.

При пересказе текста рекомендуется использовать речевые клише:

- This text is about ...
- I would like to tell you ...
- I think ...
- I like / I don't like ... because ...

Эти клише помогут построить связные высказывания при пересказе, составлении характеристики, выражении своего отношения, своей точки зрения относительно прочитанного.

#### Система оценивания выполнения заданий

задание	оценка	критерии оценивания	
упражнение	5	упражнение выполнено без ошибок	
	4	в упражнении допущены 1-2 незначительные ошибки	
	3	в упражнении допущены 2-3 ошибки, а также	
		имеются недочеты	
	2	в упражнении имеется большое количество ошибок	
	1-0	упражнение не выполнено или выполнено с большим	
		количеством ошибок	
перевод	5	перевод выполнен с подбором эквивалентной лексики	
		и в соответствии с грамматическими, лексико-	
		синтаксическими нормами языка	
	4	перевод выполнен с подбором эквивалентной	
		лексики, в соответствии с грамматическими, лексико-	
		синтаксическими нормами языка, но при этом	

		MMOTOR HOUSTHATH III IO HOPDOULLOCTH
	2	имеются незначительные погрешности
	3	передано общее содержание текста со значительными
		отклонениями от грамматических, лексико-
		синтаксических норм языка
	2	в переводе содержится большое количество ошибок
		разного плана, содержание текста не соответствует
		переводу, главная идея текста не определена
	1-0	перевод не выполнен
пересказ	5	сделан подробный пересказ текста без
		грамматических, лексических, синтаксических и
		фонетических ошибок
	4	пересказ с достаточной степенью полноты, но при
		наличии 2-3 фонетических или лексических или
		синтаксических ошибок
	3	имеются значительные недостатки по содержанию,
		присутствуют ошибки разного плана
	2	ответ не является логически законченным и
		обоснованным, наличие большого числа ошибок
		разного плана
	1-0	пересказ представляет собой бессистемные сведения,
		наличие огромного числа ошибок разного плана
контрольная	5	работа выполнена без грамматических, лексических,
работа		синтаксических ошибок
	4	работа выполнена с достаточной степенью полноты,
		но при наличии 2-3 грамматических, лексических или
		синтаксических ошибок
	3	в работе имеются значительные ошибки разного
		плана (грамматические, лексические, синтаксические)
	2	работа выполнена не полностью, присутствует
		большое количество ошибок разного плана
	1-0	работа представляет собой бессистемные сведения,
		наличие огромного числа ошибок разного плана

## Форма промежуточного контроля

## Экзамен

Экзамен по иностранному языку в 1 семестре состоит из двух частей:

1) чтение и обсуждение прочитанного оригинального текста по специальности на английском языке с преподавателем;

2) письменное решение проблемной задачи (кейс-задача).

#### Оценка устного ответа

- 5 баллов сделан подробный пересказ текста без грамматических, лексических, синтаксических и фонетических ошибок;
- 4 баллов пересказ с достаточной степенью полноты, но при наличии 2-3 фонетических или лексических или синтаксических ошибок;
- 3 балла имеются значительные недостатки по содержанию, присутствуют ошибки разного плана;
- 1-2 балла ответ не является логически законченным и обоснованным, наличие большого числа ошибок разного плана;
- 0 баллов пересказ представляет собой бессистемные сведения, наличие огромного числа ошибок разного плана.

#### Оценка решения проблемной задачи (кейс-задачи).

- 5 баллов работа выполнена без грамматических, лексических, синтаксических ошибок; оформлена в соответствии с требованиями, предъявляемыми к деловой документации подобного рода;
- 4 балла работа выполнена с достаточной степенью полноты, но при наличии 2-3 грамматических, лексических, синтаксических ошибок; имеются незначительные погрешности в письменном оформлении;
- 3 балла в работе имеются значительные ошибки разного плана (грамматические, лексические, синтаксические); имеются грубые ошибки в письменном оформлении;
- 2 -1 балла работа выполнена не полностью, присутствует большое количество ошибок разного плана;
- 0 баллов работа представляет собой бессистемные сведения, наличие огромного числа ошибок разного плана.

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Ведущий преподаватель

Каплина Светлана Евгеньевна

Заведующий кафедрой

Каплина Светлана Евгеньевна