Digitalization of the English language correspondence course for engineering students

T Y Polyakova and O V Gorbacheva
Moscow Automobile and Road Construction University (MADI), 64, Leningradsky Pave., Moscow, 125319, Russian Federation
E-mail: 89169451288@yandex.ru

Abstract. The paper is devoted to the problem of digitalization of a foreign language course for engineering students. Realizing the advantages of the educational process digitalization in engineering universities, MADI Foreign Languages Department launched the project aimed at the development of digital materials for teaching English. The course is addressed to the students of the University correspondence department at the level of baccalaureate. The digital English materials can be used as an integral part of the traditional course providing flexibility of self-study in any place with an Internet connection, self-paced learning and immediate assessment and feedback. The digital materials are intended to help correspondence students to overcome the main difficulties they have while studying English and to improve their learning outcomes. The paper gives the analysis of the definitions of the terms “digitization”, “digitalization”, and “digital transformation”, shows the difference between them, describes the aims and content of the digital materials, their structure, and the main language skills they develop.

Keywords: digitalization, English correspondence course, engineering students.

1. Introduction
The modern world is changing fast due to the development of new techniques and technologies. Digitalization is one of the most relevant innovations of our life. A lot of the countries pay special attention to this process. In 2018, Russia launched the national project “Digital Economy” and its implementation will take five years from 2019 to 2024. The key objectives of the national project are to increase funding for the development of digital economy, to create a stable and secure information and telecommunication infrastructure for high-speed transmission, processing, and storage of large amounts of data available to all organizations and households, to use mainly domestic software by state bodies, local governments and organizations [1]. But even now in our professional activities and everyday life we see more and more examples of digitalization.

Discussing digital solutions, as a rule, we use the terms “digitization”, “digitalization”, and “digital transformation”. The analysis of these terms definitions show the difference between them. According to Gartner’s IT Glossary, “Digitization is the process of changing from analog to digital form, also known as digital enablement. In another way, digitization takes an analog process and changes it to a digital form without any different-in-kind changes to the process itself.” [2]. In other words, it is a technical process, the results of which facilitate our life. Thanks to the fact that a great number of documents, files, photos are in a digital form now, it is not necessary to spend hours looking through a huge manual for actual information in order to repair a device or a car, we do not need thick photo
albums to store them in the bookshelves or wardrobes. Many of us cannot imagine their lives without smartphones that help us organize events, remember important dates, business meetings or current affairs.

If by “digitization” we mean the process of digital enablement, the term “digitalization” denotes “the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business.” [3]. Thus, through digitalization we are finding the ways to apply digital technologies most effectively. You can use them in various fields such as medical care, for instance, when nurses use portable vein finders for blood tests, or when auto mechanics use a laptop to troubleshoot a car, or when teaching students with methods of distant education, etc. Digitalization penetrates our personal life: we chat instead of making telephone calls. The number of smartphones in use increased from 23,000 in 1980 to 7.2 billion in 2015 which makes approximately one smartphone per person on Earth [4]. Digitalization increases the speed of people’s work and makes it more efficient.

Finally, the third term in question is “digital transformation” that “refers to anything from IT modernization (for example, cloud computing), to digital optimization, to the invention of new digital business models. The term is widely used in public-sector organizations to refer to modest initiatives such as putting services on-line or legacy modernization.” [5]. Thus, according to the author the meaning of the term “digital transformation” is closer to the meaning of the term “digitization” than to “digital business transformation.” In reality, the process of digital transformation requires specific organization of activities and consequently specific competences from professionals.

Speaking about digital solutions, we should bear in mind that all the three processes are closely connected and related. First, we digitize information (digitization), second, we digitalize processes and roles that make up the operations of a business or any other activity (digitalization) and, finally, we digitally transform the activity and its strategy (digital transformation). Each stage is quite necessary but taken separately it is not sufficient. The nature of digitization and digitalization processes is technological, and the nature of digital transformation is not. The latter concerns the customer whoever he or she is: a patient, a passenger, or a student. In the paper, we use the term “digitalization” in the narrow meaning as discussed above and traditionally in its wide meaning covering all the three processes [6].

Digitalization has become an integral part of all spheres of modern society, including the system of higher education. In Russian engineering universities, digital solutions are being introduced at various levels: in administration, educational environment, research and educational process.

Digital transformation in the field of administration results in the growth of efficiency in the interaction between all the departments of the university, the decrease of time losses in the process of decision-making.

Digitalization also contributes to the creation of innovative educational environment. The universities modernize the equipment of the lecture- and classrooms, do a lot to develop digital libraries and digital campuses, renovate IT resources, work out training simulators, virtual laboratories, use more and more e-textbooks, multimedia teaching materials including videos, cartoons, or/and online presentations [7].

In the sphere of research up-to-date software, hardware and equipment are being used. Digital technologies provide unprecedented opportunities for scientific communication and international cooperation.

As far as educational process is concerned, first of all universities are aimed at training specialists ready to implement digital solutions in various fields of professional activity. So educators are busy with determination of the core competences necessary for digitization, digitalization, and digital transformation in different fields of economy, design of basic models of digital competences development and methods of their implementation, providing efficient personal trajectory of students’ achievements. For this purpose, universities offer courses of training and retraining specialists in the field of digitalization [8].
The establishment of university expert digitalization centers stimulate further digital transformation of the educational process that offers a lot of advantages to students within formal, informal, open, additional, life-long education. Among them, it is necessary to mention the following:

- accessibility for the students who live far away from the university (possibly in another town) without waste of time for transportation;
- flexibility of self-study in any place on condition of an Internet connection;
- self-paced learning having the opportunity to skim the material you know and to focus on the material requiring more time and effort to grasp;
- the opportunity to have immediate assessment and feedback;
- accessibility for those with restricted mobility or busy work schedule.

At the same time, specialists in the field of higher education underline that a modern university should have a combination of both modern information technologies and real direct communication between students and teachers, experts or scientists. One of the ideas suggested is to replace the standard set of theoretical lectures with on-line products, increasing the number of contact hours, aimed at securing the material and improving practical and project activities of learners.

Understanding the unique possibilities of digital technologies, the educators are beginning to use them wider and wider in one course and at the same time for a broader scope of disciplines [9]. The discipline “Foreign language” is among them.

2. Problem
Teaching a foreign language in engineering universities is aimed at the development of foreign language communicative competence necessary to use a foreign language in the professional activity. The discipline has a rich background connected with wide implementation of various technical teaching aids. Long ago, in the middle of the 20th century the specific peculiarities of the subject made it necessary to use audial, visual and audiovisual aids. Besides using the traditional chalkboards, charts, models, slides, demonstrations, flannel graphs, flash cards, pictures, photographs, foreign language teachers were perhaps the first to bring the radio, a record player and a tape recorder in the classroom. The most popular modern teaching aids in use at present are English language labs, computers, overhead projectors, power point presentations, Internet, on-line dictionaries, on-line encyclopedias, VCDs, DVDs, DVD players.

Some time ago, from 10 to 15 years, a great variety of on-line English schools and courses were developed and offered to consumers. Some private schools are quite successful and popular among learners now. The courses use different online-platforms and try to attract as much students as possible. For example, the school “Englex” first started in 2011, and now it has over 14000 graduates [10]. Tutors use “Skype” as the way of communication with learners. “Lingualeo” provides teaching on the interactive interface basis [11]. As the school provides most of the teaching materials free of charge, they have in total about 18 billion visitors and learners. But some schools are not so popular for some reasons and quite often they have to stop their activity. However, it is evident that for many reasons digitalization of the foreign language courses makes them very attractive for learners.

The analysis of the theory and practices of foreign language teaching shows that introducing digital innovations in this process it is necessary to preserve an optimal combination of digital teaching materials and real face-to-face communication between teachers and students. Therefore, MADI Department of Foreign Languages had to solve a number of problems for digitalization of the course. It was necessary to answer the following questions:

- Who are the target audience for digital teaching materials?
- What are the main difficulties of learners that the digital materials will help to overcome?
- What part of the course is most appropriate for digitalization?
- What is the form and the structure of digital materials?
- Do foreign language teachers need any specific skills for working out digital teaching materials?
The Federal State Educational Standards (FSES) for Higher Education determine precisely the learning outcomes for graduates of engineering baccalaureate [12]. The discipline “Foreign Language” is a compulsory subject that is included in the basic part of the “Humanitarian, social and economic cycle.” At the end of the course students should acquire general cultural competence in the sphere of a foreign language (either English, or German, or French), that is formulated in many FSES as follows: “the ability to communicate in oral and written forms in the Russian and foreign language for solving tasks of interpersonal and intercultural interaction” [13]. In order to acquire this competence a student should have sufficient foreign language knowledge, skills and abilities. Among them, the graduate should know:

- the basic vocabulary necessary for oral and written interpersonal and intercultural communication;
- grammar typical for oral and written intercultural communication.

The student should have the following skills:

- reading skills necessary to understand polytechnic, intercultural and professionally oriented texts with the help of a dictionary;
- speaking skills necessary for producing a logically structured monologue within the topics studied;
- listening skills necessary to understand a monologue and a dialogue within the topics studied.

The student should have the following abilities:

- the ability to use four types of reading (critical, skimming, scanning and survey types of reading);
- to produce a monologue and a dialogue within the topics studied.

The requirements mentioned above do not cover all the skills and abilities necessary but even their enumeration shows that achieving such teaching objectives takes a lot of time and effort from the students. According to the Curriculum, engineering students of a daytime department have from 200 to 350 contact hours of “Foreign Language” and at the same time the opportunity to participate in some extra-curricular work as well. Therefore, the majority of students of the daytime department demonstrate rather good results of learning at the final exam. Students of the evening department also have enough number of contact hours and their results are quite satisfactory. On the contrary, the engineering students of the correspondence department study the discipline also for two years and have the same workload, but according to schedule, they have only 16 contact hours per a term. In spite of a great difference in schedule and training time, according to the educational program all the requirements are the same for students of daytime, evening and correspondence departments. We must admit that students achieve the required level of communicative competence having to do a lot of self-study work and nevertheless some of them fail in the exam.

For that reason, the Department of Foreign Languages took the decision that the target audience for the digital materials is engineering students of MADI correspondence department. As most correspondence programs are those of baccalaureate and about 90% of students of this department study English we decided to start with digitalization of teaching materials for learning English in correspondence baccalaureate.

The results of the final English examination show that learners have difficulties with proper pronunciation of the vocabulary, the meaning of the words and their usage in oral and written speech. The students demonstrate insufficient level of grammar knowledge, interpretation of grammar structures in oral and written speech. Reading skills are also to be improved in order to provide better understanding of written texts. While listening students show rather low level of comprehension. Besides, the correspondence students have a lot of problems of non-linguistic character. They are young people who work long hours and sometimes their work prevents them from attending classes. Some of them live far from the University.

Digital English learning materials are expected to be effective in overcoming the difficulties mentioned above and some others for two reasons. Firstly, the correspondence students are representatives of Generation Z who were born at the beginning of the 21st century, and in contrast to
the previous generation, they never knew the world without access to the Internet, social networks, computer games or virtual communication. They are not “Digital Immigrants” but they are “Digital Natives” and digital technologies are an integral part of their life. They use them most effectively [14]. Secondly, digital materials organize and control learners’ self-study work. Students can carry out tasks any time they want, stop at any moment if necessary and continue studying when they again have time for that. It gives freedom of choice and planning their lives. Once the task is ready, they can send it to their tutor for checking via e-mail.

The implementation of the project has three stages: digitization of teaching materials, their digitalization and digital transformation of the educational process. The work at these three stages requires implementation of modern digital technologies from a teacher of a foreign language. This situation is a new challenge that sets the task of continuous professional development of the teacher. Before designing the digital materials it was necessary for the English teacher to attend the course “Information systems, electronic educational environment, the fundamentals of on-line course design” provided by MADI Institute of Professional Development. The course gave the opportunity to improve digital technology skills of teachers and apply them for teaching materials design. Besides, at each stage of the project, it was possible to consult IT specialists to solve the problems.

3. Materials and methods
The purpose of the English course for correspondence students is to prepare them for using a foreign language in their future professional activities, both in written and oral communication. In addition, the acquired knowledge can serve as a basis for further self-education. The selection of the content of training is based on the survey professional foreign language needs of engineers [15].

The teaching content and methods are presented in the textbook “English for Engineers” [16] and the digital materials were worked out to supplement it. The textbook is the main part of the educational set of materials. Its goal is to provide a basic course of English for engineering students of the first and second years of study. The audio supplement (CD) is used in parallel with the textbook, and the manual includes additional texts with tasks for developing various types of reading at the final stage of training. The textbook is aimed at the development of learners’ reading, speaking, listening and writing skills.

As one of the main objectives of the English course in non-linguistic universities remains teaching reading. The textbook develops four types of reading – critical, skimming, scanning and survey types of reading, the choice of which is determined by the task set when working with the original literature: authentic general scientific articles, monographs, regional and cross-cultural literature, technical documentation, materials of polytechnic and popular science, information that determines our behavior in everyday life.

As far as the development of oral speech skills is concerned, the textbook prepares students to implement the prepared monologue in the form of a presentation or report, which, as recent studies show, is the most typical for the sphere of professional communication. An attempt is made to prepare students to participate in elementary dialogue (acquaintance, presentation, expression of request, etc.) and polylogue (conversation or discussion), which implies the necessity of developing the ability of expressing their own opinion, approval or disapproval of other people's statements, requesting information, etc. The textbook provides the ability to perceive oral texts of a polytechnic nature, presented at an average pace.

In addition, the textbook prepares students for written communication in English. The plan provides the formation of skills necessary to fill out various questionnaires and forms, conducting informal correspondence and writing certain types of business letters. Along with this material, the skills of fixing information extracted from the written text (in the form of annotations and abstracts) and translation of texts in the specialty from English into Russian are traditionally developed.

The textbook has two parts. The first part “English in Practice” contains 13 Units. They have identical structure and consist of the following sections:

• Language Material
Listening
Speaking
Reading
Writing.

Though the sections are differentiated according to the main type of speech activity in focus, the tasks of each section involve the interrelated development of reading, listening, speaking and writing skills, which is natural for verbal communication in real life.

According to the University foreign language program, correspondence students study three Units for the first term. That means that supplementary digital materials should correspond the teaching content of the three Units. Before preparing the digital materials, the Foreign Language Department undertook a pilot survey and interviewed quite a number of correspondence students in order to find out their preferences and wishes concerning digital teaching materials. There were two possible approaches: to give a detailed grammar description in a written form or to explain vocabulary, grammar rules imitating the presence of the tutor. The vast majority of the respondents said that they preferred to see a tutor explaining grammar rules on the screen of their computers instead of reading explanations of language material themselves. Taking this information into account and the recommendations received form IT specialists, we began the process of digitization on the platform of iSpring Suit which is an addition to Microsoft PowerPoint. It is a rather new, but very successful program which serves for creation of various courses. With the help of iSpring Suit, it is easy to construct your own course of studying by adding interactive interface, tests, presentations and different educational simulators.

4. The Discussion of the Results
Following the Unit structure, it was necessary to begin with the first section "Language Material" that contains subsections “Vocabulary” and “Grammar”. They involve working on language material, which is a kind of means of implementing speech communication.

Working on language material begins with the introduction and consolidation of “Vocabulary”. The textbook activates about 1300 words and phrases that belong to the most frequent general scientific vocabulary. Each Unit has approximately 45 words. These words are digitized and recorded in the digital course separately, one by one. The student is able to listen to any word by clicking on a chosen vocabulary item. The word can be played at a normal pace or in slow motion.

New words are also introduced in sentences. Various exercises are offered to activate new words. Two-purpose exercises are of particular note: subtraction a word from a row, training skills of rapid reading on the one hand and increasing the repeatability of lexical material on the other hand.

Particular attention is paid to the expansion of the potential vocabulary of students. In this regard, in each section there are exercises for recognition and correct interpretation of international words. There is a series of exercises aimed at mastering the word-building elements. The 19 elements included in the textbook are the most typical of the sphere of professional communication of future engineers. This series of exercises ends with a small text containing previously studied derivatives of words built on worked word-formation models, meaning of which each student must deduce on the basis of the root and affix known to him.

There are also exercises to develop language guess, exercises on the formation of skills to use the dictionary, crosswords etc. Repeated use of the inserted and fixed words in other sections of the Units provides the frequent occurrence of vocabulary necessary for mastering active and passive vocabulary.

While creating exercises it was necessary to take into consideration the peculiarities of Generation Z. It is well-known that it is very difficult for representatives of Generation Z to hold the attention for a long time. According to the latest research [17], it became clear that the continuation of students’ attention can be focused on one task for about eight seconds and after that they have to switch to another activity. When designing digital materials, it was necessary to introduce new educational material in small portions by dividing it into blocks using visual images in the form of tables, graphs and drawings. At the same time, each portion of the new material should be followed by its primary
fixation. Exercises should be not too big and different in the form of execution. It is advisable to ensure the use of new material in all types of speech activities: listening, speaking, reading and writing, providing multiple repetition of the studied material in new situations. Some thematic videos can be created for the introduction of new educational material. So digitizing exercises for Vocabulary, we divided one rule into several portions. It is also very important to give exercises for drilling grammar rules after each part.

Designing exercises, it is necessary to take into account that a student should hear the pronunciation of all the words and phrases within the program as well as the texts. It is compulsory for further reproduction of sounds without any errors. Besides, it is possible improve traditional education by transferring it into a digital lecture with the teacher illustrating all the material in a digital format. Watching such lectures students will have the opportunity to stop the video at any time they want, rewind it, play it again as many times as they need, and thus repeat grammar rules and structures of each of the Units and learn the rules properly. Acting in this way, students will have enough time to absorb new information, fulfill all tasks and exercises and learn the words by heart without any haste. With the digital course, we can compensate the lack of academic hours at correspondence department without losing any detail of the educational program.

The first section of the Unit also provides work on "Grammar". The basis for the selection of grammatical material is the data of linguistic and statistical studies, revealing the most typical for the scientific and technical style of the structure. Students have the opportunity to get acquainted with the meaning of selected grammatical phenomena (illustrated with the help of a small written text), with their form (tables) and consolidate the skills formed in a series of communicative exercises. It should be noted that in the section "Students' Material" one can find grammatical comments, allowing a student, if necessary, to study or repeat a particular grammatical phenomenon.

Instructions for the exercises in this section are presented in Russian, so that students' attention could be focused on the phenomenon being studied. In the digital course, all tasks to the exercises are also given in Russian language. We can take as an example one of the first grammar rule, put it into a table, divide it into three different parts and give exercises for drilling after each part (table 1–3).

**Table 1.** Affirmative sentences with the verb “to be” in the Present Indefinite Tense /The first part/.

| person/number | Sing.               | Plur.              |
|---------------|---------------------|--------------------|
| 1 p           | I am a student      | We are students    |
| 2 p           | You are a student   | You are students   |
| 3 p           | He is a student     | They are students  |
|               | She is a student    |                    |
|               | It is a dog         |                    |

**Table 2.** Affirmative sentences with the verb “to be” in the Past Indefinite Tense /The second part/.

| person/number | Sing.               | Plur.              |
|---------------|---------------------|--------------------|
| 1 p           | I was a student     | We were students   |
| 2 p           | You were a student  | You were students  |
| 3 p           | He was a student    | They were students |
|               | She was a student   |                    |
|               | It was a dog        |                    |

**Table 3.** Affirmative sentences with the verb “to be” in the Future Indefinite Tense /The third part/.

| Person/number | Sing.               | Plur.              |
|---------------|---------------------|--------------------|
| 1 p           | I will be a student | We will be students|
| 2 p           | You will be a student| You will be students|
| 3 p           | He will be a student | They will be students|
|               | She will be a student|                    |
|               | It will be cold     |                    |
Exercises that follow each of the three parts should be short and different in the form of execution. It is obvious that drills for each part should include all types of activity such as listening, speaking, reading and writing.

Section "Listening" presents assignments to two texts so that students have the opportunity to listen to. Listening to the texts is preceded by brief introductory information and an instruction. Introductory information, on the one hand, introduces the student to the situation, creates conditions for the emergence of students listening motivation, on the other hand, it facilitates oral comprehension of the text, as it orients them to a certain content of the text and provides the necessary language support.

Executions of the tasks for the first text requires, as a rule, its general understanding. The control of understanding is achieved by performing question-and-answer exercises, with students being pre-familiarized with the questions. The information extracted when listening to the text can be used by students in subsequent assignments.

At the final stage of working on the text and for correct understanding, as well as to identify obscure fragments and eliminate the causes of this misunderstanding, students should write out all the unknown words.

The textbook and the digital course provide the gradual complication of the language material of the texts for listening. It is also recommended to gradually increase the rate of presentation of texts.

In accordance with modern requirements, the section "Speaking" provides tasks for the development of monological speech skills on the given topic. The list of words and phrases provides the necessary language support. Students can use them as samples to build sentences. Such a list of questions provides a monological statement consisting of 6–7 or more sentences. Particular attention should be paid to the students’ expressing their own opinions. Correspondence students can send digitally typed audio of their speech as it was mentioned above.

There is an extra opportunity the digital course offers correspondence students: they can record their monologue and send it to the teacher. In this way, their speaking skills on a particular topic or theme can be checked and controlled by the teacher. There are six oral tasks in this section and thus six different topics should be recorded by the correspondence students. They are the following:

- The school I went to.
- My Institute.
- City traffic of future.
- The scientist I’d like a new street to be named after.
- One of the greatest inventions of the mankind.
- Choosing a tour route.

The student’s monologue should take at least two minutes. He or she type their speech in the special program of the digital course and afterwards press the button and send it to the teacher.

In the section "Reading" there are four texts: A, B, C, D, each of them has a specific methodological task. In the selection of text material the main criterion was the informative value of texts and their compliance with the interests of the correspondence students of technical universities. Texts content data of particular interest to students were obtained with the help of questionnaires.

Most of the texts are samples of the original English and American literature. In some cases, they have been adapted for better understanding and reduced in order to facilitate the process of learning for the part-time students.

Text A is considered to be the main text for studying, and therefore it has the most developed system of tasks. First of all, there is a brief introduction to the situation that precedes the execution of the tasks. Before reading the text, students are offered the tasks aimed at developing probabilistic forecasting, which means predicting the whole content or its elements on the basis of what has already been perceived. This foresight is expressed in the textbook in the form of hypotheses about the most likely content of the text. Multiple choice exercises are often used for this purpose.

In addition, these tasks create a natural motive for the first reference to the text in order to test learners’ own hypotheses, which provides practice in fast types of reading, usually skimming, which takes from two to five minutes. Then students are given the task to find fragments of the text of a
certain content. As a rule, these passages are the most saturated in terms of activated language material: vocabulary and grammar. For this purpose, it is supposed to use search reading.

The discovered fragments are intended for practice in the learning form of reading, which involves a complete and accurate understanding of the text. The means of verification is written translation typed by correspondence students and send for the checking to the teacher.

The main requirement for the translation is its adequacy to the original. Particular attention should be paid to the language means, formalizing semantic links.

Based on the importance of reading aloud for the development of speaking skills (pronunciation training, the formation of automatic pronunciation, etc.), special attention is given to the development of reading mechanisms in the textbook. For each text A, a student can find a task to read the fragment aloud. Since reading aloud is practiced on passages that must previously be read silently and understood, for this purpose one of the fragments selected earlier for practicing the student's reading is chosen. Students are given the opportunity to get acquainted with a sample of the sound of this fragment. It is presented in a recording of a digital course. Then the student independently solves two problems: at the first stage – to achieve the correct reading of the text, at the second – to increase the speed of its pronunciation.

Text B is designed to develop the skill of "fast reading" and contains no more than 3–4 % of new words, the translation of which is given in brackets in the text. This makes it possible not to interrupt the reading process and not to waste time searching for the meaning of a word in the dictionary. It is planned to increase the rate of reading, ranging from 70 words per minute in the first lessons to 100 words per minute in the last.

The main task of working on text B is to achieve the understanding of the basic facts contained in the text, which is checked by means of a multiple choice test and other types of tasks.

The main task of working on text C is to develop the ability to subtract certain information from the text. To implement the task, the text is divided into fragments and provided with pre-text questions.

Within the digital course for correspondence students we make some changes for easier transformation of it into a digital format. The texts were recorded and transferred to a digital format so that the students could clarify all difficulties in pronunciation and have the chance to playback texts as many times as they need. Thus, they can read and listen to the text at the same time, and pronounce all the sounds, words and phrases correctly, without any mistakes. Besides, they can make a self-checking, for example, read a sentence, then play it and find out if his or her pronunciation corresponds to the original.

For the correspondence students there is also a section in the digital course with the tasks of writing business letters, postcards, filling different information and registration forms, landing cards and customs declarations. Below there is an example of the form for filling in.

| Table 4. Registration form |
|-----------------------------|
| Registration Form            |
| Full name                   |
| Age                         |
| Nationality                 |
| Occupation                  |
| Home address                |
| Length of course            |
| Number of hours per day     |
| Course starting date        |
| Accommodation required or not required |
| Signature                   |

The process of digitalization results in the digital English training materials. Digital transformation requires recommendations for their implementation in the educational process. The Foreign Languages
Department organizes a workshop for all the teachers on the methods of using digital materials. Teachers have to acquire new skills in a digital sphere. Later on digital English and other foreign languages teaching materials will be worked out for the students of different levels of high engineering education of daytime and evening departments.

5. Conclusions
Digitalization has become an integral part of all spheres of modern society, including the system of higher education. Digital solutions introduced in the educational process offer a lot of advantages. In Russian engineering universities, educators introduce them for a broad scope of disciplines. The discipline “Foreign language” is among them.

MADI Foreign Languages Department worked out digital English teaching materials for engineering students of the University correspondence department. This digital English course is intended for the development of foreign language communicative competence including reading, writing, listening, and speaking skills. The course is aimed at overcoming learners’ difficulties and organizes their self-study work. The digital English course give correspondence students the opportunity of flexibility of self-study in any place with an Internet connection, self-paced learning and immediate assessment and feedback. The course provides students’ involving in the learning process. They can listen to the texts or words, read or watch grammar material explained by the teacher, type the results of their homework and send them to the teacher.

The processes of digitization, digitalization, and digital transformation used for the development of the English correspondence course can be applied for the creation of similar courses for the students of other levels of higher education including daytime and evening departments.

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