SUMMARY

The article is devoted to the actual task of increasing competitiveness in the international market of educational services, the possibilities of the system of pre-university training of foreign citizens in this process are considered. Some methodical recommendations of training on engineering and technical profile are given from the possibilities of the system of pre-international market of educational services.

INTEGRABILITY AS A WAY TO INCREASE THE PRACTICAL FOCUS OF ENGINEERING EDUCATION PROGRAMS

A.I. Blesman, V.V. Danshina

The GEF non-compliance is revealed with the violation of the system of technical education of foreign citizens in the process. It is proposed to restore the training programs implementation.

TECHNICAL EDUCATION IN RUSSIA: PROBLEMS, WAYS OF SOLUTION

V.P. Soloviev, T.A. Pereskokova

The problems of providing the country’s economy with qualified personnel with higher education are considered. The need of the modernization of higher education, aimed at training engineers is shown. The level gap in training specialists led to the violation of the system of technical education. It is proposed to restore the training of engineers in key (key) specialties. To provide the personnel of the developing sphere of services with the introduction of an “applied” bachelor’s degree with a reduced period of study.

THE ROLE AND PLACE OF TEACHERS OF GENERAL TECHNICAL DISCIPLINES IN MODERN ENGINEERING EDUCATION

A.K. Tomlin, E.N. Pashkov

The article analyzes the modern requirements for the competencies of the technical university teacher. Attention is drawn to the methodological aspects of teaching general technical disciplines and providing the educational process with modern electronic educational resources. The problem of an objective assessment of the teacher’s work quality is touched upon. Proposals are being made to develop the competencies of the higher educational institution of the university.
THE REGIONAL ASPECTS OF STAFF TRAINING FOR WORK IN LAND RECLAMATION: INVERSE RELATIONSHIP EFFECT

G.V. Olgarenko, V.V. Kashtanov
All-Russia Scientific and Research Institute for Irrigation and Farming Water Supply Systems “Raduga”

This article discusses the issues of training methods using in the skills up-grading system and re-training of the engineering staff in the field of land reclamation. Based on experience and statistics analysis, there is presented the attention of persons interested in continuous training of farming experts to the organization order and staff training level.

ACADEMIC MOBILITY OF TECHNOLOGICAL UNIVERSITY STUDENTS IN HIGHER EDUCATIONAL INSTITUTIONS OF FRANCE

N.V. Kraysman, F.T. Shageeva
Kazan National Research Technological University

The paper focuses on the academic mobility of the technological university students as a result of cross-disciplinary programs mastering of additional education. The program “Professional translation” directed to the formation of professional communicative competence in French is represented. The graduates of this program successfully participate in the linguistic trainings, take the international examinations, continue the vocational training at the French universities.

CONCEPTUAL MODEL OF FORMATION OF SYSTEM ENGINEERING COMPETENCE: ESSENCE AND DIDACTIC TOOLS

E.V. Godlevskaya
Chelyabinsk Institute of Professional Development
V.V. Lkhodelev
South Ural State University (National Research University)

The requirements of the new technological structure to engineering activity and engineering education in the country is to increase the effectiveness of independent student teaching. The essential factor determining the success of independent work is its planning. Knowledge control is one of the main forms of the learning process, and its conditions have been brought into line with the new conditions and tasks of the development of higher education.

THE SKILLS DEVELOPMENT OF SYSTEM THINKING IN STUDENTS OF ENGINEERING SPECIALIZATION (ON THE EXAMPLE OF DEPARTMENT OF GEOTECHNICS SPPGASU)

O.O. Golman
Saint Petersburg State University
A.J. Osoin
Saint Petersburg State University of Architecture and Civil Engineering

The article examines the role of the educational institution in the formation of the engineering thinking of future subjects of labor. Defined the special aspects of engineer thinking and contradictions which have to be overcome in the professional work. As a developing technology of the systematical thinking of an engineer, the authors propose to use a Mind map that was integrated into the educational process of geotechnical students in 2016–2018, and showed its effectiveness in practice.

EDUCATIONAL AND RESEARCH COMPLEX FOR AUTOMATED GAS TURBINE ENGINES TESTING

V.A. Grigor’ev, P.G. Zhukov,
D.S. Kalabudov, S.K. Bisharev
Samara National Research University named after S.P. Korolev

The article analyzes the types of management technologies used in the engineering education, with examples of their use and opportunities for updating in accordance with the requirements, regulated by the Federal law “On education in Russian Federation”. Recommendations in choosing the type of managerial technologies in engineering education with the aim of improving its quality in modern conditions are provided in the article.
the main issue, and planning for achieving the goals, including using road maps, will be additional. Processing and analysis of big data: education in a graduate school will be designed in such a way that students will need to analyze data from lectures and workshops, review materials, databases, etc. to get answers to questions during testing and final certification. Self-assessment and evaluation of the success of others: a graduate student will be able to assess their success with the help of assessments for the final certification. In addition, during the collective work in the graduate school, each student, after passing the tests, will be able to see the number of correct answers to the questions during group work, which is necessary for the organization of modern processes of teamwork in engineering practice. The ability to acquire the material of complex concepts of the digital economy in a generalized way to the employer, other students, future consumers of digital goods and services. During the work of the postgraduate school for educating research teachers, a clear understanding of the digital economy and its “cross-cutting” technologies was planned. The basis for using knowledge and skills in the real economy should be an understanding of the technological base that is currently available.

THE ROLE OF FOREIGN LANGUAGE SOURCES IN THE FORMATION OF STUDENTS’ ANALYSIS SKILLS WHILE PERFORMING INDIVIDUAL WORKS

A.L. Shepelev, E.A. Shepeleva
Northern (Arctic) Federal University named after M.V. Lomonosov

The article contains the analysis of the need and the possibility of using foreign language sources by students while performing individual works and provides recommendations on the formation of analysis skills of foreign publications in order to obtain relevant scientific and technical information about the current experience of experts in other countries on the topic explored.

METHODICAL ASPECTS AND IMPLEMENTATION OF THE PROGRAM OF ADDITIONAL PROFESSIONAL EDUCATION

O. Yu. Khatsrinova, S.V. Vodopyanova, M.F. Galakhov
Kazan National Research Technological University

In article tasks of additional professional education of experts are considered. Problems of implementation of additional educational programs of training of workers for chemical production reveal. Methodical aspects of the organization of process of training are shown.

ONCE AGAIN ON THE CHALLENGES FACED IN THE INTERACTION BETWEEN EDUCATION AND LABOR MARKET

L.N. Kim, I.N. Mishchenko
Moscow State Academy of Water Transport

The article deals with the aspects of the interaction of the education and labor market, their negative aspects which hamper the establishment of business relations between universities and large corporations. Undoubtedly, both sides are guilty in this situation, but the main culprit, of course, is the university. Firstly, today universities are rather conservative and do not always react quickly and efficiently to business appeals. And business cannot wait indefinitely, because time is the main resource for business. In addition, the unprofessional performance of universities together with the poor organization of methodological work, this does not allow quickly formulating “breakthrough” technological ideas in the educational process have their impact. When satisfying business requests, the latter would not have the desire to open corporate universities, i.e. to compete with universities in the educational market and I must say to compete quite successfully.

To train specialists who meet the demands of the labor market, it is necessary to have teachers with a high level of professional competence and their ability to convey knowledge of the specifics to professionals. Today, universities are not able to independently provide the graduate with current specialized knowledge, which has led to the “washing away” of professional personnel from the enterprise associated with the age of the latter. To begin training personnel at the enterprises’ request, the university needs to develop programs, integrate them into the educational process, recruit and train teachers, as their own university’s lecturers are not always ready for it.

CONTINUING ENGINEERING EDUCATION REQUIRES INSTITUTIONAL SUPPORT

O.V. Budzinskaya, V.S. Sheinbaum
Gubkin Russian State University of Oil and Gas (National Research University) Saint Petersburg State Electrotechnical University

The article raises the issue of the need to fix in professional standards - the main normative documents in the field of qualifications - requirements concerning the mandatory continuity of professional competencies of employees, including through the formation of additional professional education. Options are proposed for introducing these requirements without changing the established format of professional standards. It also proposed a list and justified the need to include indicators of university activities related to additional professional education in the indicators of state reporting and domestic university rankings.

BLENDED LEARNING: DESIGN AND ORGANIZATION CHARACTERISTICS ON THE BASIS OF INTERNET RESOURCES

N.P. Goncharuk, E.I. Khromova
Kazan National Research Technological University

The article is devoted to the issues of informatization of engineering education in accordance with the needs of the digital economy. The purpose of this article is to analyze the didactic capabilities of digital technologies, to study the ways of using information technologies in the training process of future engineers, to consider models for integrating educational technologies with modern digital technologies. The article identifies the main characteristics of blended learning, as a means of implementing an integrated learning model with the involvement of Internet resources.

ECOLOGIZATION OF THE EDUCATIONAL ENVIRONMENT TECHNICAL EDUCATION

V.A. Danilenkova
Kaliningrad State Technical University

In this article, the idea of ecologizing the educational environment of a technical college is substantiated. On the one hand, from the standpoint of the process approach, the involvement and interaction of the administration—teachers—students in creating conditions for the development of the environmental consciousness of students, increasing their adaptation to learning.

ASSESSING INDICATORS IMPORTANCE IN INTERNAL MONITORING: DIFFERENCE BETWEEN STUDENTS’ AND LECTURERS’ OPINIONS

O.Yu. Belash, A.A. Chirkova
Saint Petersburg State Electrotechnical University "LETI"

This article provides an overview of indicators used in education quality internal monitoring based on students’ and lecturers’ opinions and also stresses the need to take into account the different importance of indicators analyzed in education quality assessment. The study presents the differences between the opinions of students and lecturers regarding the importance of the indicators used in
The process of formation of professional mobility. The leading methods are the development, the formation of his profession, the most important condition for professional mobility to another contributes to the development of the future specialist’s susceptibility to changes, innovations in the process of professional activity, the formation of a highly culturally responsible for the consequences of professional decision-making.

**TECHNOLOGY OF ORGANIZATION OF ENVIRONMENTAL EDUCATION OF THE UNIVERSITY**

I.V. Vishniacova
Kazan National Research Technological University

The formation of the developing environment of the University is a necessary condition for the training of highly qualified engineers. The purpose of technology organization of the developing environment of the University is to create conditions for the formation of readiness for the management of intellectual property. To achieve the goal, the following tasks are solved: creation of organizational and managerial support; creation of a system of motivation for the management of intellectual property; consulting, teaching of relevant disciplines; establishment of links with organizations that make up the infrastructure of the intellectual property market.

**QUALITY EXAMINATION OF THE TEST RESULT**

S.D. Starjina, N.K. Nureev
Kazan National Research Technological University

When assessing the quality of a student’s knowledge gained through testing, each time a question arises: how objective is the knowledge gained through testing, each time a question arises: how objective is the result of this test obtained? Obviously, the objectivity of the student’s result depends on the accuracy of the test, both on the tool and on the length of time (within reasonable limits) allowed for this test. The paper proposes a sound methodology for assessing the objectivity (quality) of the test result, which can be easily applied in practice.