

## REPORT

### **of the activities of the Educational and Methodological Association of the RK universities in technical areas of training at Karaganda State Technical University for the 2019-2020 academic year**

Karaganda State Technical University by the order of the Ministry of Education and Science of the Republic of Kazakhstan No. 562 dated 12.10.2018 was approved as the basic university in 4 areas of training:

1. **Engineering** (Mechanics and Metalworking, Geophysical Engineering and Technologies);
2. **Manufacturing and Processing Industries** (Mining);
3. **Standardization, Certification and Metrology** (by industries);
4. **Hygiene and occupational safety.**

The work of the EMA was carried out in accordance with the approved plan of work corresponding to the recommendations of the REMC and the tasks of the MES RK.

Within the framework of the main activities of the EMA of universities at KSTU, the following work has been done:

- The working plan of the EMA of universities at KSTU for the 2019-2020 academic year has been developed.
- The staff of the EMA-KSTU has been formed in various areas of training in the amount of 84 people.
- The website of the University has been updated in terms of the EMA-KSTU, where the main directions of the EMA activities and a list of fixed areas of training (groups of educational programs) are indicated.
- A special portal of the GPM-EMA has been formed available for universities and employers in order to exchange proposals and recommendations for ensuring the quality of education.
- A list of educational programs of higher and postgraduate education that are updated (developed) based on the approved 480 professional standards, has been formed.
- By the order of the Department of Military and Professional Education and SPP "Atameken", 55 professional standards related to the supervised areas of training have been analyzed. For this, all approved professional standards in accordance with their profile have been sent to 54 members of the GPM-EMA representing 22 universities of the Republic of Kazakhstan and 20 research and production organizations for detailed consideration in order to update educational programs and to form high-quality learning outcomes. The fundamental shortcomings of the approved professional standards have been revealed and

specific recommendations have been made for closer interaction of universities with professional associations of employers for a qualitative update of educational programs based on balanced learning outcomes.

- On the recommendation of the REMC, proposals have been prepared for the implementation of the results of the project activities of the GPM - EMA into regulatory and program documents. A new structure of the GPM - EMA has been formed, in which representation of various enterprises and associations of employers has been expanded (38) that makes about 30 % of the representation of universities.

- As part of the practical implementation of the Road map for updating the educational programs of higher education based on the approved professional standards and requirements of employers for 17 educational programs, Key Learning Outcomes have been developed that were transferred to the Ministry of Education and Science of the Republic of Kazakhstan (June 2020).

The successful completion of this complex work has been preceded by coordination of efforts of all members of the EMA Council, forming an expert group of 11 people to summarize the presented Learning Outcomes in the format of competences. Certain aspects of implementing the Road map have been considered at 6 meetings of the EMA Council held online since December 2019 to June 2020.

- Recommendations have been prepared for assuring the quality of higher education based on the development of the National Qualifications System, matching professional and educational standards and increasing the effectiveness of interaction between higher education and the world of work.

- At the recommendation of the REMC, a Perspective thematic plan for publishing educational and methodological literature of the EMA-REMC KSTU has been formed, which includes 48 titles of textbooks and tutorials for students studying in supervised areas of training in co-authorship with representatives of universities of KSTU, AUPET, KazATK, EITI, PSU, KazNITU, KSTU, EKSTU, KATU, etc. The formed Templan of publications has been developed on the basis of monitoring the provision of the educational process with textbooks and tutorials in supervised areas of training.

- By the order of the Department of Higher Education, a Road map has been developed for introduction of textbooks in the Kazakh language into the educational process within the framework of the project “New humanitarian knowledge. 100 new textbooks in the Kazakh language” (September 2019).

- Based on the recommendation of the Department of Higher Education and the Letter from the Graduate School of Education of Nazarbayev University, the analysis of the competences in demand in the labor market within the next 5

years has been made for 6 educational programs of bachelor's degree based on assessment sheets (December 2019).

– By the order of the Department of Higher Education, correspondence tables of educational programs of postgraduate education and specialties of bachelor's and master's degrees for admission to the master's and doctoral levels have been formed and transferred to the Ministry of Education and Science of the Republic of Kazakhstan (January 2020).

– A list of reviewers of educational and methodological literature in supervised areas of training has been sent to the Republican Scientific and Practical Center "Textbook" (January 2020).

– By the order of the Department of Higher Education, a list of major disciplines has been formed for conducting complex testing for admission to the master's degree programs in the areas of the EMA-KSTU and test specifications. The materials have been submitted to the Ministry of Education and Science of the Republic of Kazakhstan (February 2020),

– At the request of the Republican Association of Mining and Metallurgical Enterprises regarding the use of 49 professional standards, the data of the quality of professional standards and recommendations for their use in educational programs in mining and metallurgical areas of training (February 2020) have been provided.

– By the order of the National Testing Center of the Ministry of Education and Science of the Republic of Kazakhstan, a list of disciplines for conducting the EEEA in bachelor's specialties assigned to the EMA-KSTU has been prepared.

– By the order of the Department of Higher Education, a revised Regulation on the EMA-REMC has been developed, which takes into account modern methodological approaches to improve higher education in the context of developing the National Qualifications System, increasing the competitiveness and quality of education. The Regulation has been transferred to the Ministry of Education and Science of the Republic of Kazakhstan (March 2020).

– By the order of the Department of Higher Education, the correspondence tables of educational programs of postgraduate education and areas of training for bachelor's and master's degrees have been clarified, in which the list of training areas for admission to master's and doctoral studies has been significantly expanded (May 2020).

– By the order of the Department of Higher Education, the analysis of innovative technologies of student-centered education with emphasis on competence-based education has been carried out. The conceptual foundations of this technology have been approved by the members of the EMA Council. It has been recommended to prepare a scientific article on this topic.

– By the order of the Department of Higher Education and recommendation of the REMC, a draft Concept for the development of lifelong education for adults of the Republic of Kazakhstan for 2020-2025 has been developed, which contains the goal and objectives of the Concept, the main principles and aspects of implementation. Presentation of this Concept developed in collaboration with the EMA-MUIT, has been approved and sent to the Ministry of Education and Science of the Republic of Kazakhstan (June 2020).

– At the instruction of the Atameken APP:

– an analysis of the National Qualifications Framework has been carried out;

– an expert report has been given for two professional standards, in which fundamental shortcomings were identified.

– There has been adopted for consideration and given 23 expert reports of the textbooks and tutorials recommended for publication with the stamp of the EMA-REMC KSTU, presented by the universities: ENU n.a. L.N. Gumilyov, KazATK n.a. Tynyshpayev, KazRTU n.a. Satpayev, KSU n.a. A. Baitursynov, KSTU and others (October 2019 - June 2020).

– At the instructions of the Ministry of Education and Science of the Republic of Kazakhstan, the Center of the Bologna Process, a consolidated schedule has been developed for conjugation of professional standards of technical and technological orientation with the list of educational programs of higher education assigned to the EMA - KSTU.

– The materials have been prepared for presentation of Rector M. Ibatov, Chairman of the EMA-KSTU Council at the online meeting of the Minister of Education and Science of the Republic of Kazakhstan on the results of practical implementation of the Road map for updating supervised educational programs of higher education in accordance with the approved professional standards and employers' requirements and formation of the key learning outcomes (June 2020).

**Rector, Chairman of the EMA-KSTU Council**

 **M.K. Ibatov**

**EMA Head**

 **Yu.N. Pak**