



«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТИҢ  
ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО  
АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR  
ACCREDITATION AND RATING

*Addressed  
Accreditation  
the Council of the IAAR*

## REPORT

**on the results of the external expert assessment Commission for compliance with the requirements of the standards of specialized accreditation of educational programs  
5B011200/6B01504 – «Chemistry», 6M011200/7M01504 – « Chemistry»,  
5B060600/6B05302 – «Chemistry», 6M060600/7M05302 – «Chemistry» RSE on REM  
“Sarsen Amanzholov East Kazakhstan state University”**

**from «04» to «06» June 2020**

**Ust-Kamenogorsk**

**« 06 » June 2020**

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**External expert commission**

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## (I) LIST OF DESIGNATIONS AND ABBREVIATIONS

<b>IAAR</b>	Independent Agency for accreditation and rating
<b>EKSU</b>	RSE on REM “Sarsen Amanzholov East Kazakhstan state University”
<b>EEC</b>	The external expert Commission of IAAR
<b>BD</b>	Basic discipline
<b>FQW</b>	Final qualifying work
<b>IRD</b>	Internal regulatory documents
<b>HE</b>	Higher education
<b>EEEEA</b>	External evaluation of educational achievements
<b>SAC</b>	State attestation commission
<b>SMSE RK</b>	State mandatory standard of education of the Republic of Kazakhstan
<b>UNT</b>	Unified national test
<b>ITW</b>	Individual teacher's work plan
<b>IOS</b>	International organization for standardization
<b>IC</b>	Individual curriculum
<b>CBS</b>	Candidate of biology
<b>CCES</b>	Catalog of compulsory and elective subjects
<b>KTO</b>	Credit technology of education
<b>CPS</b>	Candidate of pedagogics
<b>CTS</b>	Candidate of technical Sciences
<b>CPMS</b>	Candidate of physical and mathematical Sciences
<b>CP</b>	Candidate of philosophy
<b>PhD in Law</b>	PhD in law
<b>MES RK</b>	Ministry of education and science of the Republic of Kazakhstan
<b>IS</b>	International standard
<b>MEP</b>	Modular educational program
<b>RL</b>	Research laboratory
<b>RW</b>	Research work
<b>SRWS</b>	Scientific-research work of the student
<b>SRWM</b>	Research work of a master's student
<b>SRWD</b>	Research work of a doctoral student
<b>NFQ</b>	The national framework of qualifications
<b>NQS</b>	National qualifications system
<b>GES</b>	General education subjects
<b>EP</b>	Educational program
<b>RO</b>	Registration office
<b>SD</b>	Specialized disciplines
<b>FM</b>	Faculty members
<b>RK</b>	Republic of Kazakhstan
<b>RSO</b>	Republican subject Olympiad
<b>WC</b>	Working curriculum
<b>MM</b>	Mass media
<b>QMS</b>	Quality management system
<b>IWS</b>	Independent work of a student
<b>IWST</b>	Independent work of a student with a teacher
<b>IWS</b>	Independent work of students
<b>IWST</b>	Independent work of students with a teacher
<b>SC</b>	Standard curriculum
<b>EMCD</b>	Educational and methodical complex of the discipline
<b>EMCS</b>	Educational and methodical complex of specialties
<b>EMW</b>	Educational and methodical work

## (II) INTRODUCTION

In accordance with order No. 35-20-OD of 24.04.2020 of the Independent accreditation and rating Agency, from June 04 to June 06, 2020, an external expert Commission assessed the compliance of the RSE at the Sarsen Amanzholov East Kazakhstan state University (hereinafter referred to as EKSU) with the standards of specialized accreditation of educational programs of the IAAR (dated February 24, 2017, No. 10-17-OD, fifth edition).

The report of the External expert Commission (ECC) contains an assessment of the compliance of EKSU activities within the framework of specialized accreditation of educational programs with the IAAR criteria, and recommendations of the ECC for further improvement of the parameters of the specialized profile.

### **EEC composition:**

Commission chairman NAAR/IAAR – Kamkin Viktor Aleksandrovich, PhD in Biological Sciences, associate Professor of S. Toraighyrov Pavlodar state University (Pavlodar), (EP 5B060700/6B05101 – «Biology», 6M060700/7M05101 – «Biology»).

Observer from the NAAR/IAAR – Niyazova Guliyash Balkenovna, project manager for the institutional and specialized accreditation of NAAR / IAAR universities (Nur-Sultan).

Expert NAAR/IAAR – Abeldinov Elaman Kanatovich, PhD (Nur-Sultan), (EP 5B060600/6B05302 – «Chemistry», 6M060600/7M05302 – «Chemistry»).

Expert NAAR/IAAR – Musdybayeva Sharbanu Akkazievna, k.ch.sc., associate Professor of the Kazakh engineering and technological University (Almaty), (EP 5B011200/6B01504 – «Chemistry», 6M011200/7M01504 – «Chemistry»).

Expert NAAR/IAAR – Myasnikova Lyudmila Nikolaevna, k.ph.-m.sc., associate Professor of Aktobe state regional University named after K. Zhubanov (Aktobe), (EP 5B060200/6B01501 – «Informatics», 6M060200/7M06101 – «Informatics»).

Expert NAAR/IAAR – Safarov Ruslan Zairovich k.ch.sc., associate Professor of the L. N. Gumilyov Eurasian national University (Nur-Sultan), (5B011300/6B01505 = «Biology», 6M011300/7M01505 – «Biology»).

Expert NAAR/IAAR – Tashev Bekbolat Akhanovich, PhD, associate Professor of the Kazakh national women's pedagogical University (г. Алматы), (EP 6D060400/8D05301 – «Physics»).

Expert NAAR/IAAR – Urmashiev Baidaulet Amantayevich, k.ph.-m.sc., associate Professor of Al-Farabi Kazakh national University (Almaty), (EP 5B070300/6B06102 – «Information system», 5B011100/6B01501 – «Informatics»).

Expert NAAR/IAAR, employers' representative – Adylkhan Asset Berdygaliuly, Head of the Human Capital Development Department of "Atameken" East Kazakhstan region (Ust-Kamenogorsk) (EP 6D060400/8D05301 – «Physics»).

Expert NAAR/IAAR, the representative of the student community – Daniyarova Madina Daniyarovna, student EP 5B073100 - "Life safety and environmental protection" of the East Kazakhstan State Technical University. D. Serikbayeva (Ust-Kamenogorsk).

## (III) REPRESENTATION OF THE EDUCATIONAL ORGANISATION

East Kazakhstan state University named after Sarsen Amanzholov (hereinafter – EKSU) was founded in 1952 as the Ust-Kamenogorsk pedagogical Institute. In 1991, the University was transformed into the East Kazakhstan state University. In October 2003, by a decree Of the government of the Republic of Kazakhstan, Sarsen Amanzholov was named after him.

EKSU positions itself as one of the leading educational, scientific, methodological and cultural centers in the Eastern region of the country.

The University provides a wide range and high quality of educational services. The number of students enrolled at the University is 7,034. For working youth who study in a reduced form on the basis of Technical and professional education and higher education, since 2010. The

educational process is organized with the use of distance education. The training is conducted in the state, Russian and English languages. The University consists of 4 faculties, a higher College, and 8 research laboratories and centers. The University provides training in 54 bachelor's educational program (EP), 33 master's EP and 8 PhD EP in the following areas: "Education", "Natural Sciences", "Business", "Technical Sciences", "Services", "Law".

The higher College of EKSU named after S. Amanzholov has been working in the University structure since 2016. Students are enrolled in the Higher College in 9 specialties and 13 qualifications, 2 of which are applied bachelor's degrees.

Implementation of accredited EP 5B011200/6B01504 – "Chemistry", 6M011200/7M01504 – "Chemistry", 5B060600/6B05302 – "Chemistry", 6M060600/7M05302 – "Chemistry" is carried out at the Department of Chemistry of the Faculty of natural Sciences and technologies.

The University has passed the international quality management system certification (certificate from 29.10.05 DIN EN ISO 9001:2000, registration number 04115225 issued by the Munich certification center). In 2005, 2010, 2015. The University has successfully passed state certifications. In 2010, 2014 the Munich center for certification conducted a recertification of the QMS.

The University provides education in the state, Russian and English languages.

The University is a member of 7 international Associations and actively participates in 8 international and national rankings of universities and educational programs. The University has successfully passed institutional accreditation and is accredited for a period of 5 years by NAOKO (IA-A certificate No. 0104 dated may 27, 2019). the certificate is valid for may 27, 2019-May 24, 2024.

The University's bachelor's and master's degree programs passed the international specialized accreditation ASIIN in 2015 and were accredited for 5 years.

Educational activities of the University are carried out on the basis of the Law "On education" of the Republic of Kazakhstan dated July 27, 2007, perpetual license (No. 12020617), issued by the Committee for control in the field of education and science of the Ministry of education and science of the Republic of Kazakhstan on December 11, 2012 and regulated by the Charter of the University, academic policy of EKSU, development Program of EKSU named after Sarsen Amanzholov for 2018 - 2022.

The academic policy of the University is a system of measures, rules and procedures for planning and managing educational activities and effective organization of the educational process aimed at implementing student-oriented learning and improving the quality of education.

#### **(IV) DESCRIPTION OF THE EEC VISIT**

The work of EEC was carried out on the basis Of the approved program of the visit of the External expert Commission on specialized accreditation of educational programs of Sarsen Amanzholov East Kazakhstan state University in the period from 04 to 06 June 2020.

To coordinate the work of the EEC 03.06.2020 hosted a kick-off meeting, which were distributed the powers between the members of the Commission, the revised schedule of the visit, agreed in the choice of methods of examination.

In accordance with the requirements of the standards, the program of the visit included meetings with Vice-rectors, heads of structural divisions, the Dean, heads of departments of the University, teaching staff, students, graduates, employers and employees from structural divisions, interviews and questionnaires of teachers and students in connection with quarantine events were conducted online via videoconference. A total of 90 people took part in the meetings (table 1).

Table 1 - Information about employees and trainees who participated in meetings with EEC IAAR:

Category of participants	Number of participants
Rector	1
Vice-rector's office	2
Heads of structural divisions	22
Deans	1
Head of department	4
Teachers	24
Undergraduate and graduate students	63
Graduates	10
Employers	10
Total	137

Visual inspection was carried out in order to get a General idea of the organization of educational, scientific and methodological processes, material and technical base, determine its compliance with standards, as well as to get an idea of the workplaces of teaching staff, employees and students.

The experts inspected the faculty of Natural Sciences and technologies and its four departments: computer modeling and information technology; chemistry; biology; physics, as well as structural divisions, visited The academic building No. 1 (Scientific library, research hall for faculty and undergraduates, rare books Fund, Electronic reading room, Museum of archeology and cultural heritage of Altai, IT - chemistry office named after Professor Akhmetov A. S., General chemistry training laboratory named after the initiator and first rector of EKSU, doctor of Economics, Academician of the national Academy of Sciences of Kazakhstan YE.Mambetkaziev, laboratory of Phytochemistry, Laboratory of chemical analysis, laboratory of physical and chemical research, pharmaceutical and Toxicological chemistry, Laboratory of analytical chemistry, sports hall, house of students No. 4,5, DSP "Parasat", Trunov fitness center), Educational building No. 8 (national laboratory for collective use), educational building No. 7 (SIC "Surface engineering and tribology", computer classes (rooms 214,214 A, 211A), educational laboratory "Robolab"., etc.

In accordance with the accreditation procedure, a remote survey was conducted for 24 teachers and 63 students.

In order to confirm the information provided in the self-assessment report, external experts requested and analyzed the University's working documentation. In particular, The program of development of S. Amanzholov EKSU for 2018 - 2022, the University's work plan, work plans of departments, the catalog of elective disciplines, Regulations on the Department, master's and bachelor's programs, syllabuses, EMCD, job descriptions, plans and minutes of meetings of the Department, faculty, etc.

Along with this, the experts studied the Internet positioning of the University through the official website of the University <https://www.vkgu.kz/ru>

Members of the EEC visited the base practices of accredited EP programs: EKSU named after S. Amanzholov "Training and production plant" akimat Ust-Kamenogorsk, Branch of RSE "Kazhydromet"; LLP "Pilot farm of oil crop"; LLP "Technoanalyte".

Members of the EEC called for the exams:

EP 5B011200 – "Chemistry":

- Comprehensive exam, 09.00 h, (414 aud.), was attended by 11 students (Kazakh and Russian. group).

## (V) COMPLIANCE WITH SPECIALISED ACCREDITATION STANDARDS

### *5.1. Standard «Management of the educational programme»*

#### *Evidence part*

The educational activity of University is carried out in accordance with normative legal acts of the Republic of Kazakhstan and regulatory documents MES RK in the field of higher education

Documents regulating the academic activities of the University, Academic policy (re-approved at the meeting Of The academic Council of the S. Amanzholov EKSU on December 27, 2018, Protocol No. 6) are available on the University's website in the "Education" section <https://www.vkgu.kz/ru>

The quality policy Of S. Amanzholov EKSU is an integral element of University management and the basis for planning its educational activities.

The quality policy is reflected in the normative documents of S. Amanzholov EKSU in the development program of S. Amanzholov East Kazakhstan state University for 2018-2022 ,the Charter, regulations and internal regulations and other normative documents. Documents that ensure the policy and guarantee the quality of students are available in open information access on the University's website. The main priority areas are the development of the University management system; academic strategy of the University; development of research and innovation activities; development of the material base and infrastructure, etc. Educational programs are based on financial, informational, and logistical resources aimed at improving the quality of education. The creation of remote and educational portals, an electronic resource center, and an electronic document management system reflects the dynamics of the development of quality assurance in education.

According to the approved procedure, the management of the University is carried out in accordance with the development of educational services in the region, according to the stated mission, goals and objectives of the University. The expansion of academic independence of higher education institutions is aimed at increasing social responsibility for the results of their activities, the quality of training of specialists, and the formation of a modern worldview of the younger generation.

In accordance with the University's development program, programs for the development of accredited universities have been developed. The development, formation, approval and implementation of the EP development program are carried out in a transparent manner. University teaching staff get acquainted with the stated goals and program of development of the OP at the meetings of the Department and the faculty Council.

The uniqueness of EP 5B011200/6B01504 – Chemistry, 6B060600/7M01504 – Chemistry, 5B011200/6B01504 – Chemistry is to train competitive personnel for the region's education system, taking into account modern national and modern trends that meet the following requirements:

1. Meeting the needs of highly qualified teaching staff who have knowledge of the updated educational program, possess innovative methods and techniques for implementing the educational process in chemistry.

2. The possibility of developing professional and research competencies of students on the basis of educational laboratories of the University, the National scientific laboratory for collective use, equipped with modern equipment that has no analogues in the Republic of Kazakhstan.

3. The possibility of in-depth study of chemistry, taking into account regional characteristics and the use of information and innovative technologies.

4. Highly professional teaching staff.

5. High demand for graduates in the labour market.



The uniqueness of EP 5B060600/6B05302, 6M060600/7M05302 – Chemistry, consists in training of specialists – chemists of a wide profile for industrial metallurgical enterprises, enterprises in the field of ecology, "Kazhydromet". The specifics of the region, which is the center of non-ferrous metallurgy of the Republic, dictates the demand for graduates of EP. Students of this EP study in depth the disciplines of the chemical cycle using the Avance III 500 NMR spectrometer, FT – 801 IR – Fourier spectrophotometer, MGA-915 atomic absorption spectrometer with electrothermal atomization, SensAA atomic absorption spectrometer with flame atomization, liquid chromatograph "Lumachrom" with spectrophotometric and fluorimetric detectors, liquid analyzer Fluorat 02-2 M with a cryoprime included, optical neophot – 21 microscope in the national scientific laboratory of collective use that does not have analogs in Kazakhstan.

Cooperation with the practice bases allows students of the EP to pass professional practice on the basis of fixed schools and industrial enterprises of the city and region, contributes to the maximum employment of graduates of the EP and creates conditions to meet the needs and interests of employers in the region.

The connection between scientific research of the Department, teaching and training is established, which is necessary for the implementation of the EP. The subject of scientific directions of the Department is reflected in theses, master's theses, scientific products of teaching staff, developed elective disciplines containing scientific and methodological developments. The social partner of the Department - large enterprises of the city and region - the group of companies "Kazminerals" donated equipment for 23 million tenge to the balance of the University. Students can perform their research work on the basis of the national research laboratory for collective use.

Teachers of the Department of chemistry passed courses of improvement of qualification of pedagogical personnel on the program "Contemporary educational technologies" by the EC "Orleu" in the amount of 240 hours; course "Management in education", 72 hours (certificate No. 8860 from 12.05.18). In the 2018-19 academic year was completed the course in the educational program of advanced training of heads of educational institutions in the framework of updating the content of secondary education of Kazakhstan on the basis of the CPM AEO "Nazarbayev Intellectual schools" and receive a certificate in the amount of 40 hours.

The EP development plan is formed taking into account the availability of financial, information, labor, material and technical resources. Material and technical, information and library resources used for organizing the process of education and upbringing are sufficient to fulfill the stated mission, goals and objectives and meet the requirements of the implemented educational programs

The University has internal academic mobility. In the 2017-2018 academic year, on the basis of OP 6B01504 (5B011200)-Chemistry, a 2nd-year student of Abay KazNPU was trained Kanatkyzy Ainur; in the current 2019-20 academic year, three 3rd-Year students of EP 6B01504 (5B011200) - full-time Chemistry from the state University named after Shakarim (Semey): Slyamova Akerke Muratkyzy, Bazylkhanova Balausa Berikkyzy, Zhakanova Akmaral Bolatzhankyzy, according to signed 2-and 3-party agreements.

Regulatory documents are available on the University's website – <https://www.vkgu.kz/ru>, all teachers have access to them. All the main management, organizational, educational, educational, research processes that regulate the implementation of the EP are documented, and the relevant documents are available in the nomenclature files. The departments have a database of internal and external legal acts regulating all major business processes (including management of educational activities).

For each training course, a set of documents has been prepared – an educational and methodological complex of the discipline (EMCD). The EMCD includes educational and methodological documents that determine the planning, organization and conduct of the educational process in the discipline:

-standard program, working curriculum, Syllabus for students and undergraduates;

- map of educational and methodological security of the discipline;
- lecture complex, seminar plans;
- guidelines for the study of the discipline, guidelines and instructions for practical work, preparation for lectures, materials for the IWS;
- methodological recommendations for the implementation of term papers;
- materials for monitoring residual knowledge, current academic performance, boundary control and final control.

The content of disciplines, types of classes, IWST, IWS, methodological support are developed in accordance with the goals and objectives of the discipline, i.e. in accordance with the requirements for knowledge, skills, skills and competencies that the student must acquire when studying the discipline.

An electronic database of umkd has been created and students have free access to educational materials, to materials for monitoring and evaluating knowledge of the educational portal of EKSU through the personal account of students and undergraduates to library resources on the Internet.

The educational and methodological complex of the discipline (umkd) passes a preliminary examination at a meeting of the Department. After the preliminary examination, the educational and methodological documentation is discussed at the faculty's educational and methodological Council and approved by the Vice-rector for educational and methodological work.

The content of the EP modules is developed by a group of teachers of the Department who conduct classes in this specialty. Teachers of the Department, employers, senior students and graduates working in the specialty, make suggestions to the head of the Department on the formation of modules, volume and duration. The head of the Department forms the initial version of the educational program based on the GEP And CED, and the suggestions of teachers. The methodological Council of the Department analyzes the correctness of the modules, its effectiveness in training future specialists, compliance with the requirements for the formation of modular educational programs established by the rules of the SES and KTO.

Material and financial resources are planned depending on the needs of the educational program and the financial capabilities of the University.

The implementation of the educational program is facilitated by the research work of teaching staff, students and undergraduates. Research work planning is carried out in accordance with long-term development directions, intentions to take certain positions in the market of educational services in accordance with the stated mission, goals and objectives.

The objects of professional activity of graduates are "Secondary school No. 15", EKSU "OSSHGI them. Zhambyl for gifted children", EKSU "Secondary school No. 16 named after him. Zaki Akhmetova", EKSU "Shakarim secondary school No. 1", EKSU "Secondary school No. 35", EKSU "school-Lyceum No. 11", EKSU "School-gymnasium No. 3", RSE on REM "Kazhydromet for East Kazakhstan region", Department of ecology for East Kazakhstan region, Kazzinc LLP, EK scientific and production laboratory of forensic examination, VNIItsvetmet, Department of internal Affairs of Ust-Kamenogorsk, Center for drug examination, Al-Farabi Kazakh national University (Almaty).

Plans for the development of the EP have been developed, which detail the mechanisms for assessing risks in the implementation of the EP with deadlines and responsible for each action to reduce the impact of risks for this educational program.

### *Analytical part*

During the visit to the IAAR EEC, experts conducted a detailed analysis of the compliance of accredited educational institutions with the requirements of the modern education market, the effective functioning of educational programs aimed at students and all interested parties in the educational service, as well as the principles and methods of organizing educational, research and educational processes. The content and form of the EP, as well as the decisions made by the EP management, are consistent with the strategic documents.

Concisely and precisely formulated goals and learning outcomes are the starting point and Central recommendation for the development of educational programs.

The content and semantic load of the evaluation criteria of the Standard «Management of the educational program» indicates the existence of measures taken by The S. Amanzholov EKSU to improve quality in various types of activities. The University demonstrated a University-wide quality concept for each activity. It describes the main business processes and those responsible for them, which should be used for designing, managing and monitoring improvements, and making decisions based on facts.

The digital indicators can be traced to the individual development plan EP; the wording of the uniqueness and individuality of the development plan of EP and its consistency with national development priorities and development strategy EKSU quite detailed .

However, the Commission notes that the following issues related to this standard are not fully reflected in the self-report and were not confirmed during the EC visit. The content and semantic load of the evaluation criteria of the Standard «Management of the educational program» indicates the existence of measures taken by EKSU to improve quality in various types of activities. The University demonstrated a University-wide quality concept for each activity. However, for the full implementation of this standard, in particular when forming a quality system, the University must identify possible risks and provide a set of measures to maximize the material and technical potential.

Possession of information concerning possible risks to which the implemented EP is exposed contributes to the development of measures to counter such risks. This, in turn, creates the basis for improving and strengthening the University's corporate culture, which has a warning character.

The survey of faculty members conducted during the visit to the IAAR showed that the involvement of faculty members in the process of making managerial and strategic decisions is "very good "and" good " – 45.8 % and 54.1 %, respectively.

According to the results of interviewing, familiarization with various documentation, material and technical base and information and methodological resources of the University and departments, questionnaires of students and teaching staff, EEC IAAR notes the following:

#### **Strengths/best practices**

- Identification of those responsible for business processes within the EP, unambiguous distribution of staff responsibilities, differentiation of functions of collegial bodies.

- Specification of the characteristics of individuality and uniqueness of accredited educational institutions, including taking into account the coordination of the development plan of the educational institution with the development strategy of the University.

- Ensuring the participation of employers and interested persons in the discussion, planning and implementation of the educational program as part of the Department and the academic Council of the faculty.

- The EP management ensures transparency in the development of the EP development plan based on the analysis of its functioning, the real positioning of the University and the focus of its activities on meeting the needs of the state, employers, stakeholders and students.

- The management of the EP should involve representatives of groups of interested persons, including employers, students and teaching staff in the formation of the development plan of the EP.

- The management of the EP has demonstrated the successful functioning of the internal quality assurance system of the EP, including its design, management and monitoring, their improvement, and decision-making based on facts.

- The management of the EP ensured the participation of representatives of interested persons (employers, teaching staff, students) in the collegial management bodies of the educational program, as well as their representativeness in making decisions on the management of the educational program.

### ***Recommendation of the EEC***

Develop a set of measures to implement the material and technical potential of the University in the field of international cooperation when planning a system for managing possible risks that are subject to implemented EP, monitoring criteria and ways to prevent such risks.

***Conclusions of the EEC according to the Standard «Management of the educational program»: accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 13 - strong, 4 – satisfactory positions.***

### ***5.2. Standard “Information Management and Reporting”***

#### ***Evidence part***

At S. Amanzholov EKSU, the information and reporting management system is provided with internal regulatory documents, including the Charter and documents of the University's QMS.

In high school constantly collected and analyzed data on admission of students, the results of IA EP graduates in recent years, data on employment of graduates EP.

Reporting on the results of the University's activities is open to the public. Reports are publicly available on the portal <https://www.vkgu.kz/ru> and are available for saving to the user's device.

The structure and volume of information collected, sources, frequency, time interval, responsible persons reliability and timeliness are determined in accordance with internal regulatory documents of the QMS. It is possible to assess satisfaction with information about the University's activities by directly contacting the management through the rector's blog on the EKSU website.

The exchange of messages, files, audio and video communication between the staff and employees of different buildings is carried out through the internal communication portal of the LNC. This type of electronic intranet services effortlessly helps structural divisions exchange office documents in real time.

An electronic document management system (EDS) based on "1C: Enterprise 8.3" has been implemented for University employees.

A mobile version of the "eUniver" system has been developed.

In order to improve the quality of educational services provided, the University is supported by 11 servers, among which the Proxy server, 1C server, mail server, Moodle server, DNS server, etc. are actively used. Wi-Fi is available in academic buildings and students' homes. The speed of Internet access in educational building No. 1.5 is 150 MB/s, No. 7 educational building is 120 MB/s, No. 2 educational building is 32 MB/s, No. 8 educational building is 28 MB/s, students' homes are 20-40 MB/s, and No. 7, No. 1, No. 5 educational buildings have WI-FI points with a speed of 15-20 MB/s. The University also operates a student service center "Parasat" (DSP).

On the basis of the information and software complex "AIS EKSU", academic support of students is provided for the entire period of study up to receiving a diploma and an Appendix to the diploma in three languages

The minutes of meetings of departments, annual reports reflect the results of the analysis of achievements of the goal of the OP, the results of discussions on the EP with employers, as well as ways to improve the effectiveness of the educational program (No. 10 of 05.06.2019).

At the meeting of the Committee on natural science specialties of the Academic Council, catalogs of elective subjects for accredited educational programs, Protocol No. 1 of 11.01.2019 were considered.

An important factor is monitoring the employment and professional activities of graduates. Graduates of the bachelor's degree EP 5B011200/6B01504 – Chemistry, 5B060600/6B05302 – Chemistry and master's degree EP 6M011200/7M01504 – Chemistry, 6M060600/7M05302 – Chemistry are employed in educational organizations, enterprises of the city of Ust-Kamenogorsk and the region.

#### ***Analytical part***

Analyzing the content and semantic load of the standard "Information management and reporting" for accredited areas, the Commission notes that the University has a system for managing information and reporting on student recruitment, academic performance, contingent movement, personnel, academic mobility of faculty and students, etc., which is presented in regular reports at meetings of departments, the rector's office and the academic Council of the University.

The presented materials confirm the existence of a system of regular reporting, which includes the effectiveness and efficiency of departments and is based on the use of various methods of collecting and analyzing information in the context of EP. The data indicating the involvement of teaching staff, students and University staff in the process are presented.

Regular surveys of students and employers are conducted and appropriate measures are taken to eliminate shortcomings based on the results of their survey / interview. Information and communication technologies are used with a fairly high degree of efficiency.

At the same time, there are a number of issues related to this standard that are not fully confirmed in the course of the work of the EEC.

Documents confirming the existence of documented information management processes, determining the order and ensuring information security, responsibility for their functioning, reliability and systematic use of adequate information to improve the internal quality assurance system are not fully demonstrated. Complete the information on the website of the Department about EP in English.

A survey of students conducted during the visit to the National Academy of Sciences showed that 76.2% of respondents are fully satisfied and 22.2% are partially satisfied with the information about courses, educational programs and academic degrees.

According to the results of interviewing, familiarization with various documentation, material and technical base and information and methodological resources of the University and departments, questionnaires of students and teaching staff, EEC IAAR notes the following:

#### ***Strengths/best practices***

- Demonstrated the availability of information and educational resources and support systems for students;

- The information collected and analyzed in the framework of the EP takes into account the dynamics of the student population in the context of forms and types of training, key performance indicators of the EP, the level of academic performance and achievements of students

- Improving the procedure for collecting and processing information for subsequent systematization and use for statutory purposes of personal data of students, employees and teaching staff who have documented their consent.

- The University ensures the functioning of the system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software.

- The University evaluates the effectiveness and efficiency of its activities, including in the context of EP.

#### ***The recommendations of the EEC***

Constantly update the University's website with up-to-date information about the development of the University and educational programs, the availability of educational resources and support systems on the University's website.

Pay attention to the need for the equivalence of providing information in three languages to meet the needs of teaching staff and students involved in incoming external academic mobility.

***Conclusions of the EEC according to the Standard «Information Management and Reporting»: accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 7 - strong, 9 – satisfactory, 1 – suggesting improvement positions.***

### ***5.3. Standard "Development and approval of educational programme"***

#### ***Evidence part***

All educational programs of the University have clearly formulated goals that are consistent with the mission of The S. Amanzholov East Kazakhstan state University. The goals of educational programs are formulated taking into account the requirements and requests of potential consumers, based on the assessment of the demand for educational programs, which is determined by the interests of potential employers, the potential of the University, the requirements of the state and society as a whole.

The procedures for evaluating the quality of the educational program are defined by the internal regulatory documents of the University.

The procedure for the elaboration EP is governed by the University the following normative-legal acts and internal normative documentation: order of the Minister of education and science of the Republic of Kazakhstan №604 dated October 31, 2018 "On approval of state compulsory standards of education at all levels of education"; order of the Minister of education and science of the Republic of Kazakhstan from April 20, 2011 №152 "On approval of Rules of organization of educational process on credit technology of training" (Rev. October 12, 2018 No. 563); P EKSU 011-15 (Rev. from G. 18.01.2016 No. 03-16) "About the modular educational program"; PSU 002-19 "Requirements for the development of the catalog of elective subjects".

In the development of EP takes into account the interests of employers who are invited to the meetings of the departments and Express their opinion on the conformity EP the specialization and requirements of the labor market, the inclusion of new subjects and exclusion of disciplines that has lost relevance.

The development and updating of the EP at the University is carried out according to the following algorithm:

1. Development of the EP project.
2. Discussion of the EP project at a meeting of the Department.
3. Examination of the EP, its relevance, emerging competencies and expected learning outcomes at a meeting of the Project office Committee.
4. Adjustment of the EP taking into account the recommendations given by the Project team
5. Statement EP at the methodical Council of the faculty and methodical Council of the University.
6. Approval of the Catalog of elective subjects, modular educational program at the academic Council of the University. ,

The model of a graduate of an accredited EP was developed at the Department, with the participation of teaching staff, employers, and students.

Educational programs are subject to mandatory examination before the defense procedure. For example, OP 5B060600/6B05302 – Chemistry was attracted by the chief specialist of the chemical and analytical laboratory Of the Department of Ecology for East Kazakhstan region Tokanova A. A., from foreign partners, Professor of Istanbul medical University, PhD Ahmet Biatli participated in the examination of the EP.

For the formation of professional competencies of graduates, the content of the curriculum must include a cycle of core disciplines along with General education and basic disciplines.



Assessment of the quality of the EP is based on the analysis of the implementation of curricula, the catalog of elective subjects, schedules, individual curricula of students, the rating of students, internal regulatory documents regulating the implementation of the EP, questionnaires of students and employers.

Individual learning paths are a prerequisite for credit-based learning technology. When implementing the EP, the principle of an individual approach to each student is implemented. Students with the help of advisors form IUP, in accordance with the EP and QED, on the basis of which reports are compiled annually for one academic year.

For the formation of professional competencies of graduates, the content of the curriculum must include a cycle of core disciplines along with General education and basic disciplines. The logic of academic interrelation of disciplines is determined by the system of pre- and post-requirements.

The Department of chemistry carried out preparatory work to prepare for a two-degree education with the Altai state University (Barnaul, Russia), in particular, the passage of scientific internships by undergraduates of the Department at this University, taking into account academic mobility, joint research, production of scientific products in the form of scientific articles, textbooks, etc..

As part of the academic mobility, foreign scientists recognized at the international level were invited to give lectures in the 2018-2019 academic year: associate Professor, PhD Ahmet Beyatli (Turkey, Istanbul); associate Professor, PhD Masahiko Besho (University of Akita, Japan); Professor of the Department of chemical engineering at the University of Texas (USA) Nurshat Nuradzhe; assistant Professor, PhD Aichut Adhikari (Dr. Achyut Adhikari); associate Professor PhD (University of maroua, Department of chemistry (Cameroon, Africa) Amadou Dawn.

The scientific aspect in the content of the EP, which includes conducting independent scientific research throughout the entire period of training, the student demonstrates non-standard solutions to professional problems, logical and critical thinking, persuasion and argumentation of decisions, rapid development of advanced educational technologies in chemical and related specialties, acquisition of new knowledge based on modern information and educational technologies, information search and creative solutions, methods of computer collection, storage and processing of information.

#### *Analytical part*

The survey of teaching staff conducted during the visit to the National Academy of Sciences showed a very good assessment (79.2%) of the University management's attention to the content of the EP. At the same time, the content of the EP "very well" meets the needs of 66.7% of the faculty staff, "well" - 33.3 %. The survey of students showed that 78.1% were fully satisfied with the level of quick response to feedback from teachers regarding the educational process; 15.6 % were partially satisfied. Based on the results of interviews, familiarization with various documentation, material and technical base, and information and methodological resources of the University and departments.

The University has a modern material and technical base, including a laboratory for collective use, the capacity of which allows you to train students to work with complex equipment. The management of the EP carried out work on cooperation with the Altai state University, but the Memorandum of understanding is not fully implemented. The scientific potential of the teaching staff of the EP allows integrating the content of the EP at the international level.

#### **Strengths / Best practices**

- Compliance of the graduate models of accredited EP both at the regional level and in the Republic.

- Ensuring that the content of academic disciplines and the results of all levels of education correspond to the development of scientific areas.

- The University defines and documents the procedure for the development of EP and their approval at the institutional level.
- The EP management ensures that the developed EP meets the set goals, including the expected learning outcomes.
- The EP management determines the influence of disciplines and professional practices on the formation of learning outcomes.
- The management of the EP provided evidence of participation of students, teaching staff and other stakeholders in the development of the EP, ensuring their quality.

***The recommendations of the EEC:***

Develop a mechanism for preparing students, including students from other universities, for professional certification for the development of the scientific and industrial potential of the region.

Consider the possibility of implementing two-degree education within the framework of accredited programs with leading Kazakh and foreign universities.

***Conclusions of the EC on the standard "Development and approval of educational programs": accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 8 - strong, 1 – satisfactory, 2 – suggesting improvement of positions.***

***5.4 Standard "On-Going monitoring and periodic review of educational programmes»  
Evidence part***

The S. Amanzholov East Kazakhstan state University constantly monitors the quality of education for compliance with the strategic goals of the University.

On the basis of EKSU, faculty and departments, monitoring and periodic evaluation of educational programs is carried out. An important element of the system for ensuring a high level of training of students is regular monitoring and periodic evaluation of the EP. The results of these processes lead to continuous improvement of programs.

The development of the educational program is carried out taking into account the proposals of organizations and institutions of the East Kazakhstan region, interested persons, students involved in the selection and formation of the list of elective subjects, the development of topics for graduation and master's works, as well as the opinions and suggestions of students and employers based on the results of professional practices, proposals of the Monitoring and evaluation of EP at the level of chair, Dean and administration with the mandatory analysis and review of reporting on the dynamics of the programme at meetings and taking appropriate decisions to implement them. Each is pre-EP examination and the expert (usually from employers) check: consistency and logic of the EP, the goals and objectives of the EP, evaluates the expected results of the EP, rational use of teaching time (evaluation of the adequacy of the selected amount of credits in the disciplines), adequate teaching and laboratory support EP; innovative features of the program. With the consent of the expert, the EP is recommended for consideration by the UMS of the University to be put into effect from the beginning of the academic year. The expert has the right to reject and request to eliminate their comments, and has the right to participate in the UMS when considering the EP.

The need to adjust existing disciplines, the abolition of lost relevance or the introduction of new elective disciplines are discussed at a meeting of the Department and a methodological seminar on a specific EP.

The management of the EP provides a review of the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social request of society. This process is carried out by introducing elective subjects into the educational process that reflect the latest scientific achievements, market requirements, and employer recommendations.



Feedback for improving elective courses is carried out on the basis of systematic collection, analysis and management of reliable information with the participation of students/undergraduates, employees and employers, the results of which are reviewed elective courses/elective courses to ensure the relevance and relevance of areas in the labor market.

The guide on the website of S. Amanzholov EKSU presents criteria and methods for evaluating students' knowledge, which provide for the procedure for conducting current, intermediate and final knowledge control, final certification, and the current methodology for evaluating student performance for rating grades in disciplines. Intra-University control (mutual visits to classes and open classes, etc.) is carried out by the Department of methodological work, practice and employment and is recorded in the journal of mutual visits and open classes stored in the departments.

The management of the EP constantly monitors and reviews the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social order of society. According to EP 6B01504 (5B011200) -Chemistry, new disciplines were introduced such as "Methods for organizing school research projects using physical and chemical analysis methods", "methods for solving complex problems", "methods for studying chemistry in a small school", "methods for teaching natural science in accordance with the updated content of secondary education. The courses "Theoretical foundations of inorganic chemistry", "Chemistry of elements of the periodic table", "Analytical chemistry", "Organic chemistry" are taught in English.

Interested persons receive information about any planned or taken actions in relation to accredited EP through the University's website section <http://95.58.164.115/survey/file://www.vkgu.kz,file://www.vkgu.kz/www/sites/robosite/index.html>

and through written correspondence.

#### ***Analytical part***

The analysis of monitoring procedures and periodic evaluation of OP is based on:

- analysis of curricula, catalog of elective subjects, individual program plans of students;
- internal regulatory documents regulating the implementation of educational programs, their monitoring and evaluation;
- minutes of collegial bodies and meetings of departments;
- interviewing and interviewing students, teaching staff, and stakeholders;
- results of monitoring the activities of the support service.

During interviews with focus groups, visits to departments and analysis of the provided documentation, representatives of the EEC note that in practice, the management, planning and monitoring mechanisms of the EP are fully implemented. However, the results of the functioning of the mechanism for informing stakeholders about any planned or taken actions in relation to the EP are poorly reflected. Informing interested parties about changes in the content of the EP is periodic. It should be noted that it is necessary to publish information about changes made to the EP for wider access to all categories of stakeholders.

According to the results of interviewing, familiarization with various documentation, material and technical base and information and methodological resources of the University and departments, questionnaires of students and teaching staff, EEC IAAR notes the following:

#### ***Strengths / Best practices***

- Monitoring and periodic evaluation of educational environments and support services for their compliance with the goals of the EP.
- Continuous monitoring to adjust the workload, academic performance and graduation of students with the update of accredited op.
- Demonstrated supporting documents on the participation of employers and other stakeholders in the revision of the EP (expert opinions, reviews of the EP in General, and on certain disciplines by employers).

- The management of the EP should ensure that the content and structure of the EP are reviewed, taking into account changes in the labor market, the requirements of employers and the social demand of society.

#### ***The recommendations of the EEC***

Pay attention to the timeliness of informing interested parties about any planned or taken actions in relation to the EP through the University's website, social networks and the media.

***Conclusions of the EEC according to the standard "Continuous monitoring and periodic evaluation of educational programs": accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 6 - strong, 4 - satisfactory positions.***

#### ***5.5. Standard "Student-centered learning, teaching and performance assessment»***

##### ***Evidence part***

The academic policy of EKSU is based on the understanding that a student-oriented approach to managing the educational process involves the formation of partnerships with students.

Teachers of the Department regularly use modern technologies "Project training", "working in small groups", technologies using "Advanced tasks", "performing creative tasks" in their classes. Student-centered learning allows you to create unique conditions for each student that promote effective progress along the chosen educational path.

The EP management ensures equal opportunities for students, regardless of the language of instruction, to form an individual educational program. To organize educational activities, students are provided with a reference guide in two languages. Advisors provide assistance in getting acquainted with educational programs, in choosing elective subjects, prepare introductory materials and presentations together with teachers who lead these disciplines.

First-year students begin the registration process after conducting professional and academic orientation with them, in order to explain the principles of the credit system of training and prospects for future professional activity.

The subjects of the educational program are distributed by semesters and by course, in accordance with the logic of their study and continuity of content. Independent work of students under the guidance of a teacher is planned mainly for a teacher who conducts practical and laboratory classes.

On the basis of working curricula of the dispatch Department will schedule training sessions and schedule of independent work of students under the guidance of a teacher for the current semester, which is approved by the Dean of academic Affairs, a schedule of independent work approved by the heads of departments not later than two weeks before the beginning of classes.

The University is working to create conditions for inclusive education. At the University, work on the implementation of inclusive education is carried out on the basis of the plan for the organization of psychological and pedagogical support for inclusive education at the S. Amanzholov EKSU for 2016-2020. The following conditions have been created: there are ramps at the entrance to the University buildings, and special double-sided signs are pasted on self-adhesive film. The library of the academic building No. 1 has tables for wheelchair users. The official website of the University has a version for the visually impaired.

##### ***Analytical part***

Students Express satisfaction with the level of quality of teaching, which shows the results of the survey. Survey results: 76.2% are fully satisfied with the existing educational resources of the University, 22.2% are partially satisfied, and 1.6% are partially dissatisfied.

Students expressed high satisfaction with the fairness of exams and certification: 77.8 % were satisfied, 19% were partially satisfied, 1% were partially dissatisfied, and 1% were not

satisfied. EEC notes that over the past 5 years, not all teachers have completed advanced training courses, including modern methods of evaluating students' academic achievements.

In General, both students and teaching staff expressed positive opinions about the implementation of the accredited programs, which was later confirmed by the results of the survey. However, it should be noted that the University, within the framework of accredited programs, has a need to develop and implement new own research within the framework of teaching methods in order to develop student-centered learning.

According to the results of interviewing, familiarization with various documentation, material and technical base and information and methodological resources of the University and departments, questionnaires of students and teaching staff, EEC IAAR notes the following:

***Strengths / Best practices***

- Ensuring equal opportunities for students, regardless of the language of instruction, to form an individual educational trajectory.

- There is a feedback system for using various teaching methods and evaluating learning outcomes.

- To extend the consistency, transparency and objectivity of the mechanism for evaluating the results of accredited op, revealing the uniqueness.

- The EP management ensures the use of various forms and methods of teaching and learning.

- There is a presence of own research in the field of teaching methods of educational disciplines EP.

- The management demonstrated that there is a feedback system for using various teaching methods and evaluating learning outcomes.

- The EP leadership has demonstrated support for students' autonomy with simultaneous guidance and assistance from the teacher.

- The University ensures consistency, transparency and objectivity of the mechanism for evaluating learning outcomes for each EP, including appeal.

***The recommendations of the EEC***

Increase the number of teaching staff who have completed advanced training in modern methods of evaluating academic disciplines accredited by the EP in the context of student-centered learning.

Strengthen efforts to inform the public and stakeholders about the achievements of accredited EP and the results of their own research to increase the attractiveness of the EP.

Increase the share of students' participation in internal and external academic mobility.

Pay attention to the importance of familiarizing students with the mechanism for recognizing the results of additional, formal and non-formal education.

Consider possible mechanisms for activating the activities of the alumni Association.

***Conclusions according to the standard "Student - centered learning, teaching and performance assessment": accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 5 - strong, 5-satisfactory positions.***

***5.6. Standard "Students"***

***Evidence part***

The policy of forming a contingent of students is to admit to the number of students who are most prepared to study at the University, consciously chose a specialty, and scored the necessary number of points according to the results of the UNT and CTA.

In the current 2019-20 academic year, the undergraduate enrollment was: - EP 6B01504 (5B011200) – Chemistry -14 (kaz) and 6 students. (eng.) - EP 6B05302 (5B060600) -Chemistry - 8 students (rus). Contingent of students in EP 6B01504 (5B011200) – Chemistry – 76 students; EP 6B05302 (5B060600) -Chemistry – 13 students.

In the current 2019-20 academic year, the master's program enrollment was: - EP 7M01504 (6M011200) – Chemistry - 3 students - EP 7M05302 (6M060600) -Chemistry - 4 students. Contingent of students in EP 7M01504 (6M011200) – Chemistry – 52 students; EP 7M05302 (6M060600) -Chemistry – 32 students.

The implementation of research achievements in the educational process is carried out annually based on the results of the defense of master's theses and theses. There are more than 20 acts of implementation per year and provides a modern and up-to-date nature of training, its high scientific and methodological level.

Teachers of departments actively work to attract students/undergraduates to scientific activities. Teachers of the Department and students actively participate in the "Science Week". The best students are nominated for various categories "Best in EP", "Granite of science", "Zhas Talap".

In the 2018-19 academic year, according to the results of participation in the intra-University competition "Granite of science", the master's student of the Department Sagdollina Nazerke was awarded a diploma for the 1st place. In 2018, the "Startap" competition was held together with "Bolashak" among students of higher education institutions of the Republic of Kazakhstan on the theme "Menin armanym". 4-year student of spec. 5B060600-Chemistry Kabieva Aigerim and master's student Sagdollina Nazerke took part from the Department and were awarded certificates.

Employment of graduates in 2017-2018 for EP 6B01504 (5B011200) – Chemistry is 100 %, master's degree programs (6M060600 - Chemistry, 6M011200 - Chemistry) – 100%. Employment of graduates of the master's degree (6M060600 - Chemistry, 6M011200 - Chemistry), from the given data it is clear that graduates of accredited EP are almost all employed, which indicates the demand for graduates of EP.

The Department has branches in the RSE on PHV "Kazhydromet for East Kazakhstan region", JSC "UMP", NIS CB, Secondary school No. 16 named after Z.Akhmetov, Lomonosov secondary school of Zaisan district of East Kazakhstan region, KTL, Bilim-innovation.

Students of EP 7M01504 (6M011200) -Chemistry, EP 7M05302 (6M060600) -chemistry of the scientific and pedagogical direction pass the following types of practices: pedagogical, research practice. In addition, all undergraduates undergo scientific training in domestic and foreign universities, for example, scientific training in foreign research centers lasting 2 weeks (Altai state University, Barnaul, Russia).

The procedures for admitting students from other universities and recognizing and crediting credits are based on the principles of the Lisbon Convention on the recognition of learning outcomes. Admission of students from other universities is carried out in accordance with the Rules of transfer and restoration. When transferring students from other universities, the academic difference is determined in the disciplines of the working educational centers that they studied during previous academic periods.

The S. Amanzholov EKSU alumni Association was established, which is a public Association that is convened to carry out activities determined by common interests, aimed at uniting the interests of University graduates. The Association of graduates in its activities is guided by the legislation of the Republic of Kazakhstan, the Charter of the S. Amanzholov EKSU and the regulations. An electronic page Of the alumni Association has been developed on the University's website. <https://www.vkgu.kz/ru/page/nashi-vypuskniki.html>.

In General, for the organization of educational work with students, effective forms and methods are used that are necessary for the formation of a competitive specialist. To fully develop the creative potential of students, informal competitions and festivals, concerts, evenings, debates, visits to concerts, museums, exhibitions, performances, sports competitions among students, teaching staff and employees are organized within the framework of traditional sports competitions. Curators and advisors together with students annually participate in AIDS prevention months, clean-up days "Clean Thursday", "Plant your tree", "I am a patriot", "Poeziya Keshi" , etc.

Within the framework of the University's educational portal, web pages of all departments and centers, websites of departments, and web pages of teachers containing methodological developments are provided for wide access. To provide up - to-date information on the educational process of the University for universal access, the educational portal contains the following information resources: the schedule of classes, an electronic library, computer testing results, information about the employment of classrooms, a log of students ' independent work, a \WEV-questionnaire system, and much more. With the help of the educational portal, students can also get information about the history of the University, faculty, Department, information about the educational, scientific, and educational work of the University.

#### *Analytical part*

In the survey availability of academic counselling fully met (76.2 per cent); availability of health services (71,4%); availability of library resources (79,4%); existing training resources (76,2%); the overall quality of the curriculum (73%); the relationship between student and teacher (82,5%).

The EEC notes that the number of students participating in academic mobility programs is low. Over the past year, only 2 students participated in the program.

#### *Strengths/best practices*

- There is a mechanism for adaptation and support of applicants, including foreign students during the first week of study.

- The management of the EP should demonstrate the implementation of special adaptation and support programs for newly enrolled and foreign students.

- The University has demonstrated that its actions comply with the Lisbon recognition Convention.

- The management of the EP made the maximum amount of effort to provide students with places of practice, promote employment of graduates, and maintain communication with them.

- Monitoring of employment and professional activity of graduates of the EP is carried out.

- The management of the EP encourages students to self-education and development outside the main program (extracurricular activities).

#### *The recommendations of the EEC:*

Expand opportunities for students to participate in internal and external academic mobility.

Consider possible mechanisms for activating the activities of the alumni Association.

***Conclusions of the EEC according to the Standard "Student-centered learning, teaching and performance assessment" 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 6 - strong, 6 - satisfactory positions.***

### ***5.7 Standard «Teaching staff»***

#### *Evidence part*

The personnel policy is implemented in accordance with the main priorities of the University's strategy and is reflected in the "Personnel policy" regulation. Recruitment is based on an analysis of the needs of the educational program, as a result of which a competition is announced to fill vacant positions. Appointment to a position and promotion is carried out on the basis of the order of the rector of the EKSU named after S. Amanzholov, taking into account the professional competence of employees and teaching staff. The personnel potential of the teaching staff, in General, corresponds to the strategy of The S. Amanzholov EKSU and the specifics of the accredited OPS.

The Department of chemistry is a graduate of accredited educational programs. In the current 2019-20 academic year, 20 teachers are working, including 16 full – time and 4 part-time teachers. Them of teaching staff: one Professor, candidate of chemical Sciences, HAC associate Professor Aubakirova R. A.; Ph. D., associate Professor Abylkasova G. E., associate professors,



candidates of pedagogical Sciences (Shaihova B. K., Tantybaeva B. S., Afanasenkova I. V., Dautova Z. S.). 2 PhD (Ablev M. M. and M. M. Nykmukanova). Also in the full-time academic work senior lecturer Mukazhanova J. B., lecturer, master of chemistry Kabdisalym K., master of engineering and technology Maratkyzy A., master of science, Mubarak E. The degree in the Department of chemistry is 56 %.

Teachers of the EP completed advanced training courses under the program "Advanced training of teachers of pedagogical universities" in the amount of 240 hours in JSC "NCPC "Orleu".

Lecturer in chemistry S. S. Orazova passed the training program abroad at the Polytechnic University of Valencia (Spain), PhD M. M. Nykmukanova. did the program of improvement of qualification of teachers of pedagogical specialties of universities of Kazakhstan (240 h) in ISEP (Portugal).

Teaching staff EP 6B01504/7M01504 Chemistry and 6B05302/7M05302 Chemistry, meets the qualification requirements for licensing educational activities HAS full knowledge of modern teaching methods

Information about teachers involved in the implementation of the EP is available on The website of the S. Amanzholov EKSU, which contains contact information, research interests, main achievements, availability of developments, and information about professional development. This information is available to everyone.

English language courses organized By the center for multilingualism were held by Professor Aubakirova R. A., associate professors Afanasenkova I. V., Abylkasova G. E., Tantybayeva B. S., Shaikhova B. K., teachers Orazova S. S., Mukazhanova Zh.B, EHP of the Department of chemistry: master IE Burya N. F., Sanyazova Sh. K., Temirzhanova Zh. a.also took courses in English.

#### *Analytical part*

During the visit, the EC experts found that it is necessary to strengthen the work at the Department of Chemistry to increase the number of external academic mobility, which can lead to the development of research work with leading higher education institutions.

In this regard, the management of accredited universities needs to increase the level of academic mobility of teaching staff and research work. It is necessary to participate in competitions for funding research projects on the specifics of the EP.

#### *Strengths/best practices*

- Demonstration of an objective and transparent personnel policy that ensures professional growth, staff development and professional competence of the teaching staff of the Department of accredited op.

- Providing professional development and career opportunities for teaching staff in accredited programs in all structural divisions of the University, including departments.

- Involvement of practitioners – employers of the mining industry in teaching activities in accredited programs.

- The University has an objective and transparent personnel policy that includes hiring, professional growth and development of staff, ensuring the professional competence of the entire staff.

- The University has demonstrated that the personnel potential of the teaching staff corresponds to the development strategy of the University and the specifics of the OP.

- Demonstration of the best practices for employment of graduates, passing all types of practices, as well as the availability of feedback.

- The University determines the contribution of the teaching staff to the implementation of the University's development strategy, etc. Strategic document.

- University teaching staff actively uses information and communication technologies in the educational process (for example, on-line training, e-portfolio, Mohs, etc.).

#### *EEC recommendations:*

Create conditions for young teachers to participate in academic mobility programs.

***Conclusions according to the Standard «Faculty»: accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 8 - strong, 4 - satisfactory positions.***

### ***5.8. Standard “Educational resources and support systems for students and undergraduates”***

#### ***Evidence part***

The University has a material and technical base that provides all types of practical training and research work of students, provided for in the curriculum of the University and in accordance with the current sanitary and epidemiological and fire safety standards and rules.

The educational process of the University is supported by 11 servers: Platonus server, Proxy server, 1C server, mail server, Moodle server, DNS server, social network, etc. The University has 11 Wi-Fi access points.

The Department of chemistry has 6 lecture halls (Nos. 418A, 423A, 430, 433, 416,414), 11 chemical laboratories (№№ 407, 413, 417, 418, 421, 423, 424, 425, 426, 429, 429A, 434) and two research laboratories for undergraduates and students (No. 436, 437). there is a licensed warehouse for storing precursors, 4 lecture halls No. 429A, 430,414,416 are equipped with an interactive whiteboard, which is used by teachers of the Department of chemistry when conducting master classes, open classes for undergraduates and students using ICT. For each laboratory, there are passports with a list of devices and equipment that are in the approved by the rector.

The University has Opened named laboratories: Professor Yu. K. Uvaliev and academician of the national Academy of Sciences of the Republic of Kazakhstan E. A. Mambetkaziev. The social partner of the University of the group of companies "Kazminerals Aktogay" LLP decided to train specialists at the Department of chemistry.

Kazminerals Aktogay LLP delivered new equipment and devices in accordance with the acts of acceptance and transfer for a total amount of 23 million tenge. A 2-party agreement was also signed for the transfer of all equipment and devices to the Department of chemistry free of charge. They were equipped with a laboratory of chemical analysis and a chemistry room in the amount of 23 million tenge. In the 2019-2020 academic year, the above-mentioned company allocated 15 grants to train chemical analysis specialists who will work in this company after graduation.

In the 2019-20 academic year, a new IT office of chemistry was opened, dedicated to the academician of the higher school Academy, Professor A. S. Akhmetov.

The University library is located in all academic buildings. The total area of the library is 2690 sq. m.the number of seats in the reading rooms is 480. The library's readers are served in 14 service points, including 4 subscriptions, 4 reading rooms, and 6 specialized branches in different academic buildings.

The library's information capabilities are expanded through access to international and national resources available via the Internet: the Republican interuniversity electronic library (RMEB); the project of the Kazakhstan national electronic library (EGBF-KazNEB), initiated by the NAB of the Republic of Kazakhstan; the project of the National subscription Of the consortium of the National Center for Scientific And Technical Information on the use of International database resources; Regional project of Ust-Kamenogorsk libraries for corporate bibliographic processing of periodicals of the Republic of Kazakhstan, as well as with IRBIS Corporation for organizing corporate exchange of bibliographic records with the largest libraries in the world. The University has an Internet connection with a total bandwidth of 236 Megabits per second (MB/s), the provider of Beeline JSC, the type of connection is fiber-optic cable, and the wireless network "WiFi" functions.

Electronic access to library resources is provided via the University's website page <http://portal.vkgu.kz>.

#### *Analytical part*

During meetings with students and faculty revealed that, unfortunately, most do not have the financial capacity for training, training, training in leading universities of the world, so it is advisable to recruit students and faculty to the best online courses.

As a result of visual inspection of the facilities of the material base, the members of the EEC were convinced that the University has the necessary educational and material assets to ensure the educational process of the accredited educational programs. Buildings and structures of the University comply with current sanitary standards and fire safety requirements. There is a vivid example of cooperation with production.

According to the survey results, 70.8% of students are fully satisfied with the availability of library resources, 29.2% are "partially satisfied"; 79.2 % (20.8%) have classrooms and auditoriums for large groups; 75 % (25%) have classrooms for small groups; 54.2 % (37.5%) have recreation rooms for students; 74.6 % (20.6 %) have computer classes; 68.3 % (25.4%) have research laboratories– 76, 2% (15,9%). Full satisfaction of students with the provision of a hostel is 69.8 % (19 %).

#### *Strengths / best practices:*

The management demonstrated compliance of information resources with the specifics of the OP, including compliance of technological support for students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs), access to educational Internet resources, examination of research results, graduation papers, and dissertations for plagiarism.

#### *Recommendation of the EEC*

Pay attention to the increase in the production capacity of information and communication equipment for the implementation of distance learning at the proper level.

***Conclusions of the EEC according to the Standard “Educational resources and support systems for students and undergraduates”:* accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 3 - strong, 7 - satisfactory positions.**

### **5.9. Standard « Public Information»**

#### *Evidence part*

The EP management uses various methods of information dissemination: booklets and advertising materials, the University website, open days, round tables with heads of enterprises and organizations, career guidance events. Information about the content of educational programs is regularly discussed at meetings with representatives of employers. In addition, employers are included in the commissions (SAC, thesis defense).

Information about the activities of the University and the implementation of educational programs is available on the official Website of the University ([www.vkgu.kz](http://www.vkgu.kz)).

On the website of EKSU in the section faculties-Fenit in the subsection of the Department there is information on EP 6B01504(5B011200) -Chemistry,7M01504 (6M011200) -Chemistry, 6B05302(5B060600) -Chemistry, 7M05302(6M060600) -Chemistry. There is information about the faculty of the Department in the electronic portfolio section, which reflects the disciplines read, publications, achievements and awards of the faculty. The system of the electronic portal of S. Amanzholov EKSU exists and is actively used.

In order to promote and advertise the work of the University, the management has established communication with the media.



Information about the University's activities is provided by the press service of EKSU through publications, television programs, interviews, and advertising image products.

Students have the opportunity to get acquainted with the educational programs, the catalog of elective subjects, modules, formed competencies and learning outcomes, to receive Advisory services on the basis of departments, deans and other departments of the University in terms of their powers.

The University has a sufficient number of sources to inform THE public about its activities.

Information about the University's activities in implementing educational programs is published on the University's website and social networks.

The University's website is a universal information tool (<https://www.vkgu.kz/ru>). It can be viewed in three languages (Kazakh, Russian, and English). It contains information content on all structures and processes of the University. The site is intended for posting up-to-date information related to the main areas of the University's activities. Modern navigation allows external and internal users to freely navigate the site sections.

In all academic buildings and dormitories, students have the opportunity to get acquainted with the state symbols placed on special information stands. Information stands are installed in the dormitories, where materials on countering drug abuse and illicit trafficking, alcoholism, prevention of AIDS and other dangerous diseases are displayed. In specialized classrooms and classrooms, students' safety practices are observed during classes, there are information stands that regulate the rules of behavior of students, there are passports of classrooms and appropriate equipment.

Through online resources, you can constantly monitor the student's progress. Parents can track student progress at any time by having an identical student ID.

The University operates the Parasat student service Center at the S. Amanzholov EKSU to advise students on academic issues.

The EKSU information system is an information resource provided with means and technologies for accessing, storing, processing, accumulating and updating information. The electronic information system is presented in the form of databases for educational and scientific purposes, electronic libraries, educational tools on electronic media, computer equipment and software, and a corporate telecommunications network.

The University has created an unlimited high-speed data transfer channel between University departments for quick and effective access to internal and external information resources.

To increase the number of local network and Internet users among employees and students, measures were taken to introduce wireless access technologies (WiFi) to the University network.

EKSU has a high degree of implementation of information technologies in the educational process. To provide various categories of students, the following information and educational complexes and systems function: University website "biblioteka.kgu.kz, a library website with access to an electronic library biblioteka.kgu.kz, distance learning information system biblioteka.kgu.kz.

A library website has been developed as a platform for providing a single point of access to electronic information resources (biblioteka.kgu.kz) with the implementation of access to the University's electronic library, distributed electronic catalog, remote access resources, organization of the virtual help Desk, news feed, and other services. The site structure provides convenient and accessible navigation through the library's online information resources. Information in the library's electronic catalog can be searched from remote computers connected to the Internet.

One of the mechanisms for implementing feedback is a survey (according to the requirements) of students and teachers.

Regular questionnaires, the rector's forum on the University's website, the rector's personal reception, the helpline and trust boxes are mechanisms for studying the needs and expectations of students and for dialogue with senior management.

There are portals with authorized access: distance education, the website of the automated system eUniver, an electronic library (okmpi.kz), class schedule (<http://timetable.kgu.kz/raspis2018/>), there are modules "Online registration of applicants", "teaching staff load", "Schedule", "Electronic PPI". Student attendance records (both from the University and parents) are provided by the electronic access control system (ACS), for which there is an author's certificate.

The University is registered on the site of mass open online courses (moocs) of al-Farabi Kazakh national University. The learning process is provided with 40 digital learning resources (DCS).

In 2018, the University created the Digital University software Department. For the University, digitalization of all processes will be a step forward towards competitiveness and quality.

Students have 19 computer classes, 2 terminals for free access to information resources of the University.

Lecture halls of the University are equipped with presentation equipment (acoustic and projection equipment, sound reinforcement and microphones with installation, projectors and screens with installation); multimedia projectors (100%).

Creating a single WEBSITE of the automated system allows us to solve the most important task set for the University- providing students, teachers and management personnel with the necessary information resources in order to train highly qualified personnel. The system is created to improve the level and quality of educational services of the University on the basis of modern educational methods using information technologies.

eUniver allows you to fully automate the processes of the credit system and distance learning technology. The system has a centralized database that reflects all real events and processes of the University. For each student and employee, a so – called personal account (web page) is provided, which allows University employees to automate their main tasks, students to see the necessary information, and remote students to instantly get access to cases and knowledge control, directly communicate with the teacher in real time via the global Internet or the internal network of the University.

The creation of a unified information space of the University is realized on the basis of modern information and telecommunication technologies and is provided by two major components: the technology base for workstations, unified telecommunication network of the University, and relevant electronic educational resources created within the University and the environment of the Internet.

The University has created databases of educational information resources that can be accessed from the University's internal network.

Access to the Internet of all computers is carried out via a local network (organized by a high-speed DSL channel from Kazakhtelecom JSC) at a speed of 50 Mbit/s for unlimited traffic, which allowed to increase the time of users ' access to the Internet. The University has a fiber-optic communication line. In this regard, the data transfer rate from 32 Mbit/s increased to 50 Mbit/s.

For students who study using distance learning technology, cases have been created on the website of the eUniver automated system, which reflect all educational materials.

Due to the equipment of each Department with computers, laptops, office equipment and other technical means of training, each University teacher has the opportunity to independently access information.

Constant use of e-mail by employees of departments, regular receipt of messages and responses to them to the e-mail address of departments can significantly save time on reporting. Over the past 3 years, there has been an increase in the satisfaction of students and teaching staff

with the availability and use of computer equipment in training, which is associated with the opening of specialized classrooms, access to the Internet.

#### *Analytical part*

Information about the accredited educational program and the activities of the Department is available on the educational website <https://www.kgu.kz> developed in three languages (Kazakh, Russian, and English). It includes both information that is useful for students' educational activities, as well as General information, including reference information on this OP.

The website contains a description of all its structural divisions, provides information about the heads, Dean and heads of departments. Students, their parents, employers, and any other user can use the contact information provided on the website to contact the rector. You can also find information in the "Guide Book". Feedback can be provided via the rector's blog.

EKSU regularly conducts a survey, collects, analyzes and uses the data received from interested parties about the EP. Students are involved in the process of evaluating educational programs by expressing their opinions and wishes at the end of the course of study or mastering a specific discipline, or by anonymous questionnaires to identify opinions and take into account comments and suggestions of direct consumers. Students' participation in the evaluation of the educational program is also facilitated by the improvement of student self-government at EKSU.

The University operates various services for informing, supporting students and receiving feedback, each of which performs separate functions. According to the principle of openness and accessibility to the public, EKSU openly publishes information about its activities, admission rules for applicants, educational programs, terms and forms of study, international programs and partnerships of the University, advantages of the University and each faculty, information about employment of graduates, reviews of graduates, events and successes of students, contact and other useful information for applicants on various information media.

However, an analysis of the content of the University's website revealed that the information posted on the site is not updated regularly; there is insufficient information about interaction with educational organizations that implement such educational programs.

#### *Strengths/best practices*

- The information published by the University within the framework of the OP includes information about employment opportunities and qualification at the end of the OP.
- Reflection on the web resource of information that characterizes the University as a whole and in the context of certified op.
- Published by the University in the EP is accurate, objective, relevant and includes programmes, specifying expected learning outcomes, information on the possibility of qualification by the end of the EP, information about teaching, learning, assessment procedures, information about the passing score and the educational opportunities provided to students.
- The University participates in external evaluation procedures

#### *The recommendations of the EEC*

Pay attention to the importance of equal representation of the site content in the state, Russian and English languages.

Reflect on the University's website information about interaction within the framework of the implementation of the EP with partners, databases of practices, leading scientific organizations, and enterprises involved in the implementation of the EP.

***Conclusions of the EEC according to the "public awareness" standard: accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 5 - strong, 8 - satisfactory positions.***

### **5.10. Standard "Standards in the context of individual specialties "** **Evidence part**

The educational program of higher professional education ensures the implementation of the state educational standard, taking into account the type of higher educational institution, educational needs and requests of students and includes the curriculum, work programs of training courses, subjects, disciplines (modules) and other materials that ensure the quality of training of students, as well as training and industrial practice programs, a calendar training schedule and methodological materials that ensure the implementation of appropriate educational technology.

Professional practice of students is an essential part of training highly qualified specialists. It is aimed at consolidating the knowledge gained in the course of training, acquiring practical skills and developing skills in the professional field. In the course of practical training, students gain experience in professional and organizational work. During the Junior years, practical training is organized. Students' practical training takes place at the bases of the company with whom the contracts for practical training were drawn up.

The activities of the departments fully comply with the legislation of the Republic of Kazakhstan in the field of education, are organized in accordance with the goals and objectives, as well as the strategic development plan of the University and are aimed at their implementation.

The EP management demonstrates the transparency of the processes of forming the EP development plan by placing their content on the University portal, in the syllabus, in the student's guide, booklet for applicants, career guidance materials, etc.

The purpose of educational programs is to provide conditions for obtaining high-quality professional education, professional competence in the educational sphere. In this regard, educational programs are developed on the basis of a competence-based training model that meets the needs of the labor market and the requirements of employers. This model is a description of the key competencies of graduates, their level of preparedness and readiness to perform specific professional functions.

#### ***Analytical part***

The organization of educational activities in the context of accredited educational institutions is carried out by planning the educational process and content of education, choosing the methods of conducting it. Teaching is conducted on the basis of modern achievements of science and practice in the field of specialization, as well as using advanced teaching methods and technologies. For the formation of professional competencies, the use of training courses is widely practiced, and information and communication technologies are also used in teaching. All subjects of the EP are aimed at developing certain competencies that allow you to achieve the program goals and planned learning outcomes.

Two educational programs are aimed at preparing for the implementation of production, research, organizational and technological, production and management, and educational work.

#### ***Strengths/best practices***

- Manual EP shows whether the graduates of theoretical knowledge in psychology and skills in communications, analysis of personality and behavior, methods of prevention and resolution of conflict, motivation of students;

- The management of the EP should demonstrate the literacy of graduates of the program in the field of information technology.

- The EP management demonstrates the presence of disciplines in the program that teach innovative teaching methods and training planning, including interactive teaching methods, teaching methods with high involvement and motivation of students (games, case studies/situations, use of multimedia tools);

- The program focuses on various types of practices: - attending lectures and classes conducted by teachers; - conducting special seminars and discussions on the latest teaching methodologies and technologies; - within the program, students have the opportunity to listen to at least one discipline in their field of specialization taught by a practicing specialist;
- Within the framework of the EP, students are provided with knowledge and skills of systems and methods of pedagogy in the world, as well as knowledge in the field of education management.

***The recommendations of the EEC***

There are no recommendations in this standard.

***Conclusions of the EEC according to the standard «Standards in the context of individual specialties» "Education": accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 6 – strong positions.***

***Strengths/best practices***

To familiarize students with the professional environment and relevant issues in the field of specialization, as well as for the acquisition of skills based on theoretical training, the curriculum includes disciplines and activities aimed at obtaining practical experience and skills in General and majors in particular disciplines, including:

- excursions to the enterprises in the direction EP (enterprise, laboratory, etc.)
- conduct individual sessions or entire disciplines in the enterprise specialization,
- The teaching staff involved in the education program includes full-time teachers who have experience in the field of specialization of the education program.
- The content of all EP disciplines is based on and includes a clear relationship with the content of fundamental natural Sciences.
- The management of the EP provides measures to strengthen practical training in the field of specialization.
- The EP management provides training of students in the field of application of modern information technologies.

The recommendations of the EEC

There are no recommendations in this standard.

***Conclusions of the EEC according to the standard "Natural Sciences, agricultural Sciences, technical Sciences, and technologies": accredited educational programs 5B011200/6B01504 Chemistry, 6M011200/7M01504 Chemistry, 5B060600/6B05302 Chemistry, 6M060600/7M05302 Chemistry have 5 – strong positions.***

**(VI) REVIEW OF STRENGTHS/ BEST PRACTICES FOR EACH STANDARD**

***Standard «Management of the educational programme»***

- Identification of those responsible for business processes within the EP, unambiguous distribution of staff responsibilities, differentiation of functions of collegial bodies;
- Specification of the characteristics of individuality and uniqueness of accredited educational institutions, including taking into account the coordination of the development plan of the educational institution with the development strategy of the University;
- Ensuring the participation of employers and interested persons in the discussion, planning and implementation of the educational program as part of the Department and the academic Council of the faculty;

- The EP management ensures transparency in the development of the EP development plan based on an analysis of its functioning, the real positioning of the University and the focus of its activities on meeting the needs of the state, employers, stakeholders and students;

- The management of the EP should involve representatives of groups of interested persons, including employers, students and teaching staff in the formation of the development plan of the EP;

- The management of the EP demonstrated the successful functioning of the internal quality assurance system of the EP, including its design, management and monitoring, their improvement, and decision-making based on facts;

- The management of the EP ensured the participation of representatives of interested persons (employers, teaching staff, students) in the collegial management bodies of the educational program, as well as their representativeness in making decisions on the management of the educational program.

#### ***Standard "Development and approval of an educational programme»***

- Demonstrated the availability of information and educational resources and support systems for students;

- The information collected and analyzed in the framework of the EP takes into account the dynamics of the student population in the context of forms and types of training, key performance indicators of the EP, the level of academic performance and achievements of students;

- Improving the procedure for collecting and processing information for subsequent systematization and use for statutory purposes of personal data of students, employees and teaching staff who have documented their consent;

- The University ensures the functioning of the system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software;

- The University evaluates the effectiveness and efficiency of its activities, including in the context of EP.

#### ***Standard "On-Going monitoring and periodic review of educational programmes"***

- Monitoring and periodic evaluation of educational environments and support services for their compliance with the goals of the EP;

- Continuous monitoring of students ' workload, academic performance, and graduation with the update of accredited programs;

- Demonstrated supporting documents on the participation of employers and other stakeholders in the revision of the EP (expert opinions, reviews of the EP in General, and on certain disciplines by employers);

- The management of the EP should ensure that the content and structure of the EP are reviewed, taking into account changes in the labor market, the requirements of employers and the social demand of society.

#### ***Standard "Student-centered learning, teaching and performance assessment»***

- Ensuring equal opportunities for students, regardless of the language of instruction, to form an individual educational trajectory;

- Availability of a feedback system for the use of various teaching methods and evaluation of learning outcomes;

- To extend the consistency, transparency and objectivity of the mechanism for evaluating the results of accredited EP, revealing the uniqueness of;

- The EP management ensures the use of various forms and methods of teaching and learning;

- We have our own research in the field of teaching methods of academic disciplines.;

- The management has demonstrated the existence of a feedback system for the use of various teaching methods and evaluation of learning outcomes;



- The EP leadership has demonstrated support for students ' autonomy with simultaneous guidance and assistance from the teacher;
- The University ensures consistency, transparency and objectivity of the mechanism for evaluating learning outcomes for each EP, including appeal.

#### *Standard "Students»*

- There is a mechanism for adaptation and support of applicants, including foreign students during the first week of study;
- The management of the EP should demonstrate the implementation of special adaptation and support programs for newly enrolled and foreign students;
- The University has demonstrated that its actions comply with the Lisbon recognition Convention;
- The management of the EP made the maximum amount of effort to provide students with places of practice, promote employment of graduates, and maintain communication with them;
- Monitoring of employment and professional activity of graduates of the EP is carried out;
- The management of the EP encourages students to self-education and development outside the main program (extracurricular activities).

#### *Standard «Teaching staff»*

- Demonstration of an objective and transparent personnel policy that ensures professional growth, staff development and professional competence of the teaching staff of the Department of accredited EP;
- Providing professional development and career opportunities for teaching staff in accredited programs in all structural divisions of the University, including departments;
- Involvement of practitioners – employers of the mining industry in teaching activities on accredited EP;
- The University has an objective and transparent personnel policy that includes hiring, professional growth and development of staff, ensuring the professional competence of the entire staff;
- The University has demonstrated that the personnel potential of the teaching staff corresponds to the development strategy of the University and the specifics of the EP;
- Demonstration of the best practices for employment of graduates, passing all types of practices, as well as the availability of feedback;
- The University determines the contribution of the teaching staff to the implementation of the University's development strategy, etc. Strategic document;
- University teaching staff actively uses information and communication technologies in the educational process (for example, on-line training, e-portfolio, Mohs, etc.).

#### *Standard “Educational resources and support systems for students and undergraduates”*

- The management demonstrated compliance of information resources with the specifics of the OP, including compliance of technical support for students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs), access to educational Internet resources, examination of research results, graduation papers, dissertations for plagiarism.

#### *Standard «Public Information»*

- Information published by the University within the framework of the EP includes information about employment opportunities and qualification at the end of the EP;
- Reflection on the web resource of information that characterizes the University as a whole and in the context of EP;
- Published by the University in the EP is accurate, objective, relevant and includes programmes, specifying expected learning outcomes, information on the possibility of qualification by the end of the EP, information about teaching, learning, assessment procedures, information about the passing score and the educational opportunities provided to students;
- The University participates in external evaluation procedures.

#### *Standards in the context of individual specialties*

### **«Education»**

- Manual EP shows whether the graduates of theoretical knowledge in psychology and skills in communications, analysis of personality and behavior, methods of prevention and resolution of conflict, motivation of students;

- The management of the EP should demonstrate the literacy of graduates of the program in the field of information technology;

- The EP management demonstrates the presence of disciplines in the program that teach innovative teaching methods and training planning, including interactive teaching methods, teaching methods with high involvement and motivation of students (games, case studies/situations, use of multimedia tools);

- The EP guide demonstrates that students have the ability to teach self-learning skills;

- The program focuses on various types of practices: - attending lectures and classes conducted by teachers; - conducting special seminars and discussions on the latest teaching methodologies and technologies; - within the program, students have the opportunity to listen to at least one discipline in their field of specialization taught by a practicing specialist;

- Within the framework of the EP, students are provided with knowledge and skills of systems and methods of pedagogy in the world, as well as knowledge in the field of education management.

### ***Standards in the context of individual specialties: "Natural science, agricultural science, engineering, and technology"***

- To familiarize students with the professional environment and relevant issues in the field of specialization, as well as for the acquisition of skills based on theoretical training, the curriculum includes disciplines and activities aimed at obtaining practical experience and skills in General and majors in particular disciplines, including:

- visits to enterprises in the field of specialization (enterprise, laboratory, etc.),

- conducting individual classes or entire disciplines at the enterprise of specialization,

- The teaching staff involved in the education program includes full-time teachers who have experience in the field of specialization of the education program.

- The content of all EP disciplines is based on and includes a clear relationship with the content of fundamental natural Sciences.

- The management of the EP provides measures to strengthen practical training in the field of specialization.

- The EP management provides training of students in the field of application of modern information technologies.

## **(VII) REVIEW RECOMMENDATIONS FOR QUALITY IMPROVEMENT**

### ***Standard «Management of the educational programme»***

Develop a set of measures to implement the material and technical potential of the University in the field of international cooperation when planning a system for managing possible risks that are subject to implemented EP, monitoring criteria and ways to prevent such risks.

### ***Standard «Information Management and Reporting»***

Constantly update the University's website with up-to-date information about the development of the University and educational programs, the availability of educational resources and support systems on the University's website;

Pay attention to the need for the equivalence of providing information in three languages to meet the needs of teaching staff and students involved in incoming external academic mobility.

### ***Standard "Development and approval of the educational programme»***



Develop a mechanism for preparing students, including students from other universities, for professional certification for the development of the scientific and industrial potential of the region.

Consider the possibility of implementing two-degree education within the framework of accredited programs with leading Kazakh and foreign universities.

***Standard "On-Going monitoring and periodic evaluation of educational programmes"***

Pay attention to the timeliness of informing interested parties about any planned or taken actions in relation to the EP through the University's website, social networks and the media.

***Standard "Student-centered learning, teaching, and performance assessment"***

Increase the number of teaching staff who have completed advanced training in modern methods of evaluating academic disciplines accredited by the EP in the context of student-centered learning.

Strengthen efforts to inform the public and stakeholders about the achievements of accredited EP and the results of their own research to increase the attractiveness of the EP.

Increase the share of students' participation in internal and external academic mobility.

Pay attention to the importance of familiarizing students with the mechanism for recognizing the results of additional, formal and non-formal education.

Consider possible mechanisms for activating the activities of the alumni Association.

***Standard «Teaching staffy»***

Create conditions for young teachers to participate in academic mobility programs.

***Standard "Educational resources and support systems for students and undergraduates"***

Pay attention to the increase in the production capacity of information and communication equipment for the implementation of distance learning at the proper level.

***Standard «Public Information»***

Pay attention to the importance of equal representation of the site content in the state, Russian and English languages.

Reflect on the University's website information about interaction within the framework of the implementation of the EP with partners, databases of practices, leading scientific organizations, and enterprises involved in the implementation of the EP.

***Standard "Standards in the context of individual specialties"***

There are no recommendations in this standard.

**Appendix 1. Evaluation table "PARAMETERS OF A SPECIALISED PROFILE"  
Conclusion of the External Expert Commission on the results of the evaluation of  
educational programs 5B011200/6B01504 – "Chemistry", 6M011200/7M01504 –  
"Chemistry", 5B060600/6B05302 – "Chemistry", 6M060600/7M05302 – "Chemistry"**

№	№	Criteria for evaluation	Position of the educational organization			
			Strong	Satisfactory	Assumes improvements	Unsatisfactory
Standard «Management of the educational program».						
1	1	The university must have a published quality assurance policy.	+			
2	2	A quality assurance policy should reflect the link between research, teaching and learning.	+			
3	3	The university should demonstrate the development of a culture of quality assurance, including in the context of EP		+		
4	4	A commitment to quality assurance should apply to any activity carried out by contractors and partners (outsourcing), including in the implementation of joint double-degree education and academic mobility		+		
5	5	The EP management ensures transparency in the development of the EP development plan based on an analysis of its functioning, the actual positioning of the university and its focus on meeting the needs of the state, employers, interested individuals and students.	+			
6	6	EP management demonstrates the functioning of the mechanisms for forming and regularly reviewing the EP development plan and monitoring its implementation, assessing the achievement of learning goals, meeting the needs of students, employers and society, making decisions aimed at continually improving EP		+		
7	7	EP management should involve representatives of stakeholder groups, including employers, students and faculty members, in the formation of the EP development plan.	+			
8	8	EP management must demonstrate the individuality and uniqueness of the EP development plan, its consistency with national development priorities and the development strategy of the educational organization	+			
9	9	The university must demonstrate a clear definition of those responsible for business processes, within the framework of the EP, the unambiguous distribution of the duties of the staff, and the delineation of the functions of collegial bodies.		+		
10	10	EP management must provide evidence of the transparency of the educational program management system.		+		
11	11	EP management must demonstrate the successful		+		

		functioning of the internal quality assurance system of the EP, including its design, management and monitoring, their improvement, and decision-making based on facts.				
12	12	EP management must manage risk		+		
13	13	EP management should ensure the participation of representatives of interested parties (employers, teaching staff, students) in the collegial bodies of the educational program management, as well as their representativeness in making decisions on educational program management	+			
14	14	The university should demonstrate innovation management in the framework of the EP, including the analysis and implementation of innovative proposals.		+		
15	15	EP management should demonstrate evidence of openness and accessibility for students, faculty, employers and other interested parties.		+		
16	16	EP management must be trained in education management programs		+		
17	17	EP management should strive to ensure that the progress made since the last external quality assurance procedure was taken into account in preparation for the next procedure.	+			
Total standard			7	10	0	0
Standard "Information Management and Reporting".						
18	1	The university should ensure the functioning of a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software.	+			
19	2	EP management must demonstrate the systematic use of processed, adequate information to improve the internal quality assurance system.		+		
20	3	Within the framework of the EP, there should be a system of regular reporting, reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of the departments and departments, scientific research.		+		
21	4	The university should establish the frequency, forms and methods of evaluating the management of EP, the activities of collegial bodies and structural divisions, senior management, and the implementation of scientific projects.	+			
22	5	The university must demonstrate the determination of the order and ensuring the protection of information, including the definition of responsible persons for the accuracy and timeliness of the analysis of information and presentation of data.		+		
23	6	An important factor is the involvement of students, employees and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them		+		
24	7	EP management should demonstrate the existence of a communication mechanism with students, employees and other interested parties, including the existence of conflict resolution mechanisms.		+		

25	8	The university should provide a measure of the degree of satisfaction of the needs of faculty, staff and students in the framework of the EP and demonstrate evidence of elimination of discovered shortcomings.		+		
26	9	The university should evaluate the effectiveness and efficiency of activities, including in the context of EP	+			
		Information collected and analyzed by the university in the framework of the EP should take into account:				
27	10	key performance indicators;	+			
28	11	academic performance, student achievement, and expulsion;	+			
29	12	students' satisfaction with the implementation of the academic program and the quality of education at the university;		+		
30	13	availability of educational resources and support systems for students		+		
31	14	employment and career growth of graduates			+	
32	15	Students, employees and faculty must document their consent to the processing of personal data	+			
33	16	EP management should facilitate the provision of all necessary information in relevant fields of science.		+		
34	17	The university should ensure the functioning of a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software.		+		
Total standard			6	10	1	0
Standard "Development and approval of the educational programme"						
35	1	The university should determine and document the procedures for the development of EP and their approval at the institutional level.		+		
36	2	EP management should ensure that developed EPs are consistent with established goals, including intended learning outcomes	+			
37	3	EP management should ensure the availability of developed models of the graduate of the EP that describe the learning outcomes and personal qualities	+			
38	4	EP management should demonstrate conducting external expert reviews	+			
39	5	The qualifications obtained upon completion of the EP must be clearly defined, clarified and consistent with a certain level of NSC.	+			
40	6	EP management should determine the impact of disciplines and professional practices on the formation of learning outcomes	+			
41	7	An important factor is the ability to prepare students for professional certification.			+	

42	8	EP management must provide evidence of the participation of students, faculty and other stakeholders in the development of EP, ensuring their quality.		+		
43	9	The complexity of the EP should be clearly defined in Kazakhstan loans and ECTS	+			
44	10	EP management must ensure the content of academic disciplines and learning outcomes of the level of education (bachelor's, master's, doctoral).		+		
45	11	The structure of the EP should provide for various types of activities corresponding to the learning outcomes.			+	
Total standard			6	3	2	0
Standard "Continuous monitoring and periodic evaluation of educational programmes"						
46	1	The university should conduct monitoring and periodic assessment of the EP in order to ensure the achievement of the goal and meet the needs of students and society. The results of these processes are aimed at continuous improvement of the OP.	+			
		Monitoring and periodic evaluation of the EP should consider: The content of programs in the light of the latest scientific achievements in a particular discipline to ensure the relevance of the taught discipline;				
47	2	Changes in the needs of society and the professional environment;		+		
48	3	The load, performance and graduation of students;		+		
49	4	The effectiveness of student assessment procedures:	+			
50	5	Expectations, needs and satisfaction of students with training in EP;		+		
51	6	Educational environment and support services and their relevance to the goals of the EP;		+		
52	7	The university and the EP management must provide evidence of the participation of students, employers and other stakeholders in the revision of the EP.		+		
53	8	All interested parties should be informed of any planned or taken actions in relation to the EP. All changes made to the OP should be published.	+			
54	9	EP management should ensure that the content and structure of the EP are reviewed taking into account changes in the labor market and the requirements of employers in the social request of the company.		+		
55	10	The university should conduct monitoring and periodic assessment of the EP in order to ensure the achievement of the goal and meet the needs of students and society. The results of these processes are aimed at continuous improvement of the EP.	+			
Total standard			4	6	0	0
Standard "Student-centered learning, teaching and performance assessment"						

56	1	EP management should ensure respect and attention to various groups of students and their needs, providing them with flexible learning paths.		+		
57	2	EP management should ensure the use of various forms and methods of teaching instruction.		+		
58	3	An important factor is the availability of our own research in the field of teaching methods of educational disciplines of EP.		+		
59	4	EP management should demonstrate the existence of a feedback system for the use of various teaching methods and assessment of learning outcomes		+		
60	5	EP management should demonstrate support for students' autonomy while guiding and assisting the teacher.		+		
61	6	EP management must demonstrate the existence of a procedure for responding to student complaints.		+		
62	7	The university should ensure the consistency, transparency and objectivity of the mechanism for assessing learning outcomes for each academic degree, including an appeal.	+			
63	8	The university must ensure that the procedures for evaluating the learning outcomes of students of EP study meet the planned learning outcomes and program objectives. Evaluation criteria and methods within the framework of the EP should be published in advance.		+		
64	9	The university should determine the mechanisms for ensuring the development of learning outcomes by each graduate of the academic program and ensure the completeness of their formation.	+			
65	10	Evaluators must be proficient in modern methods of assessing learning outcomes and regularly improve their skills in this area.		+		
Total standard			2	8	0	0
Standard "Students".						
66	1	The university should demonstrate a policy for the formation of the contingent of students in the context of EP from admission to graduation and ensure transparency of its procedures. Procedures governing the life cycle of students (from admission to completion) must be defined, approved and published.		+		
67	2	EP management should demonstrate the implementation of special adaptation and support programs for newly arrived and foreign students		+		
68	3	The university must demonstrate the conformity of its actions to the Lisbon Recognition Convention.		+		
69	4	The university should cooperate with other educational organizations and national centers of the European Network of National Information Centers for Academic Recognition and Mobility / National Academic Recognition Information Centers ENIC / NARIC in order to ensure comparable recognition of qualifications		+		
70	5	EP management should demonstrate the existence and application of a mechanism for recognizing the results of		+		

		academic mobility of students, as well as the results of additional, formal and non-formal learning				
71	6	The university must provide an opportunity for external and internal mobility of studies. EP, as well as assist them in obtaining external grants for training.		+		
72	7	EP management should make every effort to provide students with places of practice, facilitate the employment of graduates, and maintain contact with them.	+			
73	8	The university should provide graduates of the educational program with documents confirming the qualifications obtained, including the results of training, as well as the context, content and status of the education and evidence of its completion.		+		
74	9	An important factor is monitoring the employment and professional activities of graduates, EP.	+			
75	10	EP management should actively encourage students to self-education and development outside the main program (extracurricular activities).	+			
76	11	An important factor is the existence of an active association of graduate associations		+		
77	12	An important factor is the availability and support mechanism of gifted students.		+		
Total standard			3	9	0	0
Standard «Teaching staff»						
78	1	The university should have an objective and transparent personnel policy, including in the context of EP, including hiring, professional growth and staff development, ensuring the professional competence of the entire staff.	+			
79	2	The university should demonstrate the compliance of the staff potential of the teaching staff with the development strategy of the university and the specifics of the academic program.		+		
80	3	EP management should demonstrate awareness of responsibility for its employees and ensure favorable working conditions for them.	+			
81	4	EP management should demonstrate a change in the teacher's role in connection with the transition to student-centered learning.		+		
82	5	The university should determine the contribution of faculty staff to the implementation of the development strategy of the university, and other strategic documents.	+			
83	6	The university should provide opportunities for career growth and professional development of faculty staff.	+			
84	7	EP management should involve practitioners in the relevant industries.	+			
85	8	EP management should provide targeted action to develop young teachers.		+		
86	9	The university should demonstrate motivation for the professional and personal development of teachers of EP, including encouraging the integration of scientific activity and education, as well as the use of innovative teaching		+		

		methods				
87	10	An important factor is the active use of the faculty of information and communication technologies in the educational process. (e.g. on-line training, e-portfolio, MEP, etc.)	+			
88	11	An important factor is the development of academic mobility in the framework of EP, the involvement of the best foreign and domestic teachers.		+		
89	12	An important factor is the involvement of teaching staff in public life (the role of teaching staff in the educational system, in the development of science, the region, the creation of a cultural environment, participation in exhibitions, creative contests, charity programs, etc.).		+		
Total standard			6	6	0	0
Standard "Educational resources and support systems for students and undergraduates "						
90	1.	EP management must demonstrate the adequacy of material and technical resources and infrastructure.		+		
91	2.	EP management should demonstrate the existence of support procedures for various groups of students, including information and counseling.		+		
		EP management must demonstrate compliance of information resources with the specifics of the EP, including compliance with:				
92	3.	library resources, including a fund of educational, methodological and scientific literature on general education, basic and majors in paper and electronic media, periodicals, access to scientific databases;		+		
93	4.	examination of the results of research, final works, dissertations on plagiarism		+		
94	5.	Access to educational Internet resources	+			
95	6.	The functioning of WI-FI in the territory of the educational organization.	+			
96	7.	The university should strive to ensure that the educational equipment and software used to master educational programs are similar to those used in the relevant industries.		+		
97	8.	The university must ensure compliance with safety requirements in the learning process.		+		
98	9.	The university should strive to take into account the needs of various groups studying in the context of EP (adults, workers, foreign students, as well as students with disabilities).		+		
99	10.	EP management must demonstrate the adequacy of material and technical resources and infrastructure.		+		
Total standard			2	8	0	0
Standart «Public Information»						
		The information published by the University within the framework of the EP must be accurate, objective, and up-to-date and must include:				



		Implemented programs, indicating the expected learning outcomes;				
100	1.	Information about the possibility of awarding a qualification at the end of the EP;	+			
101	2.	Information about teaching, training, and evaluation procedures;	+			
102	3.	Information about passing points and educational opportunities provided to students;	+			
103	4.	Information about graduate employment opportunities.	+			
104	5.	The management of the EP should use a variety of ways to disseminate information, including the media, information networks to inform the General public and interested persons		+		
105	6.	public awareness should include support and explanation of the country's national development programs and the system of higher and postgraduate education.		+		
106	7.	The University must publish audited financial statements on its own web resource, including in the context of EP.		+		
107	8.	The University must demonstrate the reflection on the web resource of information that characterizes the University as a whole and in the context of EP.		+		
108	9.	An important factor is the availability of adequate and objective information about teaching EP, in the context of personalities.		+		
109	10.	An important factor is to inform the public about cooperation and interaction with partners within the framework of the EP, including scientific consulting organizations, business partners, social partners and public organizations		+		
110	11.	The University should post information and links to external resources based on the results of external evaluation procedures.		+		
111	12.	An important factor is the participation of the University and implemented EP in a variety of external evaluation procedures.		+		
112	13.	The information published by the University within the framework of the EP must be accurate, objective, and up-to-date and must include: Implemented programs, indicating the expected learning outcomes;	+			
Total standard			5	8	0	0
Standard "Standards in the context of individual specialties"						
EDUCATION						
		The management of the EP must demonstrate that graduates of the program have theoretical knowledge in the field of psychology and skills in communication, analysis of personality and behavior, methods for preventing and resolving conflicts, and motivation of students:				
113	1.	The management of the EP must demonstrate the literacy of graduates of the program in the field of information technology.	+			

114	2.	The management of the EP must demonstrate the availability of disciplines that teach in. teaching methods and training planning, including interactive teaching methods, teaching methods with high involvement and motivation of students (games, case studies/situations, multimedia tools)	+			
115	3.	The EP management must demonstrate that students have the ability to teach self-learning skills	+			
116	4.	The EP should focus on different types of practices: - attending lectures and classes held by teachers; - conducting special seminars and discussions on the latest teaching methodologies and technologies; - within the framework of the program, students must have the opportunity to attend at least one discipline in their field of specialization taught by a practitioner	+			
117	5.	Within the framework of the EP, students should be provided with knowledge and skills of systems and methods of pedagogy in the world, as well as knowledge in the field of education management.	+			
118	6.	The management of the EP must demonstrate that graduates of the program have theoretical knowledge in the field of psychology and skills in communication, analysis of personality and behavior, methods for preventing and resolving conflicts, and motivation of students:	+			
Total standard			6	0	0	0
NATURAL SCIENCES, AGRICULTURAL SCIENCE, ENGINEERING, AND TECHNOLOGY						
		Educational programs in the areas of "Natural Sciences", "Technical Sciences and technologies", such as "Mathematics", "Physics", "Information systems", etc., must meet the following requirements:				
119	1.	In order to familiarize students with the professional environment and current issues in the field of specialization, as well as to acquire skills based on theoretical training, the educational program should include disciplines and activities aimed at obtaining practical experience and skills in the specialty in General and in the profile disciplines in particular, including::	+			
120	2.	- excursions to enterprises in the field of specialization (factories, workshops, research institutes, laboratories, educational and experimental farms, etc.),	+			
121	3.	- conducting individual classes or entire disciplines at the enterprise of specialization,	+			
122	4.	- conducting seminars to solve practical problems relevant to enterprises in the field of specialization, etc.	+			
123	5.	The faculty involved in the education program should include full-time teachers who have long-term experience as a full-time employee in enterprises in the field of specialization of the education program.	+			

Total standard	5	0	0	0
<b>TOTAL</b>	<b>52</b>	<b>68</b>	<b>3</b>	<b>0</b>