



«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 specialised accreditation of the educational programme 6D060400/8D05301 - "Physics" RSE on REM "Sarsen Amanzholov East Kazakhstan state University"**

from « 04 » to « 06 » June 2020

Ust-Kamenogorsk

"06" June 2020

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## CONTENT

<b>(I) LIST OF DESIGNATIONS AND ABBREVIATIONS</b>	<b>4</b>
<b>(II) INTRODUCTION</b>	<b>5</b>
<b>(III) REPRESENTATION OF THE EDUCATION ORGANISATION</b>	<b>5</b>
<b>(IV) DESCRIPTION OF THE EEC VISIT</b>	<b>6</b>
<b>(V) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE</b>	<b>7</b>
<b>(VI) COMPLIANCE WITH SPECIALISED ACCREDITATION STANDARDS</b>	<b>7</b>
<b>6.1. Standard «Management of the educational programme»</b>	<b>7</b>
<b>6.2. Standard “Information Management and Reporting”</b>	<b>13</b>
<b>6.3. Standard «Development and approval of the educational programme»</b>	<b>16</b>
<b>6.4. Standard «On-Going monitoring and periodic review of educational programmes»</b>	<b>18</b>
<b>6.5. Standard «Student-centered learning, teaching and performance assessment»</b>	<b>21</b>
<b>6.6. Standard «Students»</b>	<b>23</b>
<b>6.7. Standard «Teaching staff»</b>	<b>26</b>
<b>6.8. Standard “Educational resources and support systems for students and undergraduates”</b>	<b>30</b>
<b>6.9. Standard “Public Information“</b>	<b>33</b>
<b>6.10. Standard «Standards in the context of individual specialties»</b>	<b>35</b>
<b>(VII) REVIEW OF STRENGTHS/ BEST PRACTICES FOR EACH STANDARD</b>	<b>36</b>
<b>(VIII) REVIEW RECOMMENDATIONS FOR QUALITY IMPROVEMENT</b>	<b>38</b>
<b>Appendix 1 Evaluation table "PARAMETERS OF A SPECIALISED PROFILE"</b>	<b>40</b>

## (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>MES RK</b>	Ministry of Education and Science of the Republic of Kazakhstan
<b>EEC</b>	External expert Commission of the NAAR/IAAR
<b>BD</b>	Basic discipline
<b>FQW</b>	Final qualifying work
<b>IRD</b>	Internal regulatory documents
<b>HE</b>	Higher education
<b>EEEA</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>ITWP</b>	Individual teacher's work plan
<b>IOS</b>	International organization for standardisation
<b>IC</b>	Individual curriculum
<b>CED</b>	Catalog of compulsory and elective disciplines
<b>CTT</b>	Credit training technology
<b>MEP</b>	Modular educational programme
<b>RL</b>	Research laboratory
<b>RW</b>	Research work
<b>SRWS</b>	Scientific-research work of the student
<b>RWMS</b>	Research work of a master's student
<b>RWDS</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 programme
<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
<b>SSC</b>	Student service center

## (II) INTRODUCTION

In accordance with order № 35-20-OD of 24.04.2020 of the Independent Agency for Accreditation and Rating, 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 programmes of the IAAR (dated February 24, 2017, № 10-17-OD, fifth edition).

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

### **EEC composition:**

Chairman of the IAAR Commission - Viktor Kamkin, PhD, associate Professor of S. Toraihyrov Pavlodar state University (Pavlodar), (EP 5B060700/6B05101 - "Biology", 6M060700/7M05101 - "Biology").

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

Expert IAAR - Elaman Kanatovich Aybuldinov, PhD (Nur-Sultan), (EP 5B060600/6B05302 - "Chemistry", 6M060600/7M05302 - "Chemistry").

Expert IAAR - Muzdybayeva Sharbanu Akkaziyeva, Ph. D., associate Professor of the Kazakh University of engineering and technology (Almaty), (EP 5B011200/6B01504 - "Chemistry", 6M011200/7M01504 - "Chemistry").

Expert IAAR - Myasnikova Lyudmila Nikolaevna, Ph. D., associate Professor of Aktobe state regional University named after K. Zhubanov (Aktobe), (EP 5B060200/6B01501 - "Informatics", 6M060200/7M06101 - "Informatics").

Expert IAAR - Ruslan Safarov, Ph. D., associate Professor of the L. N. Gumilyov Eurasian national University (Nur-Sultan), (5B011300/6B01505 - "Biology", 6M011300/7M01505 - "Biology").

Expert IAAR - Tashev Bekbolat Akhanovich, PhD, associate Professor of the Kazakh national women's pedagogical University (Almaty), (EP 6D060400/8D05301 - "Physics").

Expert IAAR - Urmashiev Baidaulet Amantayevich, Ph. D., associate Professor of the al-Farabi Kazakh national University (Almaty), (EP 5B070300/6B06102 - "Information systems", 5B011100/6B01501 - "Informatics").

Expert IAAR, representative of employers - Adylkhan Asset Berdygaliuly, head of the human capital development Department of Atameken East Kazakhstan region (Ust-Kamenogorsk), (EP 6D060400/8D05301 - "physics").

Expert IAAR, representative of the student community - Madina Daniyarova Daniyarkyzy, student of EP 5B073100 - "life Safety and environmental protection" of D. Serikbayev East Kazakhstan state technical University (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. Since 2010, the educational process has

been organized with the use of DOT for working youth who study in a reduced form on the basis of Vet and higher 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 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 programmes. The University has successfully passed institutional accreditation and is accredited for a period of 5 years by IQAA (ia-A certificate № 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 programmes 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 (№ 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 Programme of EKSU named after S. 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 the EEC was carried out on the basis of the approved programme of the visit of the expert Commission on specialized accreditation of educational programmes 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 G. 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 programme of the visit included meetings with Vice-rectors, heads of structural divisions, deans, heads of departments of the University, teachers, 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 students who participated in meetings with the IAAR EEC:

<b>Category of participants</b>	<b>Quantity</b>
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
<b>Total</b>	<b>137</b>

Visual inspection was carried out in order to get a General idea of the organisation 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. Experts examined the faculty of Natural Sciences and technologies and its four departments: (Department of computer modeling and information technology; Department of chemistry; Department of biology; Department of physics), as well as structural divisions. Visited the Educational building №1 (Research library, research room for faculty and graduate students, a Fund of rare books, Electronic reading room, Museum of archaeology and cultural heritage of the Altai, IT is the study of chemistry named after Professor Akhmetova A. S., laboratory of General chemistry name of the initiator and first rector of East Kazakhstan state University, doctor of chemistry, academician of NAS RK E. Mambetkaziev, Laboratory of Phytochemistry, Laboratory of chemical analysis Laboratory physical-chemical

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 programme 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 RUP, job descriptions, plans and protocols of the Academic Council, umkd, 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 programmes: KSU "Uchebno-production combine" akimat Ust-Kamenogorsk, Branch of RSE "integro at VKO"; LLP "pilot farm of olive cultures"; LLP respectively your.

## **(V) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE**

The 6D060400/8D05301 – "Physics" educational programme was not previously accredited by an Independent agency accreditation and rating.

## **(VI) COMPLIANCE WITH SPECIALISED ACCREDITATION STANDARDS**

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

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

The mission, strategic goals and objectives of the University (approved by the Academic Council, Protocol No. 2 of October 3, 2018) are consistent with the national priorities and development programmes in the field of education and science of the Republic of Kazakhstan and published on the website <https://www.vkgu.kz/ru/page/ce-li-v-oblasti-kachestva.html> <https://www.vkgu.kz/ru/page/missiya-i-videnie.html>.

The University management has identified 7 key goals aimed at quality assurance, taking into account scientific and innovative, educational, educational, cultural, financial and economic aspects. In accordance with the strategic goals, the University has identified seven key tasks. Strategic goals and key objectives in the field of quality assurance are published on the University's website in Russian, English and Kazakh, with the transition to Latin graphics. Also, goals and objectives are posted on information stands in the University lobby.

As a result of interviews, studying the University's documentation and information on the EKSU website (The development programme of S. Amanzholov EKSU for 2018-2022 was approved by the decision of the Academic Council, Protocol № 2 of 27.09.2018; the action Plan

for the implementation of the development Programme of S. Amanzholov EKSU for 2018-2022 was approved by the decision of the Academic Council, Protocol № 2 of 27.09.2018) the members of the expert group made sure that the implementation of the accredited educational programmes EP 6D060400/8D05301 - "Physics" is carried out in accordance with the mission, vision and priorities of the University.

The development programme of S. Amanzholov EKSU for 2018-2022 (approved by the Academic Council on October 3, 2018) was developed on the basis of a prospective analysis of the development of the educational services market. The Commission confirms that the strategic, tactical and operational activities of the University are reflected in the planning, reporting and regulatory documents of the S. Amanzholov EKSU, the Commission was provided with an Academic policy (re-approved by the Academic Council of the University, Protocol № 6 of December 27, 2018); Order of the rector for approval of the working group on adjustment of the development Programme for monitoring the implementation of indicators and indicators with an indication of the period, for example, for 09.2018-09.2019. (Order № 182-p of 17.05.2019); order of the Vice-rector for strategic development and research on monitoring the University (order No. 98-p of 20.05.2019); Report on the implementation of the development Programme of S. Amanzholov EKSU for 2018-2022 and action Plan for the implementation of the University development programme; Protocol of the Academic Council № 2 of 26.09.2019. to discuss adjustments in terms of terms, indicators and changes to the University development Programme; minutes of the Academic Council № 10 dated 26.03.2020 to discuss changes to the University development Programme due to the introduction of new legislative acts and regulatory documents of the Government and the Ministry of education and science of the Republic of Kazakhstan.

Familiarization with the development programmes of the accredited EP 6D060400/8D05301 - "Physics" for 2018-2021 showed that their content corresponds to the University's development Programme.

The meeting with Vice-rectors, heads of structural divisions and faculty of the University confirms the possible risks in the development of strategic documents.

EEC members note that the University has developed an Academic policy. It is presented as a system of measures, rules and procedures for planning and managing educational activities and effective organization of the educational process [https://www.vkgu.kz/sites/default/files/files/education/akadem\\_sovet/Akadem\\_polit.pdf](https://www.vkgu.kz/sites/default/files/files/education/akadem_sovet/Akadem_polit.pdf).

Goals are published on the official website of the University <https://www.vkgu.kz/ru/page/ce-li-v-oblasti-kachestva.html> and quality policy <https://www.vkgu.kz/ru/page/politika-v-oblasti-kachestva.html>, mission and vision <https://www.vkgu.kz/ru/page/missiya-i-videnie.html>. For example, the mission of the University is to ensure its leading role in the international scientific and educational space for the formation of competitive specialists for the innovative development of Kazakhstan.

The members of the EEC note that the training programme 8D05301 (6D060400) - "Physics" is based on regulatory documents:

- "On approval of the classifier of training areas with higher and postgraduate education" - Order of the Minister of education and science of the Republic of Kazakhstan dated October 13, 2018 No. 569. <https://www.vkgu.kz/ru/page/prikazy-mon-rk.html>;

- The state mandatory standard of postgraduate education, approved by the Order of the Minister of education and science of the Republic of Kazakhstan dated October 31, 2018 No. 604. Registered with the Ministry of justice of the Republic of Kazakhstan on November 1, 2018 No. 17669. (hereinafter - SSO);

- "On approval of standard curricula for higher and postgraduate education", as amended on July 5, 2016, No. 425)

EEC members confirm that the accredited EP 8D05301 - "Physics" has a development Programme developed and approved in accordance with the rules established at the University. The development programme of EP 8D05301 - "Physics" for 2018-2022, the main information



about which is available in the public domain, was developed in accordance with the development Programme of S. Amanzholov EKSU for 2018 - 2021, and approved at the meeting of the Council of the faculty of natural Sciences and technologies on 08.11.2018, Protocol No. 3. The development programme of EP 8D05301 - "Physics" contains the mission, goals and objectives, a detailed description of the directions of strategic development (academic, research, innovation, etc.), analysis of the current situation, SWOT analysis, development prospects, etc.

The EEC confirms that the educational programme of doctoral studies implemented by S. Amanzholov EKSU in the direction of training doctoral students 8D05301 (6D060400) - "Physics" is carried out in accordance with the mission of the University, taking into account the level of development of education and science, as well as the conditions offered by reality. Training of doctoral students in the educational programme of 8D05301/6D060400 "Physics" is on the basis of State license № 12020617 issued by CCES MES of the RK, the date of issuance of the license 11.12.2012 g. (Appendix 1).

It should be noted that the development programme of EP 8D05301/6D060400 - "Physics" was developed in accordance with the University's development Programme. The EP development programmes for 2018-2021 show both mechanisms for identifying and assessing risks through SWOT analysis of EP development procedures.

In addition, the EP development programme is formed taking into account the availability of financial, information, labor, and material and technical resources. The material and technical, information and library resources used for organizing the learning and upbringing process are sufficient to fulfill the stated mission, goals and objectives and meet the requirements of the implemented programmes.

Experts note that the priorities in forming the goals of the educational programme are the demand of the labor market for competent specialists with fundamental knowledge and innovative technologies; taking into account the changing conditions of the external socio-economic environment (both in the country and abroad); focus on creating and supporting favorable conditions for innovation and creativity.

The Commission took into account that students, teachers, employers, and interested persons participate in the process of forming the development programmes of the EP. This process is carried out by discussing the professional competencies of future specialists, expected results, requirements of employers, and changes in the labor market (Appendix 4). Teaching of academic disciplines is based on modern achievements in science and practice, as well as modern educational technologies that involve the construction of educational trajectories in accordance with the competence approach.

The organization of educational process of students in educational trajectories based on the implementation of the principle of orientation EP on the personal needs of the student, disclosure of its building and training of socially active person. Based on the catalog of elective subjects, which contains a list of all modules of the component of choice, indicating the purpose of study, brief content and expected results of study, with the active participation of the adviser, the student determines the trajectory of their training with the inclusion of the selected subjects in their individual curriculum. The distribution of disciplines by semester is carried out in a logical sequence, taking into account the observance of prerequisites and post-prerequisites. The individual curriculum of the student is approved annually, contains a list of disciplines and the number of credits.

The quality of activities performed by partners in the organization of industrial practice is ensured by conducting questionnaires, surveys and interviews among students on their satisfaction with the practice bases. The main evaluation criteria are reviews of the managers of the practice bases and reports of students on the results of the internship. Information about the implementation of the educational programme is systematically analyzed and self-assessment is conducted in all areas. Application

To assess the success of the development strategy of the educational programme planned audits internal and external experts, objects of which are educational-methodical documentation of EP and disciplines, matching their contents with regulatory requirements.

To determine the level of satisfaction of external and internal needs of consumers of educational services, the Department of quality management, monitoring and forecasting organizes and conducts surveys of employers, students, teachers and employees of the University every academic period. Questionnaires used for the survey: "Teacher through the eyes of a student", "Satisfaction of students and graduates with the quality of educational services" and "satisfaction of employers with the quality of graduates". The results of the survey are statistically processed, discussed at meetings of the Department, the faculty Council, and the rector's office, and taken into account in the further planning of educational activities.

All interested persons have the opportunity to make an appointment with the rector and Vice-rectors according to the approved schedule. In addition, anyone who has the opportunity to appeal personally to the rector via his blog on the website. There is operational access to all departments through the Lync programme, file exchange via Microsoft Outlook, registration of maintenance requests and orders for various types of practices through the 1C Enterprise electronic document management system. Thus, it is possible to use various feedback methods for operational interaction. All incoming information is carefully analyzed, and the University management takes appropriate measures.

The University management creates conditions for comprehensive training of teaching staff and students to provide multilingual training. The center for multilingual education "Til Alemi" of the University has been created, which coordinates the organization of language courses, training seminars, preparation of teaching staff and students for IELTS exams and for admission to master's and doctoral programmes. In 2019, the University won the project "Stimulating productive innovation" (105 million tons) funded by the Ministry of education and science of the Republic of Kazakhstan, which in 2020 will support teachers and scientists to study English and prepare for IELTS.

General professional competencies of a graduate of EP 8D05301 (6D060400) - "Physics":

- analyze current and unsolved problems, achievements and innovative research theories of modern physics;
- integrate knowledge in various and related fields of scientific research and solve problems that require abstract and creative thinking and originality in the development of conceptual aspects of research projects in the field of physics;
- apply the basics of a systematic approach in the course of research activities;
- be able to predict the dynamics of innovation processes, assess the level of innovation activity, formulate principles and criteria for evaluating innovation, classify factors, forms and results of innovation.;

The PhD programme regulates the goals, expected results, content, conditions and technologies for implementing the educational process, and evaluating the quality of graduate training in this area.

The content of EP 6D060400/8D05301 - "Physics" provides training of highly qualified personnel for industry and scientific centers of the region and the Republic of Kazakhstan, corresponding to the level of production development, taking into account the needs of employers.

The conditions and technologies of realization of educational process:

1. Doctoral training is carried out by full-time education.
2. The educational programme of doctoral studies includes: theoretical training including studying of cycles of basic and profiling disciplines; professional practice (educational, industrial, research); research work of the doctoral student, including her doctoral dissertation, interim and final certification;

3. The Educational programme is based on modules, the labor intensity of each discipline is taken into account in credit hours based on the National qualifications framework;

4. The educational programme of doctoral studies developed by the University in accordance with the Dublin descriptors, consistent with the European framework of qualifications, the Industry qualifications framework of education; (curriculum doctoral 2018 predusmatrivaet teaching practice).

5. The organization of the educational process is carried out on the basis of credit technology of training, which allows doctoral students to build an individual learning trajectory; choose teachers; independently master training courses using educational and methodological complexes of disciplines, get advice from teachers during the SRDP; track their academic rating, etc.

Academic value and uniqueness of EP 6D060400/8D05301 - "Physics" is to implement a process of training a new generation able to work to transform the region's economy on innovation through the development and implementation of sustainable trends in the field of natural Sciences; in the choice of doctoral disciplines required in the operation process, in particular, "condensed matter Physics and nano-systems" and "Physics of nanomaterials", reflected in the Catalogue of elective disciplines.

At the meeting of the project Committee of the Department of physics (Protocol No. 1 of 14.01.2019) on the recommendations of the head of the Central scientific laboratory of JSC "UMP" Kylyshkanov M. K., as well as the production Director of the production company "BEST" Pavlov A.V. in the catalog of elective disciplines EP 8D05301 (6D060400) - "Physics" included the discipline "Actual problems of science, technology and ecology" (there is a Protocol of the meeting of the academic Council). In the catalog of elective disciplines 2019-2020. new disciplines included: "Achievements of physics in recent years", "Unsolved problems of modern physics", "plasma Physics and plasma processing".

EP 6D060400/8D05301 - Physics prepares personnel for the National Nuclear Center of Kazakhstan, JSC "UMP" LLP, respectively your NNLK and SIC "surface Engineering and Tribology" of EKSU. S. Amanzholov and organizations of RK.

Along with the teaching staff, representatives of employers, graduates, and students are involved in the development and updating of the EP.

To ensure the quality of education in the 2019-2020 academic year, the University organized an Academic Council, which consists of focus groups-project committees of educational programmes, which include representatives of the administration, teaching staff, employers, graduates of previous years, students. <https://www.vkgu.kz/ru/page/akademicheskij-sovet-vkgu-im-s-amanzholova.html>

Cooperation with foreign educational centers, such as AltSTU (Barnaul, Russia), joint Institute for nuclear research (Dubna, Russia), Federal state educational INSTITUTION of higher EDUCATION of Tomsk Polytechnic University (Russia), Siberian Federal University (Krasnoyarsk, Russia), Wroclaw University of science and technology (Wroclaw, Poland), University named after Adam Mickiewicz (Poznan, Poland), Busan national University (Busan, Korea) contribute to the active involvement of teachers and doctoral students in international educational programmes.

Knowledge about modern educational technologies, methods, techniques, methods of developing and submitting educational material, obtained by teaching staff during various types of advanced training courses, is used by them in preparation for all types of classes.

To achieve the goals of the educational programme, the highly qualified teaching staff leading the training of doctoral students in the educational programme "Physics" has a 100% degree (3 doctors of science, professors, 3 candidates of science, 3 PhD doctors, 1 doctor HUB). In particular, for the training and scientific guidance of students in EP 8D05301 (6D060400) - "Physics", contracts were signed with foreign scientists: PhD, Professor Seng Mei Lee (Busan national University); doctor of technical Sciences, Professor Alexander Gradoboev

(national Research Tomsk Polytechnic University), Professor Vieleba Wojciech (wrocław University of science and technology) (Appendix 6).

### *Analytical part*

The interaction between teaching, research, and learning plays a key role in programme quality assurance policies. The main goal of the quality assurance Policy is to guarantee the quality of educational activities by meeting the requirements of consumers. To achieve the main goal, the University pursues a constant policy of integrating the educational process and research activities by attracting doctoral students to participate in research projects:

State budget projects:

1. " Research and development of innovative technologies for obtaining wear-resistant materials for mechanical engineering products "(2018-2020) - PhD supervisor B. K. Rakhadilov.
2. "Improving the tribological properties of polymer materials by electron beam treatment" (2018-2020) - PhD supervisor B. K. Rakhadilov.
3. "Development of the technology of electrolytic-plasma surface quenching to increase the durability of heavily loaded gears" (2018-2020) - research supervisor PhD Bayatanova L. B.
4. "Development and creation of a commercial prototype of a damless mini-hydroelectric power station in the region" (2018-2020) - PhD supervisor A. M. Zhilkashinova.

Contractual projects:

1. "Creation of a multifunctional portable plant for processing metal materials based on innovative electrolytic plasma technology" (2019) - PhD supervisor B. K. Rakhadilov. <https://www.vkgu.kz/ru/page/realizuemye-nauchnye-proekty-universiteta.html>.

S. Amanzholov EKSU takes the necessary measures to maintain academic integrity and academic freedom, and protect against any kind of intolerance and discrimination against students, teachers, or employees.

All academic buildings and dormitories have hotlines and boxes for complaints and suggestions, and the rector's blog is open on the University's website (<https://rblog.vkgu.kz/>), which can be accessed by any student and teacher.

As one of the concrete steps of the work on the principle of Academic integrity, the University has developed and approved the "teacher's code of honor" and "student's code of honor", which defines the basic ethical rules of behavior of teachers and students. The code reflects the principles of professional activity, rights and obligations, and ethics of relations between students and teachers.

The University has an anti-corruption policy. The disciplinary and anti-corruption Council of the S. Amanzholov EKSU organizes and conducts events in accordance with the work plan, in order to implement the anti-corruption provisions of the Law "on combating corruption", the anti-corruption programme of the "NurOtan" party for 2015-2025, conducts activities to prevent offenses, including corruption-related ones (meetings, round tables, scientific and practical conferences and seminars, etc.). During the winter and summer examination sessions, the Republican campaign "Clean session" is held. During the academic year, students and faculty of the University are informed about the ways to submit reports on corruption violations (helplines, rector's blog). An anonymous survey is conducted among students for anti-corruption monitoring. The University has developed an educational programme for all specialties and forms of training "Fundamentals of anti-corruption culture".

Internal regulations have been developed (PR EKSU 008-19) in accordance with the Law of RK "About education" from 27.07.07 № 319-III (with changes and additions from 22.12.2016 g); Labor Code dated 23.11.2015 No. 414-V ZRK; Charter on PVC RSE "East Kazakhstan state University named after Amanzholov Sarsena". The rules define the requirements of labor discipline that are mandatory for the teaching staff, employees, and academic discipline for students of the University. The purpose of the internal regulations is to create a safe and favorable educational environment that provides conditions for successful academic and social growth of students based on mutual respect between all members of the educational process.

S. Amanzholov EKSU operates a student service Center "Parasat "(DSP), which operates on the principle of " one window " and provides students with appropriate services on administrative, educational and Advisory issues.

EP 6D060400/8D05301 - "Physics" was reviewed by a representative of the partner University, in particular, the faculty of Physics and technology of the Altai State University (Barnaul, Russia).

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

Quality assurance policies should reflect the relationship between research, teaching and learning

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 EP management engages representatives of interest groups, including employers, trainees, and teaching staff, to form a development plan for the EP.

The EP management demonstrated the individuality and uniqueness of the EP development plan, its consistency with national development priorities and the development strategy of the educational organization.

The EP management provided evidence of the transparency of the educational programme management system.

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 fact-based decision-making.

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

The weak side of the EP is:

The EP management should implement risk management as well as a system of measures aimed at reducing the degree of risk

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

Consider further possible joint forms of international cooperation with partner universities and step up the implementation of this cooperation.

The management of the EP should implement risk management and a system of measures aimed at reducing the degree of risk

***The EEC notes that the University has a strong position according to 7 criteria of this standard, satisfactory positions according to 7 criteria, and offers improvement according to 1 criterion.***

## **6.2 Standard “Information Management and Reporting”**

### ***Evidence part***

Meeting with the leadership of the University, heads of departments and faculty showed that the collection and analysis of data to assess the impact of the implementation of accredited EP conducted in accordance with applicable regulations, record keeping is conducted in accordance with the approved nomenclature of Affairs, the safekeeping and archiving of documents, electronic document circulation is implemented through Microsoft Outlook.

The University has its own information website and educational portal. Information site of the University (<https://www.vkgu.kz/ru>), contains information about the activities of the University, the history of the University, the educational process, scientific activities,

international cooperation, etc. There is information for both students and applicants. The rector's blog functions.

The Parasat student service Center (SSC) operates to serve students on a one-stop-shop basis.

The expert Commission confirms that students have access to the following information resources on the library's website <http://library.vkgu.kz>: bibliographic descriptions of books, Republican interuniversity electronic library (RSEB); project of the Kazakhstan national electronic library (EGBF-KazNEB), NNP RK; project of the National subscription for the use of resources of the international databases Scopus and Web of Science; RSCI. EB "Epigraph", NEB" Cyberleninka", EB" LAN", project" AbaiDigital", official statistical information on East Kazakhstan, Plenipotentiary directory, Scientific social networks, personal identifiers of scientists, citation databases, DOI, project" Rare Fund", project" Regional Bulletin of the East", project "Feed of new books". The scientific library of the University has access to domestic databases with the Republican interuniversity electronic library, as well as to foreign databases Clarivate Analytics, SpringerLink, Sciepse, near abroad rolpred.com (free of charge), LAN (2019).

Students, employees and teaching staff of the University when applying to the University draw up agreements for the processing of their personal data.

To increase the interactivity of interaction with the contingent and facilitate feedback, social networks are used - Vkontakte (<http://vk.com/>), "facebook" (<https://www.facebook.com/>), in addition, departments have groups for mass distribution of information via the WhatsApp mobile application. In connection with the transition to distance education due to quarantine, DOT platforms on AIS E-Univer, ZOOM, Youtube and Skype are widely used in the implementation of accredited EP.

In all departments of the University, records management is conducted in accordance with the nomenclature of cases. The Department has work plans of the Department, research plan, R & d plan, educational work plan, individual work plans of teachers and students in all areas of activity there are annual reports that are approved at the meeting of the Department. The results of scientific research are reflected on the University's website.

The Board acknowledges that the frequency, forms and methods of evaluation of the control EP, as well as the activities of collegial bodies and structural divisions, senior management, research projects regulated by complex Provisions and guidelines posted on the state and Russian languages on the University website in the section "Local normative documents of the University" (<https://www.vkgu.kz/ru/page/lokalnye-normativnye-dokumenty-universiteta.html>).

The Commission indicates a high level of satisfaction of the EP management, academic staff and students feedback system and resolution of conflicts, as evidenced by the results of the anonymous survey 100% of respondents from the category of TS gave a positive evaluation to the questions "Rate the accessibility guides for students", "Rate the availability of the guide teachers", "Rate the level of feedback of faculty with leadership" and "perception of How the management and administration of the University criticism?". The survey of students showed that 96.8% of respondents were fully or partially satisfied with the level of accessibility and responsiveness of the University's management, while only 3.2% were partially satisfied. 96.8% of students are fully or partially satisfied with the fairness of exams and certification, while only 3.2% expressed dissatisfaction with this parameter.

Documents are preserved and archived and electronic document management is in progress. Access to the Internet via WI-FI.

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

Analyzing the EP on the content of the standard "information Management and reporting" for accredited areas, the Commission notes that the University operates a system for informing employees, teaching staff and students through both paper and electronic mailing of internal and external documents to structural divisions. The publication of the necessary

information is observed on the website of the University and faculty, and is also posted on information stands. Stakeholders are informed at meetings and meetings, as well as via direct e-mail.

The official website of the University and faculty, reference terminals in academic buildings, wall stands of deans' offices where the schedule of classes, schedules of the educational process, and exam schedules are placed are widely used as sources of information for students.

All information management processes are automated on the basis of the University's corporate computer network. Local corporate messenger "Commfort" supports the exchange of individual and group messages and file exchange between departments and faculties of the University.

The information technology center provides protection of the software used – licensing of software products; electronic resources published on the Internet - using the https Protocol, the corporate network - setting up firewalls; computer equipment - installing antivirus tools; confidential information-access control; corporate information - using authorization and authentication tools.

The survey of students conducted during the visit to the national Academy of Education showed the following satisfaction of respondents:

- the level of accessibility and responsiveness of the University management: fully satisfied and partially satisfied-96.9%;
- the usefulness of the website of the educational organization in General and faculties in particular: fully satisfied and partially satisfied-95.2%, partially dissatisfied-4.8%;
- informing the requirements for successfully completing this specialty: fully satisfied and partially satisfied-93.6%;
- the library is well equipped and has a fairly good collection of books: fully satisfied and partially satisfied-88.9 %.

However, the Commission notes the insufficient implementation of the principle of trilingualism when providing information through the University's website in the section on information coverage of academic mobility and adaptation of first-year students. Information on the stands on educational and educational processes is not reflected in English.

It should be noted that during the interviewing of the heads of structural divisions and teaching staff of the University, the expert Commission found that when forming social passports of the contingent of students, the procedure for obtaining written permission to collect, process and store personal data is not carried out.

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

Students, employees, and teaching staff document their consent to the processing of personal data.

The University measures the degree of satisfaction with the needs of teaching staff, staff and students within the framework of the EP and demonstrates evidence of eliminating the identified shortcomings;

The University provides measurement of the dynamics of the student population in the context of forms and types.

The University provides measurement of students' academic performance, achievements, and deductions

The University provides a measure of students' satisfaction with the implementation of the EP and the quality of education at the University;

The University measures the availability of educational resources and support systems for students;

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;

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

Update the content of the University's educational website in a timely manner, especially in the field of international cooperation and international educational programmes.

***EEC notes that according to 7 criteria of this standard, the University has a strong position, according to 9 criteria - satisfactory positions.***

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

### ***Evidence part***

The University has developed an algorithm for developing and approving educational programmes (<https://www.vkgu.kz/ru/page/polozheniya-lokalnye-normativnye-dokumenty-universiteta.html>) taking into account the following legislative and regulatory documents: Law of the Republic of Kazakhstan "on education" dated July 27, 2007 No. 319-III ZRK; decree Of the Government of the Republic of Kazakhstan" on approval of state mandatory standards of education of the relevant levels of education " dated October 31, 2018 No. 604; Order of the Minister of education and science of the Republic of Kazakhstan "on amendments and additions to the order of the Minister of education and science of the Republic of Kazakhstan dated April 20, 2011 No. 152" on approval of the Rules for organizing the educational process on credit technology of training " dated October 12, 2018 No. 563; Order of the Ministry of education and science of the Republic of Kazakhstan "On approval of qualification requirements to educational activities, and the list of documents confirming compliance with it" from June 17, 2015 No. 391 (as amended by the order of MES RK dated November 16, 2018 No. 634); the Regulation "On the development of modular educational programmes" from 28.12.2018 G.; "Regulation on the development of the catalog of elective disciplines."

The expert Commission shows that the development and approval of educational programmes at the University for accredited EP have a multi-level stage:

- development of the EP project by a working group from among the faculty of the Department and partners-employers in accordance with the National qualification framework, industry qualification framework and professional standards (if available), SES, standard curricula and standard programmes of disciplines;
- discussion of the EP project at the Department meeting;
- examination of the EP, its relevance, emerging competencies and expected learning outcomes at a meeting of the Academic Council (project Committee from 2019-2020 academic year);
- development of recommendations for making changes and additions to the EP;
- updating the EP (in terms of elective subjects) by modules;
- adjustment of the content of EP (modules for achieving learning outcomes) to meet modern requirements;
- definition of teaching, learning and evaluation methods that ensure the achievement of learning outcomes; development of evaluation tasks for measuring learning outcomes in the EP, etc.), etc.

The University has a four-level and differentiated quality control system with the following structure:

- 1) Department (methodical section);
- 2) faculty (methodological Council of the faculty);
- 3) methodological Council of the University (MSU). Part of MSU includes the following working groups: working group on the implementation of the programme "Rouhani Jair"; group for methodological support for the development of teaching materials; group training and methodological support and monitoring of professional practice; group on the implementation of



trilingual education; group the implementation of the programme of transition to the Latin alphabet, such as the introduction of the updated content of education, such as the introduction of IT technologies in the educational process).

4) the scientific Council. (Protocol №5 of 16.06.2015; Protocol № 9 of 27.06.2016; Protocol №7 of 27.06.2017; Protocol №6 of 29.06.2018; Protocol №13 of 27.06.2019).

The main role in the development and updating of the EP belongs to the Academic Council (project Committee), which includes teaching staff, students, graduates, employers responsible for organizing the practice. The activities of the Council are regulated by EKSU 019-16 "on the Academic Council of the S. Amanzholov EKSU" (EKSU 050-19 "Regulations on the Project office"). The Commission indicates Protocol confirmation (minutes No. 1 of 11 January 2019) decision to include in the EP CED accredited undergraduate discipline "Physiology and biochemistry of plants, Physiology of aquatic organisms, Physiology and ecology of microorganisms" at the suggestion of the employer Anuarbekova S. M. - Director of the Altai branch of LLP "Kazakh Sri of fishery".

The inclusion of these disciplines is aimed at improving the training of personnel with the necessary skills and abilities for the labor market, which is reflected in the materials of the Protocol when discussing the EP.

Quality assurance of accredited EP is carried out through mutual attendance of classes and conducting open classes, as well as on methodological decades (PR EKSU 006-18 "Regulations on the organization and conduct of methodological decades").

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

1. Development of the EP project by a working group from among the faculty of the Department and partners-employers in accordance with the National qualification framework, industry qualification framework and professional standards (if available), SES, standard curricula and standard programmes of disciplines. It is mandatory that the EP meets the stated goals that are consistent with the mission of the University, the requests of employers and students.

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 Committee.

4. Development of recommendations for making changes and additions to the EP to the project committees.

5. Adjustment of EP taking into account the recommendations of project committees (updating of the EP (in terms of elective courses) module; adjustment of the content of the EP (modules to achieve learning outcomes) taking into account modern requirements; definition of methods of teaching, learning and assessment, ensuring the achievement of learning outcomes; development of assessment tasks to measure learning outcomes 18 at the EP, etc.).

6. Statement EP at the academic Council of the University.

7. Approval of the Catalog of elective subjects (hereinafter - QED), the modular educational programme (hereinafter-MOE) at the Academic Council of the University (in accordance with the Cyclogram of educational and methodological activities of S. Amanzholov EKSU. The activity of the Academic Council is regulated by EKSU 045-19-About the Academic Council of EKSU named after S. Amanzholov.

### *Analytical part*

The procedure for discussing and approving educational programmes of specialties, compliance with their standards by level is reflected in the minutes of the meeting of the graduating departments and the Academic Council of the University.

The modular educational programme EP 8D05301 (6D060400) - "Physics" contains a complete list of academic disciplines grouped into cycles of basic (DB) and profile disciplines

(PD) both for mandatory components and elective components, indicating the labor intensity of each academic discipline in credits and academic hours.

Working curricula EP 8D05301 (6D060400) - "Physics" provide a sequence of studying the disciplines of the DB and PD cycles.

Qualifications received by graduates in the result of mastering of educational programme of doctoral studies PhD, refers to the 8th level qualifications of the National qualifications framework (approved by the Protocol dated 16 March 2016 the Republican tripartite Commission on social partnership and regulation of social and labor relations).

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

The University defines and documents the procedures 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 ensures that the developed models of the EP graduate describe the learning outcomes and personal qualities.

The EP management determines the influence of disciplines and professional practices on the formation of learning outcomes.

The EP management provides evidence of participation of students, teaching staff and other stakeholders in the development of the EP, ensuring their quality.

The structure of the EP provides for various types of activities that correspond to the results of training.

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

Expand the areas of interaction with the best foreign universities to attract foreign students.

***EEC notes that the University has a strong position on 6 criteria of this standard, and satisfactory positions on 6 criteria.***

### **6.4 Standard “On-Going monitoring and periodic review of educational programmes”**

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

On the basis of the University, faculty and departments, monitoring and periodic evaluation of educational programmes is carried out in order to ensure that the goals are achieved and meet the needs of students and society. 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 programmes. All interested parties are informed of any planned or taken actions in relation to these programmes.

Monitoring and periodic evaluation of educational programmes are aimed at achieving its goals, the full formation of planned learning outcomes.

EP verification is performed in accordance with the EP monitoring methodology, which includes:

- survey of students, teachers, and employers ' organizations;
- analysis of academic performance of students, undergraduates and doctoral students;
- information support of the educational process, resource and information support of the

EP;

- analysis of the assessment system for students, undergraduates and doctoral students;
- assessment of the level of competence of R & d (R & d, R & d, R & D);
- the degree of compliance of the EP with the established requirements.

Improvement planning is implemented using quality management tools. Measures are being developed to improve processes, which are reflected in the documentation of the quality assurance system.

It is established that modern educational technologies are used to ensure the required quality of training. The performer of the educational process is a highly qualified teaching staff of the Department.

The EEC confirms that the development of the educational programme 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 graduate and master's works, as well as the opinions and suggestions of students and employers based on the results of professional practices.

The University management has created conditions for attracting employers to the implementation of the educational programme through participation in meetings of the Project Committee to coordinate the list of elective subjects, management of professional practice, review of doctoral works and methodological developments of teachers.

The educational programme 8D05301 - "Physics" is updated in connection with changes in the state mandatory standard of education at all levels of education (Order of the Minister of education and science of the Republic of Kazakhstan dated October 31, 2018 №604. Registered with the Ministry of justice of the Republic of Kazakhstan on November 1, 2018 №17669), professional standards, introduction of new directions and elective courses. The educational programme is updated in accordance with the requests of employers (14.01.2019 Minutes of the meeting of the Committee on EP №1) which is reflected in the catalog of elective subjects for the corresponding academic year and approved by the Academic Council of the University. In order to meet the needs of various groups of students, the EP includes elective subjects that are necessary in the course of future work. For example, the disciplines " plasma Physics "and" Plasma processing " were offered for study by doctoral students.

The Department of postgraduate education and the registration office organize and conduct the selection of doctoral and elective subjects in accordance with regulatory requirements.

Monitoring and periodic evaluation of the EP are reflected in the minutes of the Department's meetings.

The University monitors and periodically evaluates the EP in order to ensure that the goal is achieved and meet the needs of students and society. The results of these processes are aimed at continuous improvement of the EP.

The workload of students, the level of academic performance and the output of students meet the regulatory requirements. The University, employers, and students are informed about the planned and taken actions in relation to the EP.

The analysis of procedures for monitoring and periodic evaluation of educational programmes is based on the analysis of: curricula, catalog of elective subjects, individual curricula of students, internal regulatory documents regulating the implementation of educational programmes, their monitoring and evaluation, minutes of collegial bodies and meetings of departments.

The educational programme contains theoretical training, an additional educational programme-minor ("Tamed Sun of Kazakhstan-tokamak"), several types of practices, intermediate and final certification.

The educational programme is developed in accordance with the Dublin descriptors, coordinated with potential employers and reflects the University's commitment to the ideas of the Bologna process: student-centered education; lifelong learning; competence-based education; quality assurance and improvement. The standard ratio was met: basic subjects-15% and core subjects-85%.

Implementation of educational programmes is conducted in accordance with national state standard and other normative documents of the MES, according to the rules of modular

structuring competence-based approach and taking into account the learning outcomes of the modules and the whole modular programme in Kazakhstan credits and ECTS.

Catalog of elective subjects. The catalog of elective subjects is developed in order to create an opportunity to independently and comprehensively determine the trajectory of students' learning and is approved by the Academic Council of the University.

The catalog of elective subjects includes a component for choosing basic and core subjects and is updated annually to reflect changes in the external environment and labor market requirements.

The developed Catalog of elective subjects of the EP is aimed at the formation of key competencies of students, defined by the Dublin descriptors, consistent with the European and National qualifications framework, and contributes to the personal development of students and develops their creative abilities.

The educational programme provides an opportunity for students to independently track the current rating. The accumulative system promotes their desire to actively participate in all types of classes, planning, monitoring and evaluation of knowledge.

The University, employers and students are informed about the planned and taken actions in relation to the EP. Information is provided directly through the University's teaching staff and the website <http://vkgu.kz>.

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 achievements of science, market requirements and recommendations of employers.

Feedback for improving elective courses is based on the systematic collection, analysis and management of reliable information with the participation of students, undergraduates, doctoral students, employees and employers, the results of which are reviewed elective courses to ensure relevance.

Individual training plans of students. The registration office organizes registration of students to study academic subjects with the involvement of structural divisions and advisors; forms academic groups and streams; registers individual curricula of students; organizes and conducts intermediate and final certification of students, etc.

In order to avoid chaotic choice of elective subjects, students, undergraduates and doctoral students are given several educational paths to choose from. Lists of elective subjects and the sequence of their study, allowing you to get an additional list of professional skills and competencies within the specialty, focused on a specific field of activity, taking into account the needs of the labor market and employers.

An accessible educational resource environment has been created for training, including computer equipment, software products-licensed and purchased, websites, computer classes, reading rooms, a book Fund, a Fund of educational digital materials, etc.

### *Analytical part*

Disciplines are provided with work programmes, syllabuses, test books, educational and methodical manuals and guidelines for laboratory practice and independent work of students.

Preliminary consultation is held at lectures, practical classes, and previous sessions of the SRDP, where the time for submitting the SRD is additionally announced, as well as changes in the schedule for receiving the SRD. All disciplines of the Department are provided with methodological materials for performing independent classroom work.

The guide on the website of S. Amanzholov EKSU presents criteria and methods for evaluating students' knowledge, providing for the procedure for conducting current, intermediate and final control of knowledge, final certification, and the current methodology for evaluating student performance for rating grades in disciplines.

Educational disciplines of the EP are sufficiently equipped with educational and didactic materials with a modern level of content and execution. Educational and didactic material is developed by qualified teachers at a sufficiently high scientific and methodological level and is aimed at developing competencies in accordance with the educational programme. Classrooms equipped with modern computers and an interactive whiteboard are used to ensure high-quality classes. All disciplines are provided with methodological guidelines for independent implementation of practical work, lecture notes to increase the availability of educational material for disciplines.

The University has created the necessary conditions for self-education of doctoral students: a library with a Fund of educational, methodological, scientific literature, periodicals; an electronic library and subscription domestic and foreign databases; free Internet access; access to sports halls; conditions for participation in competitions, competitions and subject Olympiads; in student self-government bodies; for research work.

The modular structured educational programme is regularly updated, and the requirements of the labor market and employers are taken into account when developing elective courses and the content of the professional practice programme.

Feedback for improving elective courses will be based on the systematic collection, analysis and management of reliable information with the participation of students, employees and employers, the results of which are reviewed elective courses to ensure relevance.

Interested persons receive information about any planned or taken actions in relation to accredited EP through the University's website and through written correspondence.

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

Monitoring and periodic assessment of the survey: changes in the needs of society and the professional environment;

Monitoring and periodic evaluation of the EP should consider the expectations, needs, and satisfaction of students with the EP training.

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

The management of the EP should review the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social demand of society.

***EEC notes that according to 2 criteria of this standard, the University has a strong position, and according to 7 criteria - satisfactory positions.***

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

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

The EP management ensures equal opportunities for students, regardless of the language of instruction, to form an individual educational programme aimed at developing professional competence. Regardless of the language of instruction, students are equally available syllabuses, umkd, scientific and educational literature, SRS, SRSP, consultations and information resources. On the official website of the University, students and visitors can get acquainted with the admission Rules, regulatory documentation on the organization and methodological support of the educational process, transfer from one course to another, from other universities, the procedure for transferring credits mastered in other universities, deductions, etc. Graduate departments ensure the harmonious development of students, taking into account intellectual development and individual characteristics.

The EP management aims to ensure that different groups of students and their needs are addressed by giving them the opportunity to choose alternative subjects and using different forms and methods of teaching and learning. Before the start of the EP, the survey data and electronic databases of students are processed and appropriate adjustments are made based on

these data. The University also promotes support for all groups of students, including those with disabilities. The policy for implementing inclusive education is published as part of the Academic policy and is freely available on the University's website.

Members of the Commission noted that from the student's page on the University's educational portal, each student can view the schedule of classes and exams, current and intermediate academic performance, and so on.

The main criterion for completing the educational process for the preparation of doctors of philosophy (PhD) (doctor of the profile) is the development of at least 180 academic credits, including all types of educational and scientific activities. In cases of early completion of the educational programme of doctoral studies and successful defense of the dissertation, the doctoral student is awarded the degree of doctor of philosophy (PhD) or doctor of the profile, regardless of the period of study.

The main task of the knowledge assessment process is to provide the student and the employer with information about the level of knowledge and abilities, the assimilation of educational material, the amount of practical skills acquired and the degree of formation of the student's competencies. This is facilitated by the information and educational portal developed at the University (<http://portal.vkgu>) and automated information system (hereinafter-AIS).

The information and educational portal serves as a "single window" of access to all educational and information resources of the University, to the results of student performance, including current and mid-term control, intermediate and final certification of students. The electronic database of academic achievements of each student is formed by the "user Menu" systems, which contains the "student Section", then - "academic Performance" of the information and educational portal of EKSU.

AIS is aimed at ensuring the quality of training, creating rules for planning and monitoring the educational process, information support for decision-making, providing information about the educational process for students. It has subsystems such as: "Registration", "Schedule", "Testing", "Student" and others.

Academic performance of students, assessment of factors of influence and methods of its improvement are discussed annually at the Academic Council of the University. The analysis is carried out, on the basis of which changes are made to the curricula and programmes related to the use of modern approaches to higher education based on the competence approach, strengthening of professional orientation, and the research component.

Transfer and reinstatement of students from other universities are carried out in accordance with PGU 034-18 - "on the procedure for reinstatement, transfer and expulsion of students"

[https://www.vkgu.kz/sites/default/files/files/education/local\\_norm\\_doc/poloj\\_vosst\\_perev\\_otchis\\_ru.pdf](https://www.vkgu.kz/sites/default/files/files/education/local_norm_doc/poloj_vosst_perev_otchis_ru.pdf).

The provision of academic leave to students is carried out in accordance with PSU 033-18 – "on the procedure for granting academic leave to students of S. Amanzholov EKSU" [https://www.vkgu.kz/sites/default/files/files/education/local\\_norm\\_doc/poloj\\_akadem\\_otp\\_ru.pdf](https://www.vkgu.kz/sites/default/files/files/education/local_norm_doc/poloj_akadem_otp_ru.pdf).

The University follows the student's code of honor and "zero tolerance" for dishonest attitude to study, study, and getting grades. Regular meetings are held between the rector (once a quarter) and deans (on the last Wednesday of each month) of the University's students, thanks to which young people have the opportunity to make suggestions for improving the conditions of the educational process. Helplines and boxes for complaints and suggestions are posted in all academic buildings and students' Homes, according to the University's website [www.vkgu.kz](http://www.vkgu.kz). The rector's blog is open, which can be accessed by any student

The code of honor of the teacher of S. Amanzholov EKSU is a system of moral norms, obligations and requirements of conscientious behavior, based on generally recognized moral principles and norms of Kazakhstan society and the state. The main activity of the teacher is to

work with students, take care of their education and culture, and educate true patriots of their homeland.

### *Analytical part*

Teachers of the accredited EP 8D05301 - "Physics", serving the educational process, observe the code of honor of the teacher and prove by personal example to students the need to comply with the rules of labor and academic discipline, respect for colleagues. Teachers are demanding of themselves, their words and actions, honest and impartial in professional evaluation of their colleagues and students, organized. Teachers are constantly working to improve their theoretical and practical knowledge, teaching skills and actively conduct research and scientific activities based on an honest search for knowledge.

### *Strengths / Best practices*

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

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

The EP leadership demonstrates support for student autonomy while providing guidance and assistance from the teacher.

The EP management demonstrates that there is a procedure for responding to student complaints.

The EP management ensures respect and attention to different groups of students and their needs, providing them with flexible learning paths.

### *Recommendation of the EEC*

Include a formula for calculating academic performance indicating the weight shares of the final control, admission rating, and current academic performance in the EP description

***EEC notes that the University has a strong position on 5 criteria of this standard, and satisfactory positions on 5 criteria.***

## **6.6 Standard «Students»**

### *Evidence part*

The policy of formation of the contingent of students is admission to the number of enrolled persons that are most prepared to study in doctoral programmes of the University, deliberately chose the EP and have a certificate (IELTS) on English language level, obtained the required number of points by results of UNT (graduates of a magistracy) on the basis of the state order (grants).

Admission to the doctoral programme in EP 8D05301 (6D060400) - "Physics" is carried out on a full-time basis.

Upon admission, students are familiar with the rules of living in a hostel, the code of corporate culture and the scientific circles and student self-government organizations operating at the University and the Department, the library's working hours, instructions for users of reading rooms and subscriptions, the electronic information search system, and the reference guide.

Based on the information received, students form an IEP, build educational trajectories, using the opportunity to choose both a teacher and a discipline, taking into account their needs for obtaining appropriate competencies within the chosen specialty. The reference guide for each academic year is available for each student both on paper and in electronic form.

Experts noted that students and visitors to the official website of the University can get acquainted With the rules of admission, transfer from one course to another, from other universities, the procedure for transferring loans mastered in other universities, deductions, etc.

The University has created the necessary conditions for creative development and participation of students in scientific research. One of the strengths in the organization of research activities of the University is to attract students to perform research together with the teaching staff.

The University has created the necessary conditions for doctoral students to work:

- scientific library with a Fund of educational, methodical, scientific literature, periodicals;
- electronic library and subscription full-text domestic and foreign databases;
- availability of free Internet;
- ability to publish scientific articles;
- the opportunity to participate in University research competitions, projects, conferences of students and doctoral students;
- the opportunity to participate in the work of sports sections at the University.

In the course of training, doctoral students gain skills in working in a group through participation in the development and defense of scientific projects, sports competitions, social life of the faculty and University, cultural and leisure events, charity events.

The content of the QED is discussed at the meetings of the Academic Council. As a result of the discussion, the proposals of doctoral students to improve the quality of education were taken into account, for example, elective subjects in English (Modeling of nonstationary processes in the multiphase mediums, Technology of thin films, Bases of nano electronic) were included in the curriculum; Minor "Tamed Sun of Kazakhstan – tokamak" was developed; Professor Wojtek Vieleba from Poland was involved in the implementation of the programme with guest lectures on tribology.

professional and research practice of students.

The unified information and educational environment of the University (AIS) is used to provide the EP, and all participants in the educational process have access to the electronic library. In addition, all information that reflects the planning, implementation of the EP and evaluation of students' performance is provided on the website [www.vkgu.kz](http://www.vkgu.kz).

The system of the electronic portal of S. Amanzholov EKSU exists and is actively used. The portal provides access to the schedule, EP content, operational information about activities, and a system of announcements and news (<http://euniver.vkgu.kz>), a list of electronic library materials. Subjects of the educational programme are provided with educational and didactic materials. The educational portal of the University provides educational documentation for students. Students have access to a full database of electronic educational publications updated by the University library, as well as national and international electronic databases.

There is an information system AIS EKSU, which includes technological support for all participants in the educational process. The AIS has an electronic journal for monitoring students' knowledge. This journal is intended for monitoring academic performance. The module contains a log of final grades, final state certification, examination and rating statements without appeal, examination and rating statements with appeal, transfer of students from course to course, reports on transfer sessions, academic debts.

Appeal commissions are created by order of the rector to consider students' complaints about the assessment of their knowledge during the examination sessions and final certification. The appeal procedure is fairly transparent. At the end of the final certification, a report on the work done by the appeals Commission is compiled and a decision is made. A summer semester was introduced to eliminate academic debt and differences in curricula, re-master disciplines, and study additional courses.

Monitoring of academic achievements and assessment of their knowledge in cycles or in individual disciplines is carried out by the registration office at the milestone stages of the educational process (at the end of each academic period and academic year) and should be focused on the final results of training.



The University has created conditions for continuous self-education of students in the field of education, aimed at the formation of professional mobility, development of research skills, disclosure of creative potential, individual abilities and personal development.

Teachers of the departments are actively working to attract students to scientific activities. Teachers of the Department annually organize and conduct intra-University competitions "Zhas Talap", "Granite of science", which is held during the Week of science and creativity, as well as a student scientific conference. The best papers are published in conference proceedings and presenters will be awarded with diplomas and certificates.

The development and implementation of educational and teaching AIDS and didactic materials necessary for the organization of the educational process is carried out in accordance with the long-term plan of the publication, coordinated by the Department of methodological support of educational programmes. The quality control of training manuals prepared for publication is carried out by the expert Commission of the Academic Council of the University.

The library contains the necessary materials for training: educational, technical, reference and General literature, various periodicals. The library Fund is staffed printed and (or) electronic editions of the main academic literature in the disciplines of the base part of all cycles, published during recent 10 years (for basic part disciplines of Humanities, social and economic cycle – over the past 5 years).

The library collection is 1,052,964 copies. The Fund of additional literature in addition to educational includes official reference and bibliographic and periodical publications in the amount of 42,293 copies.

The library of building №7 of the faculty of natural Sciences and technology is equipped with an electronic catalog. Access to the resource is provided from the scientific library and the Electronic library website.

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

- electronic library catalog;
- student electronic library;
- personal indexes of scientists ' works;
- bibliographic indexes and lists;
- acquisition of information resources;
- new arrival;
- list of periodicals issued by the library, etc.

The library page on the site is updated regularly.

Access to Internet resources is organized from the official website and educational portal of the University.

The Fund of educational and methodical literature on accredited EP is in a satisfactory state.

University students have the opportunity, under the signed contracts to use the services of the Republican interuniversity electronic library (REIL); the research platform Web of science, Scopus Database publishing Corporation Elsevier; Kazakhstan national electronic library DB Polpred.com electronic library "Epigraph", database "Paragraph" etc.

Students are provided with dormitories, they live in the Houses of students №1, 4, 5. The dormitories have been completely renovated and comfortable living conditions have been created: electric stoves, washing machines, etc. The dormitories have study and reading rooms, rest rooms, showers, and laundries. The hostel has a student Council, which includes housing and household, sanitary, cultural, sports sectors, and the editorial Board.

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.

Upon graduation, graduates who have successfully completed their studies are issued a state-issued diploma, an Appendix to the diploma (transcript) of the state standard, indicating the results of training and the number of credits studied – Kazakhstan and ECTS.

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

The EP management demonstrates the implementation of special adaptation and support programmes for newly enrolled and foreign students.

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

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

Consider taking part in the "Erasmus" programme for students and faculty of the University.

To find an opportunity to expand the geography and increase the quantitative indicators of outgoing academic mobility of students to English-speaking countries in order to maximize the available multilingual potential of students.

***EEC notes that according to 2 criteria of this standard, the University has a strong position, according to 12 criteria - satisfactory positions.***

## **6.7 Standard "Teaching staff"**

### ***Evidence part***

The University's personnel policy is transparent and available on the University's website. The management of the EP demonstrates the application of the University's personnel policy for teaching staff involved in the implementation of the EP. Recruitment is based on an analysis of the needs of the educational programme, which results in a competition for filling vacant positions. The competition to fill vacant positions of teaching staff and researchers at the University is held in accordance with the current legislation. The announcement of the competition and acceptance of documents for participation in the competition is posted on the University's website in the Vacancies section (<https://www.vkgu.kz/ru/page/vakansii.html>).

The faculty is the main resource for ensuring the mission of the University. The University pays special attention to the processes of recruitment and training of staff. It is important that teachers have full knowledge and understanding of the subject taught, the necessary skills and experience to effectively transfer knowledge to students in the educational process. Special attention is paid to the continuous improvement of the provision of educational programmes with teachers with academic degrees and academic titles.

All academic disciplines of the EP are served by the faculty of the Department of physics. For example, the Department of physics has 2 doctors of science, professors, 3 candidates of science, 3 doctors of PhD according to the educational programme 6D60400/8D05301 – "Physics". Basic higher education corresponds to the direction of the educational programme.

The teaching staff is formed based on the needs for effective implementation of educational programmes, as well as based on the total academic load.

Personnel policy at the University is conducted in accordance with the Labor code of the Republic of Kazakhstan dated December 28, 2018 № 37, the Collective agreement of the University, PSU 042-18 "Personnel policy".

The Commission confirmed that in order to improve the quality of knowledge in the field of professional competence, teachers in the scientific library of the University have access to

information resources and databases. Teachers are regularly informed through the University's website about grant competitions at home and abroad, as well as about conferences held on the profile, about journals indexed in Thomson Reuters, Scopus, where they can publish the results of their research in both educational and scientific activities.

Training and professional development of teaching staff is mainly carried out through short-term courses and internships at leading universities and enterprises in Kazakhstan and abroad.

The professional development plan includes all types of internships, PC courses, etc. Upon completion of advanced training, reports or documents confirming training (certificates) are provided.

EKSU pays great attention to ensuring that the merits of teaching staff are properly recognized and rewarded. For the purpose of staffing the University with competent and experienced personnel, ensuring sufficient material conditions for conscientious performance of official duties, production efficiency and quality of work, the relationship between specific labor results and increasing the material interest of employees, various forms of labor incentives and material incentives are carried out at the University for achievements in scientific activity, innovation in work, long-term and impeccable work, and for other achievements in work.

S. Amanzholov EKSU is responsible for the quality of work of its teachers and employees and provides favorable conditions for their activities. The length of working time and the main responsibilities of employees and the University administration are reflected in the "internal regulations", the Charter of the RSE at the Sarsen Amanzholov East Kazakhstan state University. The rules define the requirements of labor discipline that are mandatory for the teaching staff. In case of violation of the Rules, the University administration has the right to apply disciplinary measures.

The staff of the Department is determined based on the standard academic load calculated on the basis of approved working curricula (RUP) of specialties and requirements for the order of planning the academic load of the teaching staff.

The visit of the EEC showed that the teaching staff of the EP complies with the Rules "on approval of qualification requirements for educational activities and the list of documents confirming compliance with them" (order of the Minister of education and science of the Republic of Kazakhstan dated June 17, 2015 № 391, as amended on September 20, 2016 № 568).

Members of the Commission confirm that the Department of physics has a sufficient reserve of qualified teachers in the disciplines of the specialty, which is confirmed by the availability of alternative candidates in compulsory and elective disciplines. The faculty of the Department is actively engaged in both educational and scientific activities, takes advanced training courses and English.

The choice of areas and topics for R & d in the Department of physics conducted in accordance with the priorities of scientific and technical policy of the Republic of Kazakhstan (Nuclear technologies and technologies of renewable energy, nanotechnology and new materials), Programme of fundamental scientific researches of MES of RK (promising New materials and technologies, radiation-thermal technology).

Research of the Department of physics is carried out on the following topics:

1. Influence of external influences on the structure and properties of metals, alloys and non-metallic materials.
2. increasing the wear resistance of metal surfaces by the combined method of surface mechanical processing and electrolyte-plasma treatment.
3. Nuclear and alternative energy.
4. Obtaining heat-protective coatings by detonation method.
5. Problems of training competitive specialists in CSR and ICT.

EEC members were convinced that 48 articles, including those with non-zero impact factors, were published in the RSCI-13 publications recommended by KKSON – 9 for the topics

of research areas of the faculty, employees and masters, doctoral students of the Department of physics during the reporting period.

Professional retraining of teaching staff in the direction of the educational programme is consistently carried out. Qualification and professional development of staff is an important factor in the competitiveness of each University. Teaching staff of the Department take advanced training courses according to the University's advanced training plan:

Control over the professional development of teaching staff is carried out by the qualification confirmation center. The professional development plan includes all types of internships, PC courses, etc. Upon completion of the course, reports or documents confirming the training (certificates) are provided.

Appropriate conditions are created at the University for the full professional development and realization of the creative needs of each category of employees.

### *Analytical part.*

The activity of the University's teaching staff is carried out on the basis of an individual teacher's work plan drawn up for each academic year. The individual work plan and report of teachers has the following structure: educational work (section 1); educational and methodological work (section 2); research work (section 3); organizational and methodological work (section 4); educational work (section 5); professional development (section 6).

Academic work: planning the teaching load of the teaching staff is carried out by the head of the Department in accordance with the approved standards. The distribution of the academic load for teachers is carried out taking into account their qualifications, academic degree, title, and position.

The University has created all the necessary conditions to ensure the necessary balance between the educational and scientific activities of teachers who implement the educational programme. The Department carries out a differentiated distribution of the teaching load of teaching staff, including classroom, extracurricular load, practice hours, management of doctoral dissertations.

When distributing the teaching load, consistent continuity is taken into account, i.e. teachers are assigned certain academic disciplines, according to the profile of the specialty.

Lecture courses in special subjects are taught by established teachers.

Teachers of the departments conduct individual documentation efficiently, fill out individual plans for all sections correctly and in a timely manner. They report on the implementation of individual plans in December for the first semester and in June for the year, which provides an appropriate conclusion about the success or analyzes the reason of failure of individual sections of the plan. After discussing the results of the implementation of the individual plan, head of the Department. the Department makes a corresponding entry on the last sheet of the report of the faculty.

Teaching staff carry out scientific activities by submitting collective research projects to competitions held by the Ministry of education and science of the Republic of Kazakhstan. Teaching staff weekly plan several hours a day (depending on the daily workload of the working day) to work in the library, at the Department, etc. When drawing up the workload and schedule of teachers, the administration strives to ensure a balance between teaching and supervision, and to enable personnel to effectively engage in research and educational work.

Teachers of the Department write reviews and reviews of doctoral and master's theses, act as official opponents in their defense.

During the academic year, the teaching staff of the Department of physics carry out continuous work on improving programmes, their modularity, defining educational goals and forming learning outcomes, and improving the effectiveness of training.

There is a constant assessment of teachers' activities through open classes, mutual visits to classes, planned sociological surveys, and teaching staff. The activity of teachers is planned, which provides the necessary balance of educational, teaching, research and educational work.

Teachers of the Department contribute to the improvement of the educational programme. Every year, according to the UML publication plan, textbooks, monographs, manuals, e-learning resources, guidelines and recommendations approved at a meeting of the University's methodological Council are developed and published. Educational and methodical literature is introduced into the educational process of the University.

By decision of the Academic Council for outstanding achievements in scientific-pedagogical and public activities of workers presented to the government awards and awards MES "honored worker of education of RK", "For merits in development of science of Kazakhstan", Honorary diploma of the Ministry, with Gratitude, the ministries, akimat, etc.

At the end of the academic year, competitions are held in the following categories: "Best teacher" - for success in academic work", "Best researcher-for success in scientific work" and other categories. All winners are awarded a cash prize and diplomas. In the "Best Department" category, the Department of physics has been awarded this title three times in recent years. Teachers of the Department were repeatedly recognized as the best in various categories in annual competitions of the University scale.

B. K.Rakhadilov – "100 new faces of Kazakhstan" 2018; winner of the Grant of the Foundation of the First President of Kazakhstan, 2018; winner of the Grant "Best University teacher-2018"."Best teacher of the year - 2019", 1st degree Diploma of the Minister Of education and science of the Republic of Kazakhstan based on the results of the NIRS-2011 competition; two-Time winner of the State scientific scholarship for talented young scientists who made an outstanding contribution to the development of science and technology in 2013-2014 and 2018-2019; III place in the nomination "Best young scientist" In the national competition of innovative projects of NURINTECH youth.

Zhilkashinova A.M. – "100 new faces of Kazakhstan" 2018; Award for the development of a unique domestic unmanned mini-hydroelectric power station of the derivational type (2019); "Best teacher of the year - 2020".

The faculty annually presents the results of scientific activities for discussion by a wide audience in the framework of foreign and patronymic scientific publications and conferences. Scientific publications of the faculty of the Department are presented in table 5.6. (Appendix 12)

Teaching staff uses modern interactive and pedagogical teaching methods and innovations in the educational process. When conducting lectures, interactive whiteboards, demonstrations and virtual laboratory work, visual AIDS (posters, graphs, tables, etc.), educational and methodological literature developed by the faculty are used.

Teaching staff effectively uses the brainstorming method, which develops critical thinking, problem-based learning, and project-based learning. It is used in small group work, group discussions, etc. Such work instills skills of cooperation and interpersonal communication. In the educational process, when conducting lectures, the results of scientific research of teachers are used (Professor Skakov M. K., Professor Kveglis L. I., associate Professor Yerbolatuly D., etc., Rakhadilov B. K., Kylyshkanov M. K.).

In order to ensure the quality of the EP, the staff of the faculty was supplemented by invited teachers, leading specialists in the relevant field of production. For example: Darya Lvovna Alontseva, PhD, Professor of D. Serikbayev EKSTU; Rusin Yuri Grigorievich, Ph. D., head of the uranium laboratory Stepanov Anatoly Anatolyevich physicist-engineer, Service of the chief physicist of JSC "UMP", Verigin Alexander Alexandrovich, Ph. D., Director of "Technoanalit" LLP, Kylyshkanov Manarbek kalymovich Ph. D., head of the research laboratory, Pavlov Alexander Viktorovich, HR Director, production company "BEST" LLP, etc.

The center for multilingual education "Til Alemi" of the University organizes English courses for University teachers (in 2018, Kveglis L. I. graduated from English courses).

As part of the academic mobility of the faculty, foreign scientists were invited to give lectures from universities in the top 500 universities in the world: Senior Expert Service Germany Dr. Sumit Banerjee (Germany); Professor of Mineralogy Simon Redfern (great Britain,

University of Cambridge). Lectures on nanotechnology by Professor Prof. Dr. Matthias Rebhan were organized. International surau

During the period from October 3 to October 7, 2016, Jiri Klemesh, Professor of the Catholic University of Moscow, delivered a course of lectures in English for students of the Department of physics. Peter Pazman in Budapest (Hungary).

On October 5, 2016, Professor Sang-MacLee of Busan University (South Korea) made a report on the topic: "State of the future development of energy-saving technologies in South Korea".

On November 3, 2016, he gave a lecture on "surface Modification of metals and alloys", doctor of Ph. D., Professor O. D. Pogrebnyak (Sumy Institute of surface modification, Ukraine).

From 7 to 10 December 2016 lectured on problems of radiation material science, Ph. D., associate Professor of the Department "materials Science and materials processing technologies" of the Polytechnic Institute of Siberian Federal University Noskov F. M., the Professor of Siberian Federal University Lyamkin, (Krasnoyarsk, Russia), Professor, doctor NIAMH wroclaw universitetami and technology (Wroclaw, Poland).

In 2017, Professor at Busan University (South Korea) Sang Mei Lee gave a course of lectures on "Nuclear power" for undergraduates and doctoral students.

From October 04 to 05, 2018, doctor of Ph. D., Professor O. D. Pogrebnyak (Sumy Institute of surface modification, Ukraine, University of Lublin, Poland) was invited to give lectures.

October 15, 2018 Andrey Savchenko, a well - known foreign scientist, Professor, expert in the field of materials science, PhD, chief engineer of Optimech Intrnational from New Zealand, is a graduate of EKSU.

From October 22 to 26, 2018, the training course "Reactor technologies", lecturers, instructors of the course were Japanese specialists (Dr. Amamoto, Dr. Ioka) and specialists Of the national nuclear center of the Republic of Kazakhstan.

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

The EP guide demonstrates a change in the role of the teacher in connection with the transition to student-centered learning.

The EP management engages practitioners from relevant industries to teach.

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

Actively use information and communication technologies in the educational process (for example, on-line training, e-portfolio, Mohs, etc.).

Take measures to create conditions for outgoing academic mobility of teaching staff to foreign countries.

***EEC notes that according to 2 criteria of this standard, the University has a strong position, and according to 7 criteria - satisfactory positions.***

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

### ***Evidence part***

The University has created conditions for meeting the social, personal and everyday needs of students. This operates the infrastructure for the organisation of educational process and extracurricular activities and includes: 8 University buildings, 4 students ' hostels, 7 canteens, sports club, student fitness center. And.N. Trunova, swimming pool "Chaika", training-tactical polygon of the military Department of the name of Kabanbai Batyr, a research library, National scientific laboratory of collective use, educational and scientific center practices "Sibiny", center for field practice them. G. Vistenius-D. Pankratiev. Administrative and academic support to

ensure students: admissions office, the student service Centre "Parasat", Department of organization and control of educational process, the marketing center, careers and employment Department of distance technologies, center for multilingual education, libraries.

The material and technical base of the University provides all types of practical training and research work of students, provided for by the educational programmes of the University and corresponding to the current sanitary and epidemiological and fire safety standards and rules.

The educational process within each EP is provided with the necessary classroom Fund, educational laboratories, and computer classes.

The Commission confirmed that the material and technical base used for organizing the training process in the specialty 6D060400/8D05301 - "Physics" meets all the requirements of the educational programme being implemented.

The faculty of natural Sciences and technology is assigned a classroom Fund for the purpose of conducting special disciplines (practical and laboratory classes), which includes:

- specialized classrooms equipped with modern multimedia equipment for conducting classes using video presentations;
- classrooms and laboratories for practical training in special disciplines, equipped with educational and laboratory equipment;
- computer class.

Material and technical resources, funding, training and laboratory facilities, the library Fund, information of EKSU. S. Amanzholov due to the content of SES, the requirements of services of state supervision, the principles of state social policy and aimed at the successful implementation of the EP.

The financial policy of S. Amanzholov EKSU is aimed at improving the quality of EP. The University promptly updates the material and technical base in accordance with modern requirements.

EEC confirmed that to support students in fulfilling their educational, personal and career needs, the S. Amanzholov EKSU has:

- center student services "PARASAT" (street of the 30th Guards division, 34);
- Department of postgraduate education (34, 30th Guards division street, academic building № 1, office 231);
- scientific library;
- center for information and technical support and digitalization (34, 30th Guards division str., academic building №1);
- technology commercialization office (148 Voroshilova str., building 7, office № 100,121);
- Research center "surface Engineering and tribology" (148 Voroshilova str., building 7, № 121, 121f, 121d);
- National scientific laboratory for collective use (18a Amurskaya str., academic building № 8, 148 Voroshilova str., building 7 );
- Student houses (№ 1-7 Obraztsovaya street; № 3-42 30th Guards Division street; № 4-38 30th Guards Division street; № 5-40 30th Guards Division street);
- canteens and buffets (in all academic buildings);
- sports halls (training building №1, 34 30th Guards division street; training building №2, 7 Bazhova street; training building №7, 148 Voroshilova street) and the "Chaika" swimming laboratory (31/1 Potanina street);
- medical offices (in all buildings );
- clubs (debate Club "DILMAR", Sports club, MK "Zhas Otan" under the party "Nur Otan", chess club, volunteer club "Meyirim", etc.).

Advisors provide constant assistance to students in the development of OP, assist in the preparation and adjustment of the individual curriculum; monitor the timely preparation and availability of methodological materials and compliance with the rules for conducting boundary

and final control in all disciplines of the specialty. In addition, they provide consulting assistance in solving issues of professional self-determination, future career, determining the topic of graduation work, and the base of professional practice.

Organizational support and coordination of the academic mobility programme at S. Amanzholov EKSU is provided by the Department of international cooperation and attracting foreign students.

Academic mobility of students is organized at the University in accordance with the PSU 040-18 "Regulations on academic mobility of students, teachers and employees" and is regulated by the following documents:

- a statement of the student;
- agreement on cooperation between universities;
- individual training plan for students, undergraduates, and doctoral students;
- a tripartite agreement (agreement) on training in mobility programmes between the student, the receiving and sending universities.
- order to send a student to a partner University;
- academic transcript;
- certificate of academic performance of a student or master's student (transcript) during their studies at the Host University;
- medical certificate 082-y (for those traveling abroad).

Within the framework of academic mobility, the Department of physics has signed cooperation agreements with universities in Kazakhstan and neighboring countries (Shakarim State University (Semey), Siberian Federal University (Krasnoyarsk, Russia), Altai state University (Barnaul, Russia, national Research Tomsk Polytechnic University (Tomsk, Russia), Wroclaw University of technology (Wroclaw, Poland)).

The material and technical base of the S. Amanzholov EKSU is maintained in proper order and is promptly repaired by the training and support staff.

Members of the Commission noted that currently most of the faculty's classrooms are equipped with multimedia equipment, scientific laboratories equipped with the necessary tools and materials are freely available for students, and the software is regularly updated in all classrooms. Technological support for teachers is provided through the provision of computer equipment, classrooms with multimedia equipment, and specialized classrooms; through the provision of technical assistance in the design of course cases, electronic textbooks, test tasks, publication of methodological and scientific literature, electronic journals of pedagogical load, creation of an electronic portfolio.

The main parameters of the logistic support of the educational process of the Department focuses on the expansion of its technological capabilities, such as availability of technical training, support of educational and research copying equipment and use in the classroom audio - visual equipment.

All buildings and structures meet the current requirements of sanitary standards and fire safety, qualification requirements for the activities of educational institutions and state educational standards.

Offices for the administration, teaching staff, staff, and available state-of-the-art equipment help to maintain the goals of educational programmes, the expected learning outcomes of students, and provide an atmosphere conducive to learning.

#### *Analytical part*

The research center "surface Engineering and tribology" was established on April 2, 2018 as part of a programme-oriented project. Research and development of innovative technologies for obtaining wear-resistant materials for mechanical engineering products (project implementation years: 2018-2020).

The research center develops innovative technologies based on resource-saving methods of surface modification and application of protective coatings to increase the wear resistance of products. Mechanical engineering that are subject to intensive wear and tear during operation.



The material and technical, information and library resources used to organize the learning process are sufficient and meet the requirements of each implemented EP.

As software, the programme "IRBIS 64+" is used, which provides comprehensive automation of all library processes, consisting of 6 modules: "Aggregator", "Cataloger", "Reader", "book Security", "book delivery", "Administrator".

Users are provided with a modern reference and bibliographic apparatus: an electronic catalog and problem-oriented databases. Working with catalogs is carried out in two types: electronic and traditional (card). The total volume of the electronic catalog is 207738 bibliographic records. The electronic catalog consists of 9 databases: "Books", "Articles", "Periodicals", "Works of teaching staff", "Rare books", "Electronic Fund", "Readers". The electronic catalog is edited in accordance with regulatory documents, and a planned retroconversion of the library Fund is being conducted. The electronic catalog reflects the library's collection from 1998 to the present, increasing annually.

Electronic document management ensures the movement of electronic documents in the EKSU, while a full cycle of automation is carried out from creating a document to sending it to the archive. At the same time, a significant reduction in the use of paper documents is achieved.

Online testing – a database of test tasks used for testing students' knowledge.

The University pays great attention to the development of support services for students who have difficulties in studying, lagging behind due to various reasons in the development of EP, as well as students who have a desire for deeper development of the programme, the development of additional credits during the summer semesters, and academic mobility.

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

The EP management demonstrates compliance of information resources with the specifics of the EP, including compliance with: library resources, including the Fund of educational, methodological and scientific literature on General education, basic and profile disciplines on paper and electronic media, periodicals, access to scientific databases;

Availability of access to educational Internet resources

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

Expand THE Wi-Fi zone.

***EEC notes that the University has a strong position on 2 criteria of this standard, and satisfactory positions on 6 criteria.***

### ***6.9 Standard «Public Information»***

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

EEC members were convinced that the main partners of the University in implementing information policy are The regional communications service of East Kazakhstan region, the regional TV channel "ALTAI", the regional Newspapers "Didar", "Rudny Altay", "Aldaspan", "Ustinka plus", and regional websites Altaynews.kz, "Ustinka LIFE", Republican TV channels "Khabar", "Kazakhstan", "Astana", "Atameken", "24 kz", "CPC", international news agencies - MIA "Kazinform", MIA "DK News", Republican Newspapers "Kazakhstanskaya Pravda", "Business Kazakhstan", " Bilimdi El. Educated country", "Italics", "Express K", Republican magazine "Modern education", etc.

Information on the site is integrated from the University's information systems, updated in real time and is aimed at groups of users: applicants, students, academic staff, administrative and managerial staff.

The information site is managed by the information technology and digitalization Center.

Information security, which guarantees the trust of consumers and other interested parties, is provided through role-based access control, server system administration, backup system, and restriction of access of individuals to the premises with servers.

### *Analytical part*

The effectiveness of informing the site is carried out through monitoring on an ongoing basis.

The information policy includes an annual report of the rector of the University on the results of its activities to the public: students, parents, employers, social partners and other interested parties.

Informing the public about the activities of S. Amanzholov EKSU, educational programmes is carried out through events, conferences, round tables at the University, as well as cooperation with various organizations.

Business cooperation is carried out with government agencies – akimat of Karaganda region, the akimat of Ust-Kamenogorsk, maslikhat of East Kazakhstan region maslikhat of the city Department of internal policy of East Kazakhstan region, the Department of physical culture and sports, Department of Agency of the Republic of Kazakhstan for civil service Affairs and anti-corruption in EKR, the Department of justice, the Department of police of East Kazakhstan region, regional court, regional Prosecutor's office, the Department of defense of Kazakhstan, the office for religious Affairs, the Department of employment coordination and social programmes administration for languages development, Department of culture, archives and documentation, Department of entrepreneurship and industrial and innovative development, Department of tourism and external relations, Department of internal policy of East Kazakhstan region, etc.

For example, the media center cooperates with the Department of the Agency of the Republic of Kazakhstan for civil service Affairs and anti-corruption in East Kazakhstan region in joint video conferences on the basis of the TV Studio "Altai jastary".

Among the educational structures and institutions, parties, public and youth organizations: NUR OTAN party, Institute of analysis and forecasting of East Kazakhstan region, RNP center "Daryn", JSC "national center for advanced training "Orleu", Nazarbayev intellectual school of chemical and biological direction of Ust-Kamenogorsk, Chamber of entrepreneurs of East Kazakhstan region, center of pedagogical skills, etc.

The database of distribution of press releases, press announcements, more than 70 e-mail addresses of the media.

Every major event is comprehensively covered in local, national and international media.

For example, the opening of the youth cultural-educational center named after Abai in Poland provided information support, due to the interaction of the Ministry of education and science of Kazakhstan, the Kazakh Embassy in Poland, the rector of the University, the regional administration, the media center "Altai jastary" in more than 30 media of the East Kazakhstan region, Kazakhstan, Russia, Poland.

On the website of S. Amanzholov EKSU in the section "Education", in the subsection "Educational programmes" there is the following information: goals and objectives of the EP, qualification characteristics, educational trajectories, uniqueness of each trajectory, learning outcomes for each trajectory, requirements for the level of education of graduates of this EP (based on the Dublin descriptors).

Subjects of educational programmes are provided with teaching materials and didactic materials. The educational portal of the University presents all educational documentation for students, including the umkd in all disciplines, which are available both in paper form and on electronic media. A full database of electronic educational publications is available for students, updated by employees of the University library, as well as national and international electronic databases of educational and scientific literature, including the Web of Science database.

Information about the University, results and achievements, information for applicants and advertising booklets, materials about the University's activities are presented in the media of

national, regional and local significance, on the Internet, in social networks on the pages of the faculty and Department.

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

The information published by the University within the framework of the EP is accurate, objective, up-to-date and includes information about employment opportunities for graduates.

An important factor is the availability of adequate and objective information about the Ts of the EP.

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

Ensure timely updating of information about teaching staff in the context of EP on the University portal.

***EEC notes that the University has a strong position on 2 criteria of this standard, and satisfactory positions on 8 criteria.***

#### ***6.10. Standard «Standards in the context of individual specialties»***

The developed monitoring mechanisms and conditions allow for successful adjustment of the EP. Feedback aimed at improving educational programmes includes monitoring employers.

The educational process for accredited EP is carried out by annual updating of teaching materials, updating the subject of doctoral theses, as well as the introduction of new elective subjects, taking into account the recommendations of employers.

EP 6D060400/8D05301 - "Physics" in the context of individual specialties of the direction of fitting has the following positive indicators:

- expected high demand for graduates-doctoral students of this EP Department;
- possibility of training specialists on state grants;
- high-quality provision of educational services;
- favorable psychological atmosphere in the team and relationships with doctoral students;
- experience in innovation;
- availability of an office commercialization StartUp
- availability of a branch for EP 6D060400/8D05301 - "Physics" in the National Nuclear center (Kurchatov);
- availability of a joint educational programme (SOP) on EP 6M060400 (7M05301 – - "Physics" of S. Amanzholov EKSU and EP 03.04.02 "physics of nanosystems" of Altsu (Russia)
- multilingual education of doctoral students, lectures in English by faculty of the Department and invited foreign scientists.

Practical teachers who are leading employees in their organizations are also involved in the training of students:

Kylyshkanov M. K., Ph. D., Professor, head of the scientific center of JSC "Ulba metallurgical plant" (JSC "UMP"); Zhilkashinova a.m., Ph. D., SNS of The national scientific laboratory for collective use of S. Amanzholov EKSU; Verigin A. A.-General Director of "Technoanalit" LLP, Pavlov A.V.-LLP

"Production company" BEST " production Director, Filatova O. N.-Director of KSU school №32, Rodionov I. M.-teacher of the highest category of the Predgornenskaya school, Kolyasnikova E. L.-teacher of the highest category Of the "center for developing training "Vostok", tuyakbaev B. T. head. research and production laboratory of innovative technologies of The national scientific laboratory of collective use of the S. Amanzholov EKSU, Iskakov B. A. Ph. D., Director of the KSU "Educational and production plant", etc.

For each type of practice, teachers of the Department, in accordance with the Rules for organizing and conducting professional practice and the rules for determining organizations as bases of practices, developed and approved working curricula and tasks for the training practice of students of specialties with methodological instructions for their implementation.

### *Analytical part*

Based on the results of the analysis, the EEC members concluded that teaching in the accredited educational programme is based on the achievements of science and practice in the field of specialization.

The Commission is provided with evidence-based information about the practice-oriented nature of training, which allows you to form the necessary professional competencies of graduates.

Information about the types of practices and related aspects is presented and confirmed by facts, and the main skills and abilities acquired as a result of training are indicated.

During interviews with students, graduates and employers, a proposal was made to strengthen the practical orientation of the courses offered. In this regard, it is necessary to invite more often practitioners from enterprises, civil servants, as well as to develop elements of dual education in senior courses.

### *Strengths / Best practices:*

- training is conducted within the framework of the EP in innovative teaching methods, the use of multimedia tools.

manual EP is actively working on conducting classes and organizing practices of the doctoral students on the bases of practice on the branches katedry held round tables with the participation of employers, scientific seminars held by the Department of physics jointly with the National scientific laboratory of collective use (NLCP) and research center "surface Engineering and tribology".

### *The recommendations of the EEC*

Consider the possibility of conducting the defense of doctoral dissertations at enterprises and branches of the Department.

The management of the EP should provide for the possibility of opening a branch of departments on the basis of enterprises for conducting individual classes or entire disciplines of specialization.

*Conclusions of the HEC on the criteria for the standard "Standards in the context of individual specialties" EP 8D05301 - "Physics": strong-3, satisfactory -1 .*

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

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

Quality assurance policies should reflect the relationship between research, teaching, and learning

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 EP management engages representatives of interest groups, including employers, trainees, and teaching staff, to form a development plan for the EP.

The EP management demonstrated the individuality and uniqueness of the EP development plan, its consistency with national development priorities and the development strategy of the educational organization.

The EP management provided evidence of the transparency of the educational programme management system.

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 fact-based decision-making.

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

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

Students, employees, and teaching staff document their consent to the processing of personal data.

The University measures the degree of satisfaction with the needs of teaching staff, staff and students within the framework of the EP and demonstrates evidence of eliminating the identified shortcomings;

The University provides measurement of the dynamics of the student population in the context of forms and types.

The University provides measurement of students' academic performance, achievements, and deductions

The University provides a measure of students' satisfaction with the implementation of the EP and the quality of education at the University;

The University measures the availability of educational resources and support systems for students;

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;

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

The University defines and documents the procedures 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 ensures that the developed models of the EP graduate describe the learning outcomes and personal qualities.

The EP management determines the influence of disciplines and professional practices on the formation of learning outcomes.

The EP management provides evidence of participation of students, teaching staff and other stakeholders in the development of the EP, ensuring their quality.

The structure of the EP provides for various types of activities that correspond to the results of training.

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

Monitoring and periodic evaluation of the survey: changes in the needs of society and the professional environment;

Monitoring and periodic evaluation of the EP should consider the expectations, needs, and satisfaction of students with the EP training.

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

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

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

The EP leadership demonstrates support for student autonomy while providing guidance and assistance from the teacher.

The EP management demonstrates that there is a procedure for responding to student complaints.

The EP management ensures respect and attention to different groups of students and their needs, providing them with flexible learning paths.

*Standard «Students»*

The EP management demonstrates the implementation of special adaptation and support programmes for newly enrolled and foreign students.

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

*Standard «Faculty»*

The EP guide demonstrates a change in the role of the teacher in connection with the transition to student-centered learning.

The EP management engages practitioners from relevant industries to teach.

*Standard «Educational resources and support systems for students and undergraduates»*

The EP management demonstrates compliance of information resources with the specifics of the EP, including compliance with: library resources, including the Fund of educational, methodological and scientific literature on General education, basic and profile disciplines on paper and electronic media, periodicals, access to scientific databases;

Availability of access to educational Internet resources.

*Standard «Public Information»*

The information published by the University within the framework of the EP is accurate, objective, up-to-date and includes information about employment opportunities for graduates.

An important factor is the availability of adequate and objective information about the Ts of the EP.

*Standard «Standards in the context of individual specialties»*

Training is conducted within the framework of the EP in innovative teaching methods, the use of multimedia tools.

Leadership EP is actively working on conducting classes and organizing practices of the doctoral students on the bases of practice on the branches katedry held round tables with the participation of employers, scientific seminars held by the Department of physics jointly with the National scientific laboratory of collective use (NLCP) and research center "surface Engineering and tribology".

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

*Standard «Management of the educational programme»*

Consider further possible joint forms of international cooperation with partner universities and step up the implementation of this cooperation.

*Standard «Information Management and Reporting»*

Update the content of the University's educational website in a timely manner, especially in the field of international cooperation and international educational programmes.

*Standard «Development and approval of the educational programme»*

Expand the areas of interaction with the best foreign universities to attract foreign students.

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

The management of the EP should review the content and structure of the EP, 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»*

Include a formula for calculating academic performance indicating the weight shares of the final con

*Standard «Students»*

Consider taking part in the "Erasmus" programme for students and faculty of the University.

To find an opportunity to expand the geography and increase the quantitative indicators of outgoing academic mobility of students to English-speaking countries in order to maximize the available multilingual potential of students.

*Standard «Faculty»*

Actively use information and communication technologies in the educational process (for example, on-line training, e-portfolio, MOOCs, etc.).

Take measures to create conditions for outgoing academic mobility of teaching staff to foreign countries.

*Standard «Educational resources and support systems for students and undergraduates»*

Expand the Wi-fi zone.

*Standard «Public Information»*

Ensure timely updating of information about teaching staff in the context of EP on the University portal.

*Standard «Standards in the context of individual specialties»*

Consider the possibility of conducting the defense of doctoral dissertations at enterprises and branches of the Department.

The management of the EP provides for the possibility of opening a branch of departments on the basis of enterprises for conducting individual classes or entire disciplines of specialization.

## Evaluation table "PARAMETERS OF A SPECIALISED PROFILE"

Conclusion of the External Expert Commission on the results of the evaluation of educational programme 6D060400/8D05301 - "Physics»

№ п\п	№ п\п	Criteria for evaluation	Position of the educational organization			
			Strong	Satisfactory	Assumes improvements	Unsatisfactory
<b>Standard "Management of the educational programme"</b>						
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 programme 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 programme management, as well as their representativeness in making decisions on educational programme 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.		+		
<b>Total standard</b>			<b>7</b>	<b>7</b>	<b>1</b>	
<b>Standard “Information Management and Reporting”</b>						
16	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.		+		
17	2.	EP management must demonstrate the systematic use of processed, adequate information to improve the internal quality assurance system.		+		
18	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.		+		
19	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.		+		
20	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.		+		
21	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		+		
22	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.				
23	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.		+		
24	9.	The university should evaluate the effectiveness and efficiency of activities, including in the context of EP	+			
25	10.	Information collected and analyzed by the university in the framework of the EP should take into account:		+		
		key performance indicators;		+		
26	11.	academic performance, student achievement, and expulsion;		+		
27	12.	students' satisfaction with the implementation of the academic programme and the quality of education at the university;	+			
28	13.	availability of educational resources and support systems for students	+			
29	14.	employment and career growth of graduates	+			
30	15.	Students, employees and faculty must document their consent to the processing of personal data	+			
31	16.	EP management should facilitate the provision of all necessary information in relevant fields of science.	+			
<b>Total standard</b>			7	9		
<b>Standard "Development and approval of the educational programme"</b>						
32	1.	The university should determine and document the procedures for the development of EP and their approval at the institutional level.	+			
33	2.	EP management should ensure that developed EPs are consistent with established goals, including intended learning outcomes	+			
34	3.	EP management should ensure the availability of developed models of the graduate of the EP that describe the learning outcomes and personal qualities	+			
35	4.	EP management should demonstrate conducting external expert reviews		+		
36	5.	The qualifications obtained upon completion of the EP must be clearly defined, clarified and consistent with a certain level of NSC.		+		
37	6.	EP management should determine the impact of disciplines and professional practices on the formation of learning outcomes	+			
38	7.	An important factor is the ability to prepare students for professional certification.		+		

30	8.	EP management must provide evidence of the participation of students, faculty and other stakeholders in the development of EP, ensuring their quality.	+			
40	9.	The complexity of the EP should be clearly defined in Kazakhstan loans and ECTS		+		
41	10.	EP management must ensure the content of academic disciplines and learning outcomes of the level of education (bachelor's, master's, doctoral).		+		
42	11.	The structure of the EP should provide for various types of activities corresponding to the learning outcomes.	+			
43	12.	An important factor is the presence of joint EPs with foreign educational organizations.		+		
<b>Total standard</b>			6	6		
<b>Standard “Continuous monitoring and periodic evaluation of educational programmes”</b>						
44	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 programmes in the light of the latest scientific achievements in a particular discipline to ensure the relevance of the taught discipline;				
45	2.	Changes in the needs of society and the professional environment;		+		
46	3.	The load, performance and graduation of students;	+			
47	4.	The effectiveness of student assessment procedures:		+		
48	5.	Expectations, needs and satisfaction of students with training in EP;		+		
49	6.	Educational environment and support services and their relevance to the goals of the EP;	+			
50	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.		+		
51	8.	All interested parties should be informed of any planned or taken actions in relation to the EP. All changes made to the EP should be published.		+		
52	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.		+		
<b>Total standard</b>			2	7		
<b>Standard “Student-centered learning, teaching, and performance assessment”</b>						
53	1.	EP management should ensure respect and attention to various groups of students and their needs, providing them	+			

		with flexible learning paths.				
54	2.	EP management should ensure the use of various forms and methods of teaching instruction.	+			
55	3.	An important factor is the availability of our own research in the field of teaching methods of educational disciplines of EP.		+		
56	4.	EP management should demonstrate the existence of a feedback system for the use of various teaching methods and assessment of learning outcomes		+		
57	5.	EP management should demonstrate support for students' autonomy while guiding and assisting the teacher.	+			
58	6.	EP management must demonstrate the existence of a procedure for responding to student complaints.	+			
59	7.	The university should ensure the consistency, transparency and objectivity of the mechanism for assessing learning outcomes for each academic degree, including an appeal.	+			
60	8.	The university must ensure that the procedures for evaluating the learning outcomes of students of EP study meet the planned learning outcomes and programme objectives. Evaluation criteria and methods within the framework of the EP should be published in advance.		+		
61	9.	The university should determine the mechanisms for ensuring the development of learning outcomes by each graduate of the academic programme and ensure the completeness of their formation.		+		
62	10.	Evaluators must be proficient in modern methods of assessing learning outcomes and regularly improve their skills in this area.		+		
<b>Total standard</b>			5	5		
<b>Standard "Students»</b>						
63	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.		+		
		EP management should demonstrate the implementation of special adaptation and support programmes for newly arrived and foreign students		+		
64	2.	The university must demonstrate the conformity of its actions to the Lisbon Recognition Convention.		+		
65	3.	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		+		
66	4.	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				
67	5.	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.		+		
68	6.	EP management should make every effort to provide students with places of practice, facilitate the employment of graduates, and maintain contact with them.		+		
69	7.	The university should provide graduates of the educational programme 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.	+			
70	8.	An important factor is monitoring the employment and professional activities of graduates, EP.				
71	9.	EP management should actively encourage students to self-education and development outside the main programme (extracurricular activities).		+		
72	10.	An important factor is the existence of an active association of graduate associations		+		
73	11.	An important factor is the availability and support mechanism of gifted students.		+		
74	12.	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.	+			
75	13.	EP management should demonstrate the implementation of special adaptation and support programmes for newly arrived and foreign students		+		
76	14.	The university must demonstrate the conformity of its actions to the Lisbon Recognition Convention.		+		
<b>Total standard</b>			2	12		
<b>Standard "Teaching staff"</b>						
77	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.		+		
78	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 programme.		+		
79	3.	EP management should demonstrate awareness of responsibility for its employees and ensure favorable working conditions for them.		+		
80	4.	EP management should demonstrate a change in the teacher's role in connection with the transition to student-centered learning.	+			

81	5.	The university should determine the contribution of faculty staff to the implementation of the development strategy of the university, and other strategic documents.		+		
82	6.	The university should provide opportunities for career growth and professional development of faculty staff.		+		
83	7.	EP management should involve practitioners in the relevant industries.	+			
84	8.	EP management should provide targeted action to develop young teachers.		+		
85	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		+		
<b>Total standard</b>			2	7		
<b>Standard "Educational resources and support systems for students and undergraduates "</b>						
86	1.	EP management must demonstrate the adequacy of material and technical resources and infrastructure.		+		
87	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:				
88	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;		+		
89	4.	examination of the results of research, final works, dissertations on plagiarism	+			
90	5.	Access to educational Internet resources		+		
91	6.	The functioning of WI-FI in the territory of the educational organization.	+			
92	7.	The university should strive to ensure that the educational equipment and software used to master educational programmes are similar to those used in the relevant industries.		+		
93	8.	The university must ensure compliance with safety requirements in the learning process.		+		
<b>Total standard</b>			2	6	0	0
<b>Standart «Public Information»</b>						
		<i>The PO must publish reliable, objective, and up-to-date information about the educational programme and its specifics, which should include:</i>				
94	1.	expected learning outcomes of the implemented educational programme;		+		
95	2.	qualifications and / or qualifications that will be awarded upon completion of the educational programme;		+		

96	3.	teaching and learning approaches, as well as the system (procedures, methods and forms) of assessment;		+		
97	4.	information about passing points and training opportunities provided to students;		+		
98	5.	information about employment opportunities for graduates.	+			
99	6.	The management of the EP should provide for a variety of ways to disseminate information, including the media, information networks to inform the General public and interested persons.		+		
100	7.	Public awareness should support and explain the country's national development programmes and the system of higher and postgraduate education.		+		
101	8.	The public organization should demonstrate the reflection of information on the web resource that characterizes it in General and in the context of educational programmes.		+		
102	9.	An important factor is the availability of adequate and objective information about the PPP of the EP.	+			
103	10.	An important factor is to inform the public about cooperation and interaction with partners in the framework of the EP.		+		
<b>Total standard</b>			2	8		
		<b>NATURAL SCIENCES, AGRICULTURAL SCIENCE, ENGINEERING, AND TECHNOLOGY</b>				
		Educational programmes in the areas of "Natural Sciences", "Technical Sciences and technologies" , such as "Mathematics", "Physics", "Information systems", etc., must meet the following requirements:		+		
104	1.	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 programme of education should include 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 (factories, workshops, research institutes, laboratories, educational-experimental farms, etc.), - conducting individual classes or entire disciplines at the enterprise of specialization, - conducting seminars to solve practical problems relevant to enterprises in the field of specialization, etc.		+		
105	2.	The teaching staff involved in the education programme should include full-time teachers who have long-term experience working as a full-time employee at enterprises in the field of specialization of the education programme.	+			
106	3.	The content of all the disciplines of the EP should be based in one way or another and include a clear relationship with the content of fundamental natural Sciences, such as mathematics, chemistry, and physics.	+			
107	4	The management of the EP should provide measures to	+			

		strengthen practical training in the field of specialization.				
108	5.	The EP management should ensure that students are trained in the use of modern information technologies.		+		
<b>Total standard</b>			3	2	0	0
<b>TOTAL</b>			<b>38</b>	<b>69</b>	<b>1</b>	<b>0</b>

