



«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТИҢ
ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО
АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR
ACCREDITATION AND RATING

REPORT

**of external expert commission on the results of the evaluation
of K. Zhubanov Aktobe Regional State University**

5B070300 - "Information Systems",

5B070400 - "Computer Science and software",

5B070500 - "Mathematical and Computer Modeling",

6M070300 - "Information Systems"

**educational programs for compliance with the requirements of
specialised accreditation standards**

SITE VISIT DATES: from 4th to 6th October, 2017

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING
External expert commission

*To the Accreditation
Council of IAAR*



REPORT

**of external expert commission on the results of the evaluation
of K. Zhubanov Aktobe Regional State University
5B070300 - "Information Systems",
5B070400 - "Computer Science and software",
5B070500 - "Mathematical and Computer Modeling",
6M070300 - "Information Systems"
educational programs for compliance with the requirements of specialised
accreditation standards**

SITE VISIT DATES: from 4th to 6th October, 2017

CONTENT

(I) LIST OF SYMBOLS AND ABBREVIATIONS	3
(II) INTRODUCTION	4
(III) REPRESENTATION OF THE ORGANIZATION OF EDUCATION	5
(IV) DESCRIPTION OF THE VISIT OF THE EEC	17
(V) CONFORMITY TO THE SPECIALIZED ACCREDITATION STANDARDS	
5.1. Standard " Educational Program Management"	10
5.2. Standard "Information and Reporting Management"	13
5.3. Standard "Development and Approval of Educational Programs".....	15
5.4. Standard "Continuous monitoring and periodic evaluation of educational programs".....	18
5.5. Standard "Student-centered Training, Teaching and Assessment of progress"	20
5.6. Standard "Students"	22
5.7. Standard "Academic staff and teaching efficiency".....	28
5.8. Standard "Educational resources and systems support of students ».....	34
5.9. Standard "Public Awareness"	37
5.10 Standard "Standards in the context of individual specialties"	38
(VI) REVIEW OF STRONG SIDES / BEST PRACTICES FOR EVERY STANDARD.....	
(VII) REVIEW OF RECOMMENDATIONS FOR IMPROVING QUALITY	41
(VIII) RECOMMENDATION TO THE ACCREDITATION BOARD	
Appendix 1. Evaluation table "SPECIFICATION PROFILE PARAMETERS"	43

(I) LIST OF SYMBOLS AND ABBREVIATIONS

ARSU - Aktobe Regional State University
 AMP - Administrative and management personnel
 BD - Basic Disciplines
 EEAA - External evaluation of academic achievements
 EW - Educational work
 SAC - State Attestation Commission
 SSCE – State Standard for Compulsory Education
 DLT - Distance Learning Technologies
 UNT - Unified National Testing
 ICT - Information and Communication Technologies
 IS - Information Systems
 IC - Individual curriculum
 FL - Foreign language
 EC – Elective course
 CYA - Committee for Youth Affairs
 ESCC - Education and Science Control Committee of the Ministry of Education and Science of the Republic of Kazakhstan
 CT - Complex testing
 CTT - Credit Technology Training
 QED - Catalog of elective disciplines
 MES of the RK - Ministry of Education and Science of the Republic of Kazakhstan
 MEP - Modular educational programs
 NAS - National Academy of Science of the Republic of Kazakhstan
 SRW - Scientific Research work
 SRWU - Scientific research work of undergraduates
 SRWS - Scientific Research work of students
 STC - Scientific and Technical Council
 PD - profiling disciplines
 GED - General educational disciplines
 EP - Educational Programs
 MS – Major subjects
 AS – Academic staff
 EPD - Editorial and Publishing Department
 WC - Working curriculum
 DLS - Distance Learning System
 IWU - Independent work of undergraduates
 IWS - Independent work of students
 IWSGT - Independent work of students under the guidance of a teacher
 SC - Standard curriculum
 TSS - Training and support staff
 AA - Accounting and Audit
 EMC - Educational-methodical complex
 EMCD - Educational-methodical complex of discipline
 EMCP - Educational-methodical complex of practice
 EMCS - Educational-methodical complex of specialty
 TMC - Teaching and Methodology Council
 PhD – Doctor of Philosophy

(I) INTRODUCTION

In accordance with Order No. 46-17-OD of September 25, 2017 of the Independent Accreditation and Rating Agency, from October 4 to October 6, 2017, an external expert commission assessed the conformity of educational programs 5B070300- "Information Systems", 5B070400- "Computer Science and software", 5B070500 - "Mathematical and Computer Modeling", 6M070300 - "Information Systems" of the Aktobe Regional State University named after K. Zhubanov to the standards of specialized accreditation of the IAAR.

The report of the external expert commission (EEC) contains an assessment of the submitted educational programs to the criteria of the IAAR, recommendations of the EEC for further improvement of educational programs and profile parameters of the educational programs of Aktobe Regional State University named after K. Zhubanov.

The EEC composition:

The Chairman of the Commission - Yensebayeva Marzhan Zaitovna, Cand. Sc. Physics and Mathematics, Associate Professor, Kazakh National Research Technical University named after K. Satpaev (Almaty)

Foreign expert - Grakovski Alexander, Dr.sc.ing., Professor of the Faculty of Computer Science and Electronics, Transport and Telecommunication Institute (Riga, Latvia);

Foreign expert - Kozuyev Durus Isakbaevich, Cand Sc. Philology, Associate Professor, Vice-rector for Academic Affairs, Bishkek Humanitarian University named after K. Karasayev (Bishkek, Kyrgyzstan);

Expert - Guljan Mukhametkaliyeva Gaurieva, Cand. Sc. Philology, Associate Professor, Eurasian National University. L. N. Gumilev (Astana city);

Expert - Bodikov Seifolla Zhamauovitch, member of the Union of Designers of the Republic of Kazakhstan, member of the Eurasian Designers Union, Karaganda State University named after E.A. Buketov (city of Karaganda);

Expert - Karsibayev Erzhan Ertaevich, Doctor of Technical Sciences, Professor, Turan University (Almaty);

Expert - Zakirova Dilnara Ikramkhanovna, PhD, University "Turan" (Almaty);

Expert - Khamraev Sheripidin Itakhunovich, Cand. Sc. Engineering, Associate Professor, Abay Kazakh National Pedagogical University. (Almaty);

The employer is Damilia B. Kunanova, Head of the human capital development department, Chamber of Entrepreneurs "Atameken" of Aktobe oblast (Aktobe);

Student - Tynystyk Akdana Bultekyzy, 4th year student of the specialty "5B011900-Foreign language: two foreign languages", Aktobe University named after S. Baishev (Aktobe);

Student - Ruslan Y. Luparev, 4th year student of the specialty "5B042100-Design", Kazakh-Russian International University (Aktobe);

Student - Baimanaanbetova Aidana Samatyzy, 3rd year student of the specialty "5B070300-Information Systems", Kazakh-Russian International University (Aktobe);

Observer - Timur Kanapyanov, Head of International Projects and Public Relations of the NAAR (Astana);

Observer - Niyazova Guliyash Balkenovna, Project Manager for Institutional and Specialized Accreditation of the IAAR (Astana).

(III) PROFILE OF THE ORGANIZATION OF EDUCATION

Aktobe Regional State University named after Kudaibergen Zhubanov (K. Zhubanov ARSU) is one of the leading regional universities in Western Kazakhstan. The formation of the university as a major educational, scientific and cultural center of the region has its own history. The university is the legal successor of the Aktyubinsk Pedagogical Institute, founded in 1966.

In 1990, the institute was named after the first Kazakh professor-linguist Kudaibergen Zhubanov. On May 7, 1996 the institute was reorganized into the Aktubinsky University named after K. Zhubanov. January 31, 2001 the university received the status of "state".

By the Decree of the Government of the Republic of Kazakhstan dated 03.02.2004 No. 128 the university was reorganized with the separation of the Aktobe Pedagogical Institute from its structure. By the Decree of the Government of the Republic of Kazakhstan dated 29.05.2013 No. 529, the Aktobe State University named after K. Zhubanov and the Aktobe State Pedagogical Institute were reorganized, by merging into the Aktobe Regional State University named after K. Zhubanov.

The university has a developed material and technical base that meets modern requirements: 7 educational buildings, scientific laboratories, the Palace of Students with an assembly hall for 826 seats, the Palace of Youth, training and production facilities, a sports complex, sports facilities, a swimming pool, 2 student dormitories, student clinics, agrobiostation, a building for the center of innovative technologies and telecommunications, a library.

K. Zhubanov ARSU carries out training of specialists according to the state license No. 13014680 issued by the Ministry of Education and Science of the Republic of Kazakhstan on September 17, 2013 in 8 directions of higher education "Education" (22 programs), "Humanities" (4 programs), "Law" (1 program), "Art" (2 programs), "Social sciences and business" (7 programs), "Natural sciences" (6 programs), "Technical sciences and technologies" (10 programs), "Services" (2 programs) and 20 programs of postgraduate education (19 Master of Arts and 1 EP doctoral studies).

There are 10 faculties in the university (Physics and Mathematics, Foreign Languages, Natural Sciences, Philology, Engineering, History, Economics and Law, Pedagogy, Professional and Part-time faculty). In these faculties there are 31 departments.

As of October 1, 2017, the students number is 10,473 people. They are: 7808 full-time students, 2665 part-time students. 2712 students are state grant holders. 4570 students came from regions, other regions and countries.

The number of employed graduates in 2017 was 1,682 people (74.7%).

The university has a research institute "Institute for Humanitarian Research"; research centers: "Applied Mathematics and Informatics", "Radiation Physics of Materials", "History, Ethnography and Archeology"; Educational and production center; scientific laboratories "Nanotechnology", "Zhubanovedenie". And also in September 2017, the Innovative Technologies Park was created, where 16 scientific laboratories, a project office, the Commercialization Office, the Research Center "Applied Mathematics and Informatics", the Research Center "China studies", technical offices, a printing house are concentrated.

The total number of faculty is 670 people. The number of teachers with academic degrees is 292 (45.8%), including 27 doctors of sciences, 252 candidates of sciences, 13 PhDs, holders of honored titles in the field of arts, physical culture and sports - 6, masters - 194 people.

(IV) DESCRIPTION OF THE VISIT OF THE EEC

The work of the EEC was carried out on the basis of the Program of the visit of the expert commission for the specialized accreditation of educational programs in the Aktobe Regional State University named after K. Zhubanov in the period from 4 to 6 October 2017.

In order to obtain objective information about the quality of educational programs and the entire infrastructure of the university, the content of the self-assessment reports was clarified by meetings with the rector, vice-rectors in the areas of activity, deans, department heads (the Department for Academic Affairs and Education Quality Assessment, the Finance and Economics Department, innovative programs, the Institute for Continuing Education, the Center for International Cooperation, Digital Technologies, Marketing, the Department of Management I staff and legal service post-graduate education, organization of office work, scientific library,

educational-methodical department, office-registrar, etc.), heads of departments, teachers, students, graduates, employers. A total of 204 people took part in the meetings (table 1).

Table 1. Information about employees and students who took part in meetings with the EEC IAAR:

Category of participants	Amount
Rector	1
Pro-rectors	3
Heads of structural subdivisions	16
Faculty Deans	5
Heads of Departments	7
Teachers	20
Students, postgraduates	20
Graduates	20
Employers	20
Total	112

During the excursion, the members of the EEC familiarized themselves with the state of the material and technical base, visited the dean's office of the Physics and Mathematics Department, the Department of Information Systems and Software, lecture rooms, the park of innovative technologies, the student service center, the Confucius Institute, the students' palace, sports complexes, polyclinic, student hostel and university museum

Within the framework of the visit of the EEC, attendance of classes was organized:

EP "5B070300-Information Systems": a laboratory lesson on the course "Publishing databases to the Internet" for undergraduates. The content and organization of the work are well prepared, the teacher used modern teaching methods (situational education of working groups to solve the problem, collective search for solutions).

EP "5B070500-Mathematical and computer modeling: practical lesson (senior lecturer Tamuova G.S.) in the discipline" Analytical Geometry" 1st course students. The lesson was attended by all 5 students of the course. The subject of the lesson corresponds to the syllabus. The lesson was conducted at the proper methodical level, using methods of fixing the material with explanations, consecutive transfer from assignments under the supervision of the teacher to independent implementation.

A visit to the bases of practices of educational programs of the 3rd cluster was organized:

- Branch of "Information and Computing Center of the Committee on Statistics of the Ministry of Education and Science of the Republic of Kazakhstan" in the Aktobe region (director Kiyasov Nurzhan Idiatullaevich).

- StroyTechno (Commercial director Yuluev Vladislav).

- City center of technical creativity (director Paskevia Alexander Aleksandrovich).

The events planned within the framework of the visit of the EEC IAAR facilitated detailed familiarization of experts with the university's educational infrastructure, material and technical resources, faculty, representatives of employers' organizations, students and graduates. This allowed the IAAR members to conduct an independent assessment of the compliance of the data set out in the self-assessment reports of the university's educational programs with the criteria of the specialized accreditation standards of the IAAR.

Within the framework of the planned program, recommendations for improving the University's activities developed by the EEC on the results of the examination were presented at a meeting with the management on October 6, 2017.

(V) CONFORMITY TO SPECIALIZED ACCREDITATION STANDARDS

5.1. Standard "Management of the educational program"

The Evidence

Implementation of EP 5B070300 - "Information systems", 5B070400 - "Computer equipment and software", 5B070500 - "Mathematical and computer modeling", 6M070300 - "Information systems" (scientific and pedagogical direction, profile direction) is carried out in accordance with the state license and applications to the license, issued by ESCC MES RK.

Training is carried out in the state and Russian languages by full-time and part-time departments on the basis of secondary education, vocational education and higher education.

The documents regulating the academic activity of the ARSU are represented by a collection of regulations and instructions "Academic Policy of the Zhubanov ARSU" approved at a meeting of the University Academic Council (Minutes No. 6 of January 13, 2016).

In 2017, the Aktobe Regional State University named after K. Zhubanov adopted the "Quality Policy" (approved by the decision of the Academic Council, Minutes No. 11 of May 10, 2017), which defines the principles for the management of educational programs and is reflected in the plans of the issuing department "Information systems and software" and plans for the development of EP 5B070300 - "Information systems", 5B070400 - "Computer equipment and software", 5B070500 - "Mathematical and Computer Modeling", 6M070300- "Information systems" (scientific and pedagogical direction).

The mission of the University is the preparation of competitive specialists which are in demand on the labor market, for the western region and the country as a whole, brought up in the spirit of the Kazakhstan patriotism.

The Vision of the University: development of a university that is competitive within the country, oriented toward the status of a spiritual center of the western region and a national university.

The implementation and development of the programs under consideration is determined, first of all, by the mission, vision, strategy of the university development, and also by the Development plans for educational programs.

The management of educational programs is carried out in accordance with the legal and regulatory documents of the Ministry of Education and Science of the Republic of Kazakhstan, taking into account the provisions of the State Program for the Development of Education of the Republic of Kazakhstan for 2016-2019, the mission and Strategic Plan of the ARSU for 2017-2021, the plans for the work of the departments and development plans for the EP.

Monitoring of indicators of the development of educational programs is the basis for their improvement and is realized through the following generally accepted procedures in the areas of activity of the ARSU.

Activities to monitor the quality of the educational process, conducted at different levels, are recorded in the form of records, acts, certificates, reports, etc., and are discussed at the meetings of the department and the Faculty Council. Their effectiveness and effectiveness is considered at the meetings of the Department of Informatics and Information Technology and the Council of the Faculty of Physics and Mathematics.

The current plans for the development of the EP were approved at the meeting of the Academic Council of the Faculty of Physics and Mathematics, Minutes No. 10 of May 12, 2017, which includes strategic directions for the development of the EP, activities, indicators and responsibilities.

The effectiveness of the development plan for the EP is ensured by the responsibility of the academic staff for the final results, the delegation and delineation of powers, and the posting of information on the university's website.

The management of the EP attracts representatives of employers to determine the direction of development of educational programs and their management.

To manage the EP, the necessary information, personnel, financial and material resources, as well as regulatory and legal documentation that ensure the implementation of educational programs

Management of educational programs includes: management of educational programs; management of educational content through the information system "Univer"; the management of the contents of the personal offices of the teaching staff and students; management of the schedule, taking into account the working curriculum and individual curricula of students.

An important component of effective implementation of the EP and the coherence of its actions in general with the work of the university is: centralized planning (with the right to independently determine the Department of development indicators, reflecting the specifics of the implemented EP and the resource potential of the department (academic staff, technologies used, corporate communications and their content (participation in the educational process, scientific activities, promotion of employment, organization of practice, internships, etc.);

- a uniform monitoring and reporting system for all units;

- questioning of teaching staff, students and university employees for satisfaction with the conditions of the organization of the educational process and work activity (including assessment of the work of the support services for the educational process and the infrastructure of the university); questioning of employers on the quality of training specialists.

Analytical part

At the same time, the commission notes that the following issues concerning this standard are not fully reflected in the self-report and were not confirmed during the visit of the EEC.

The self-assessment report mentions a number of changes in the university "related to the change in the development strategy, which is reflected in the change in the quality policy." Indeed, the organizational and managerial structure of K. Zhubanov ARSU was optimized in early 2014-2015 academic year in order to avoid duplication of functions (the decision of the Academic Council of September 30, 2014 protocol No. 2). At the beginning of 2015-2016 and 2016-2017 academic years, some changes were made to the organizational structure (Minutes No. 2 of 30.09.2015, August 31, 2016). The latest changes were made at the end of 2016-2017 academic year (Minutes No. 11 of May 10, 2017), but the information provided during the visit of the EEC did not allow assessing the development of a culture of quality assurance, including in the context of the OP.

There are no materials on the commitment to quality assurance of any activities performed by contractors and partners (outsourcing), including in the implementation of joint / two-diploma education and academic mobility.

Clearly and precisely formulated goals, and learning outcomes are the starting point and the central recommendation for the development of the educational program. However, the objectives identified in the EP Development Plans are of a general nature and differ only in numerical terms. It is not confirmed by the documents on the requests of any interested persons (users of the EP) that the formation and content of the Development Plan is based.

The objectives of the EP defined in the MEP "Mathematics and Computer Modeling" are general, not specified in relation to the educational program 5B070500 - "Mathematics and Computer Modeling" and are not consistent with the planned learning outcomes.

Part of the digital indicators traces the individuality of the development plan for the EP, however, the formulation of the uniqueness and individuality of the EP development plan and its coherence with the national development priorities and the development strategy of the ARSU is not detailed. What exactly is the uniqueness and advantage of each EP submitted for accreditation before similar educational programs of other HEIs was not reflected in the self-assessment reports and was not confirmed during the interview of the leaders of the EP.

Filling in the evaluation criteria of the Standard "Management of the educational program" confirms the steps of the ARSU to improve the quality in various activities. But nevertheless, the

University does not have a university-wide concept of quality (quality assurance system) for each activity (it does not describe the main business processes and responsible for them) on the basis of which design, management and monitoring, improvement, decision-making based on facts. In the development and functioning of the quality system, the institution determines the goals and desired outcomes, including the identification of associated risks and opportunities.

The management of the EP does not determine the risks to which the EPs may be exposed. Knowledge of risks could serve as a basis for developing a "risk-based approach" and taking measures to counteract them. Adherence to risk-based thinking can help a university create a corporate culture of the University that has a proactive and preventive character aimed at doing better and improving the performance of the work as a whole.

There is no information on the management of the training program on management education programs

Strengths / best practice

- At the university, the work on management of innovations, introduction of innovative processes within the framework of the EP is put at a proper level.
- The principle of openness and accessibility of the EP management for trainees, teachers, employers and other interested persons is observed.

The EEC recommendations:

To strengthen the development of a quality culture in the university, which includes continuous monitoring of activities with the aim of improving and taking measures when goals and tasks are not achieved. Commitment to quality assurance should apply to any activities performed by contractors and partners (outsourcing), including in the implementation of joint/two-degree education and academic mobility.

Develop an intra-university quality assurance system, including design of the EP, risk management, monitoring, improvement, decision-making on the basis of facts.

The management of the EP to conduct systematic work to define and formulate the individuality, and uniqueness of the EP, the coherence of the development plan with the national development priorities and the development strategy of the University.

Organize courses on management education and student-centered training for managers of the EP.

Conclusions of the EEC on the criteria for 5B070400 - "Computer equipment and software", EP 5B070300 - "Information systems", 6M070300 - "Information systems": strong positions - 2, satisfactory - 11, need to be improved - 4.

Conclusions of the EEC on the criteria for 5B070500 - "Mathematical and Computer Modeling" by the criteria: strong - 2, satisfactory - 10, need to be improved - 5.

5.2. Standard "Information Management and Reporting"

The Evidence

ARSU introduces information management processes, including the collection and analysis of information: a special service is functioning, which is responsible for information support of the University and its units; formation through the media of a positive public opinion about the activities of the University; assistance to journalists in their work on covering the activities of the university and its departments; monitoring of the media, studying trends in public opinion on the activities of the University and assessing the impact on it of the media.

The general information part of the site contains information about the university, its departments, events occurring within its walls

The university has a unified automated information system "Univer", which provides complete information about the learning process of each student for the entire period. We keep track of progress in all disciplines, GPA, place orders, announcements. Information is provided

for each student and teacher with a search system, reports on various criteria. Not only employees and students, but also parents of students have access to AIS "Univer" and all information posted on the portal. A positive aspect in organizing the activity of the university is the opening of the Student Support Center, which operates on the principle of "one window".

In order to prevent hacker attacks on the University's Internet resources, periodic monitoring of the status of services responsible for the serviceability of the service is performed, restrictions are introduced for users' access to the resource and to the network OS.

The students, employees and faculty of the University formalize agreements for the processing of their personal data, which confirms the legitimacy of the activities of the ARSU in accordance with the Law of the Republic of Kazakhstan "On Personal Data and their Protection" (May 21, 2013 No. 94-V).

The Alumni Association of K. Zhubanov University has been functioning at the University since 2014, which is a public association, convened for the purpose of carrying out activities determined by a common interest, aimed at uniting the interests of university graduates.

Based on the results of the questionnaire, a number of indicators are analyzed, such as satisfaction: the results of the activities of the EP, the department and individual teachers, the relationship with the administration of the university, the heads of the faculties. On the basis of the information received, the department, faculty, and university are making adjustments in their activities, seeking to improve educational processes. The results of the survey are considered and discussed at the educational-methodical council, at the university academic council, at the meetings of the departments.

So, one of the tools for analyzing the activity of the EP 5B070300- "Information systems", 5B070400- "Computer equipment and software", 5B070500 - "Mathematical and computer modeling", 6M070300- "Information systems" are annual sociological surveys of students, employers and teachers. The faculty regularly interviews students about the quality of the information received and its completeness.

Analytical part

Analyzing the EP on filling the "Information Management and Reporting" standard in accredited areas, the commission notes that the university has a system of information management and reporting on the recruitment of students, academic performance, contingent movement, staffing, academic mobility of PPS students and students, etc. ., which is presented in regular reports at a meeting of the departments, the administration and the Academic Council of the University. A regular questioning of students and employers is conducted, and appropriate measures are taken to correct deficiencies based on the results of their questioning / interviewing.

However, the following issues concerning this standard are not fully reflected in the self-report and were not confirmed during the visit of the EEC.

The information-analytical system of the university does not fully provide for continuous monitoring of the activities of the EP aimed at the satisfaction of the consumers of the EP.

The Commission notes that issues related to this standard, such as the criteria for assessing the effectiveness and effectiveness of the institution, including in the context of the EP, as well as the definition of key performance indicators, are not fully reflected in the self-report and were not confirmed during the visit of the EEC.

Confirmation of the existence of documented processes of information management, ordering and securing of information, responsibility for their functioning, reliability and systematic use of adequate information to improve the internal quality assurance system were not confirmed.

In addition, the connection and involvement of the Alumni Association of K. Zhubanov University, which has been functioning since 2014, is not carried out at the proper level. During the interview with the alumni, it was suggested to intensify work with the graduates of the ARSU in order to receive feedback.

Strengths / best practice

- The periodicity, forms and methods for evaluating the management of the EP, the activities of collegial bodies and structural subdivisions, top management, and the implementation of scientific projects have been established.

- Information collected and analyzed within the framework of the EP takes into account the dynamics of the contingent of learners in the context of forms and species.

At the university, the work on ensuring the measurement of the degree of satisfaction, trained in the implementation of vocational training and the quality of education at the university, is set at the proper level;

- The procedure for collection and processing, established by the Law, of information for the subsequent systematization and use for personal purposes of personal data of trainees, employees and teaching staff who have documented their consent has been established.

EEC recommendations

1. To apply strategic KPIs (key performance indicators) to cascade first to the level of structural units, and then to the level of employees.

2. Document information management processes, determine the order and ensure the protection of information, responsibility for their functioning, reliability and systematic use of adequate information to improve the internal quality assurance system.

Conclusions of the EEC on the criteria for 5B070400 - "Computer equipment and software", EP 5B070300 - "Information systems", 6M070300 - "Information systems", 5B070500 - "Mathematical and computer modeling": strong positions - 6, satisfactory positions - 10, 1 needs to be improved.

5.3. Standard "Development and approval of the educational program"

The Evidence

In the Zhubanov ARSU, the process of forming educational programs includes the development of the structure and content of accredited educational programs, the analysis of information on implementation, the preparation of the report, the coordination of draft decisions based on the results of the implementation of the EP, the compilation of comments and proposals, and presentation of the results to management. Further consideration and approval of the EP takes place at the Faculty Council, EMC and the Academic Council of the University.

In preparing, approving, amending and supplementing the EP participate interested persons who can recommend elective courses for inclusion in the catalog of elective disciplines, for the selection of their students. Renewability of the EP is made in accordance with the requests of employers, which is reflected in the catalog of elective disciplines for the relevant academic year and approved by the Academic Council of the university. In EP 5B070300-Information systems, 5B070400-Computer equipment and software, 5B070500-Mathematical and computer modeling, 6M070300-Information systems on the recommendations of enterprises and organizations that are the bases of the practices of students, new disciplines were introduced: in 2014-2015 - "Publication databases on the Internet "(JSC" TNK KazHrome ")", 1C-Accounting (ActiveSoft LLP), Web-technologies for the design of IP (New Information Technologies JSC), expanding the knowledge of the sections" Development tools program 'and having a professional orientation. In the development of the OP students participate. So, according to the accredited bachelor's programs after passing the production practice, the students are recommended to study the elective course "IT-management" on the 3-year course (minutes of the meeting of the Department of Information Systems and Software No. 6 dated January 6, 2017).

The evaluation of the quality of educational programs is carried out on the basis of the analysis of curricula, the catalog of elective disciplines, timetables, individual plans of trainees, internal normative documents regulating the implementation of educational programs, questioning of students and employers

In the university, graduate models for vocational education are formed, in the development of the model of the graduate took part PPS chairs, graduates and students of the university.

Models for accredited programs include general and professional competencies and are part of the relevant modular educational programs. The methodology for the development of educational programs is based in part on the implementation of the European training system and the following principles:

1. Understanding the content of a multi-level education, taking into account Dublin descriptors and labor market requirements.
2. Competence approach as a basis for designing educational programs.
3. The modular principle of the formation of educational programs based on the Dublin descriptors

The university has the following types of curricula: the standard curriculum (SC), the curriculum (WC). Curricula are developed on the basis of standard curricula for specialties for the entire period of study, State compulsory education standards and Rules for the organization of the educational process on credit technology training. In accordance with the State Educational Establishment of the Republic of Kazakhstan in the curricula, the ratio of the volume of the disciplines of the cycles of the GD, BD, and profiling disciplines is maintained.

The content and structure of the accredited EPs are formed in accordance with the requirements of the Standard Rules for the Activities of Organizations of Higher and Postgraduate Education, approved by the Government of the Republic of Kazakhstan dated May 17, 2013 No. 499, SES RK, approved by Decree of the Government of the Republic of Kazakhstan No. 1080 of 23.08.2012, process on the credit technology of education, approved by the Order of the Minister of Education and Science No. 152 dated April 20, 2011, with corresponding amendments to them.

Formation of individual educational trajectories of the trainee is carried out with the help of an adviser for each academic year on the basis of SES RK, SP, IPs.

The structure and content of modular educational programs for the entire period of study are developed by the issuing departments on the basis of typical curricula of the specialty, models of graduates. According to the results of the questionnaire, 94.3% of the teaching staff believe that the work on updating educational programs is well established. According to the results of the questionnaire survey, 90.5% of the respondents note the sharpness and structuredness of the courses

The educational program is approved for 3 years. On the basis of the OS, working curricula are compiled and approved annually. Catalogs of elective disciplines (QED) are developed by the issuing department and approved by the educational and methodological council of the ARSU. The QED contains a brief description of the disciplines with the indication of the prerequisites and the post-requisition of the discipline. QED are available at the departments, in the scientific library

MOP displays the logical sequence of mastering cycles, disciplines, practices, final certification, the protection of the thesis, providing the formation of general and special competencies. The complexity of the disciplines of cycles in Kazakhstan and ECTS credits, as well as in hours, with the allocation of lectures, laboratory, practical (seminar) occupations, independent work of students under the guidance of the teacher and independent work of the student, all kinds of professional practice, intermediate certification are indicated.

An important role in the training of specialists, namely in the development of their professional competencies, is played by various types of practices provided for by the SC. In the university, after completing the practice, students present to the chair a report and a diary signed by the head of the practice base

In ARSU, in order to identify the training needs of specialists, as well as the requirements of interested parties, the department produces permanent partnerships with employers, on the basis of concluding contracts and memoranda, round tables and open meetings of the chairs are held with the participation of interested persons on the formation of educational programs.

Analytical part

In accordance with the main directions of the State Program for the Development of Education of the Republic of Kazakhstan for 2011-2020 and the requirements of the Bologna Convention, the University in 2014-2015 academic year moved to the modular construction of educational programs aimed at improving and implementing competence-oriented education. At the same time, the commission notes that the following issues are not fully reflected in the self-report and have not been confirmed during the visit of the EEC.

The representativeness of attracting employers participating in the design and implementation of the program is not substantiated. How to choose the main partners of the university, typical as employers for The model of the graduate is of a general nature, separate sections of the document are repeating one by one and having been revoked by the order of the Ministry of Education and Science of the Republic of Kazakhstan of the State Educational Establishment of the Republic of Kazakhstan, 3.08.331-2006 in the specialties, as well as the first edition of the State Educational Establishment of the Republic of Kazakhstan dated 23.08.2012 № 1080, "State obligatory standard higher education".r the graduates of each individual organization

At the same time, the commission notes that neither in the self-assessment report nor in the course of the EEC visit did the confirmation of the questions on the analysis of the graduate models considered by the EP on the compliance with the widely spread international professional recommendations. IEEE and ACM (<http://www.acm.org/education/curricula-recommendations> and <https://www.computer.org/web/peb/curricula>) Computer Curricula (CS-2013, CE-2016, IS-2010_Bachelor, IS-2013_Master) at the stage of development and approval of the EP.

All peer-reviewed EP are one of the most popular and popular programs in the world relating to the direction of information and communication technologies (ICT), for which a certain unification of the set of learning outcomes, subjects and their content recommended by professional associations has long been established. Therefore, it is desirable to use industry-specific professional standards and IEEE and ACM recommendations, known as Computer Curricula (CS-2013, CE-2016, IS-2010_Bachelor, IS-2013_Master, etc.) along with GOSO, NRC and TUP MES RK (p.12). Neither the self-assessment report nor the visit of the EEC did not mention them.

There is no information on conducting an external examination of the EP. What joint programs are implemented in the framework and on the basis of the proposed EP?

The possibility of preparing students for professional certification is not indicated, they are not used for the purposes of EP for the possibility of open distance programs Microsoft Academy and Cisco Networking Academy.

With regard to the educational program 5B070500- "Mathematical and Computer Modeling", the commission notes the following. According to the declared goals and input requirements - this is a demanded program, graduates of which are in demand. However, the existing small set of groups apparently necessitated the pooling of OBD and PD blocks into common flows with students of programs 5B070300 - Information Systems, 5B070400 - "Computers and software". So the discipline of the compulsory component "Algorithms, data structures and programs" of program 5B070300-Information systems is studied by students 5B070500- "Mathematical and computer modeling" in the first year of the first semester.

The accredited programs are not coordinated with the EP of the leading HEIs of the Republic of Kazakhstan, on the basis of which the REMC sections are located and the policy of development of specialties is collectively determined. It should be noted that in the self-assessment report there is a statement that "... the EP is harmonized in content with the educational programs of the S.Seifullin Kazakh Agrotechnical University."

The objectives of the EP defined in the MEP "Mathematical and Computer Modeling" are general, not specified in relation to the educational program 5B070500 - "Mathematical and Computer Modeling" and are not consistent with the planned learning outcomes.

The imbalance between the BD and PD units of the academic disciplines of EP 5B070500 does not meet the requirements of mathematical training of the graduate of the specialty "Mathematical and Computer Modeling".

The model of the graduate described in Appendix 4 is of a general nature, the separate sections of the document repeat the lost and canceled by the order of the Ministry of Education and Science of the Republic of Kazakhstan State Educational Establishment of the Republic of Kazakhstan RK RK RK 3.08.331-2006 in the specialties, as well as the first edition of the State Educational Establishment of the Republic of Kazakhstan dated 23.08.2012 № 1080, standard of higher education ". The requirements for general education, professional competence, economic and organizational and managerial competencies are not specified and do not have an objective relation to this specialty.

How the interested parties get involved in drawing up the graduate model is not described in the self-assessment report and not confirmed during the visit. First of all, enterprises and organizations of scientific research and research and production profile, typical as employers for graduates of this program.

The profile of a part of the partner enterprises, where the students of the EP pass practical training, does not imply the acquisition of the full competencies stated in the training results of the EP.

Strengths / best practices:

- availability of developed graduate models describing learning outcomes and personal qualities;
- conducting external examinations of the EP;
- The complexity of the EP is clearly defined in Kazakhstan credits and ECTS.

EEC recommendations:

1. to conduct a set of activities on a systematic basis to harmonize the content of educational programs with educational programs of leading Kazakhstan and foreign universities, as well as the recommendations of international professional associations IEEE and ASM (Computer Curricula).

2. to analyze the possibility of organizing dual education at senior courses and the implementation of joint EP with other higher education institutions.

3. to consider the possibility of training students for professional certification.

4. The content of EP 5B070500 to bring into compliance with the qualification characteristics of the graduate of the specialty "Mathematical and Computer Modeling". To this end:

- to review the contents of the program in order to restore the balance between the blocks of databases and PD of educational disciplines in the field of mathematical and information technologies;

- to align the goals and outcomes of the training in the graduate student model.

Conclusions of the EEC on the criteria for 5B070400 - "Computer technology and software", EP 5B070300 - "Information systems", 6M070300 - "Information systems": strong positions - 3, satisfactory positions - 7, 2 need to be improved.

Conclusions of the EEC on the criteria for 5B070500 - "Mathematical and Computer Modeling" by the criteria: strong positions - 3, satisfactory positions - 6, 3 need to be improved.

5.4. Standard "Continuous monitoring and periodic evaluation of educational programs"

The Evidence

The University defines the procedure for monitoring, reviewing and revising the EP.

Checking the EP is carried out in accordance with the monitoring methodology of the EP, which includes:

- Interrogation of entrants, students, graduates, teachers, employers' organizations;

- student performance;
- information support of the educational process, resource and information support of the EP;

- analysis of the student evaluation system;
- assessment of the level of competence;
- degree of compliance with the EP requirements

Constant monitoring and periodic evaluation of accredited EPs is carried out taking into account the proposals of organizations and institutions of the Aktobe region and Western Kazakhstan, interested persons, students participating in the process of selecting and forming a list of elective disciplines, developing the subject of graduate work, as well as opinions and suggestions of students and employers based on the results passing of professional practices, proposals of the SAC chairmen. It also takes into account the demand for graduates in various fields with the use of information technology, the recognition by employers of the region of the quality of training specialists

The EP is updated in connection with the change in state compulsory standards of higher education, the introduction of new directions and elective courses. Renewal of the EP is carried out in accordance with the requests of employers, which is reflected in the catalog of elective disciplines for the relevant academic year and approved by the Academic Council of the university.

All measures to control the quality of the educational process, conducted at different levels, are recorded in the form of records, acts, certificates, reports, etc., and are discussed at meetings of the departments and educational and methodological commissions, at the faculty council, the scientific and methodological council of the university, Academic Council of the university. Based on the analysis and evaluation of control indicators, measures are being developed to improve the quality of the implementation of the EP.

The leadership of the university demonstrated its openness and accessibility for students, teachers, employers: hours of reception on personal issues were determined, meetings with the rector were systematically held. As a channel of communication for innovative proposals, traditional forms of feedback are used: meetings with management and the rector's blog. Based on the results of the questionnaire, the level of accessibility and responsiveness of the university's management fully satisfied 100% of the students and 94.9% of the teaching staff.

Analytical part

At the same time, the commission notes that the following issues concerning this standard are not fully reflected in the self-report and were not confirmed during the visit of the EEC.

How is the content of the EP carried out in the light of the latest scientific achievements to ensure the relevance of the subjects taught. Some elective block disciplines related to programming languages, Object Pascal and Borland C++ development environments, Borland Delphi, have lost their relevance due to their non-use by most software companies. It compares the structure considered by the EP with world trends and the demands of the professional environment (Computer Curricula)

It is not revealed how interested persons are informed when the content of the EP changes, and where changes made to the EP are published.

In the annotations of the disciplines "Fundamentals of Circuitry Engineering" and "Digital and Impulse Technology" there is a duplication of learning outcomes, in others, the short content of the discipline is replaced by the objectives of the course, for some reason, the fastest and most reliable fiber-optic communication is missing in the course of "Communication Systems" among telecommunications systems .

What tools do EPs management use to identify external changes? How is the analysis of changes in the labor market carried out and how does this affect the change in the content of the EP?

EEC recommendations

1. The management of the EP to ensure the revision of the content of the EP taking into account the latest scientific achievements, changes in the labor market and the requirements of employers.

2. Improve the work on optimizing the content of the EP, in terms of the formation of practice-oriented training of students.

Conclusions of the EEC on the criteria for 5B070400 - "Computer equipment and software", EP 5B070300 - "Information systems", 6M070300 - "Information systems": satisfactory positions - 10.

Conclusions of the EEC on the criteria for 5B070500 - "Mathematical and computer modeling": satisfactory positions - 10.

5.5. Standard "Student-centered learning, teaching and assessment of progress"

The Evidence

The management of the EP provides equal opportunities for students regardless of the language of instruction in the formation of an individual educational program aimed at the formation of professional competence.

The graduating department ensures the harmonious development of students taking into account intellectual development and individual characteristics.

The EP management seeks to ensure attention to different groups of learners and their needs, providing them with flexible learning paths and using various forms and methods of teaching and learning. The department conducts its own research in the field of methods of teaching the academic disciplines of the EP.

For the purposes of student-centered training, the Department of Information Systems and Software uses various teaching methods and technologies that take into account the variety of forms of information assimilation:

- lecture-discussion, lecture-consultation on the disciplines "System Programming", "IP Design", (Kereyev AK, Bekesheva LR), work in groups (Tashimova AK, Buranbaeva BS) , method of case studies (Bekesheva LR, Urdabaeva G.), method of projects (Baibaktina AT, Kaparova LE, Duisegalieva AD) method of critical thinking (Sartabanova Zh.E., Talipova M.Zh., Baibaktina AT, Bekesheva L.R.), business and role-playing games (Zhahina.R.U., Abilmazhinova B.S.), the method of open programs (Toleuov T.Zh. and Buranbaeva B.S.) and focusing questions, detailed lecture (Zhumitov B.Zh., bilmazhinova B.S., Bigaliev M.Zh.), as well as use other innovative teaching methods;

multimedia classes on the disciplines "web technology", "3D modeling", "Publishing a database on the Internet" (Bekesheva L.R., Kaparova L.E., Sartabanova J.E., Zhakhina R.U.), "Technologies programming "(Baibaktina A.T., Buranbaeva B.S.), "Database systems" (Shamisheva B.S.)

- technology, built on the system "Taxonomy Bloom", in the classroom on the discipline of Web technology (Bekesheva L.R.);

Case-Study method, the method of projects in the classroom (Sartabanova Zh.E. and Kaparova LE).

To monitor the effectiveness and effectiveness of innovation and the use of various teaching methods, a survey is conducted among the students "Teacher with the eyes of students".

34.4% of students express complete satisfaction with the quality of teaching 6.2% rated as good and 1.6% satisfactory.

Operating within the credit system of training, the Department of Information Systems and Software creates the most favorable conditions for students to master the disciplines of the specialty. For this purpose, the following are being developed:

- 1) working programs (Syllabus) for each discipline for students and undergraduates;
- 2) control and measuring materials for classroom work on each discipline;
- 3) control and measuring materials for SIW;

- 4) materials for knowledge control;
- 5) materials for working on practices.

The entire volume of SIW is confirmed by assignments requiring daily and independent work from students and undergraduates. The management of the EP monitors the independent work of the trainee and an adequate assessment of its results.

Diploma work completes the training of a specialist and shows his willingness to solve theoretical and practical problems in his field. The purpose of the thesis: systematization and deepening of theoretical and practical knowledge in the chosen specialty; acquisition of independent work skills; mastering the methods of research, generalization and logical presentation of the material.

Students receive information about the possibilities of forming an individual educational trajectory, as well as assistance with its implementation through the system of training "Univer", as well as with the help of an adviser.

Monitoring of progress of trainees on the educational trajectory is carried out on the basis of the system of evaluating the results of trainees. Monitoring is carried out on the basis of reports of the faculty

Monitoring and evaluation of their implementation and learning outcomes, in general, is provided by the following procedures:

- independent computer testing in the disciplines of the OP: provides an objective evaluation of knowledge and shows the trend of the dynamics of their level;
- questioning of employers on the quality of training graduates of the EP;
- employing employers to work in the SJSC and the State Energy Commission;
- the use of educational methods in the educational process, close to the content of the sphere of work of graduates of the EP (cases, game situations, practical tasks on the topics of the course), etc.

Assessment of knowledge, skills and professional competencies, trained by credit technology training is carried out on a 100-point scale with the conversion of the final result into alphabetic and digital equivalent. When making an assessment, attendance, activity level in the class, systematic fulfillment and level of independence of all types of tasks, the ability to correctly formulate the problem, and to find answers are taken into account. All the students' academic achievements are reflected in the transcript.

Appeal of the results of academic achievement of students is carried out through the work of the Appeals Committee.

A classic feedback tool for studying the quality of teaching (content, forms, methods) is the questioning of students (questionnaires: "Teacher through the eyes of students", "Student satisfaction with the quality of training in the specialty", "Student satisfaction with the quality of the educational process", "Student's satisfaction with learning outcomes" , "Satisfaction of the AS, questioning graduates and employers).

Monitoring of students' satisfaction with the passage of production practice is carried out by means of questionnaires. The problems and suggestions indicated by the students in the questionnaires form the basis for improving its organization and content.

Forms of feedback are also a virtual reception, which includes the rector's blog and pages in social networks.

The students express complete satisfaction with the quality of teaching (80.2%); fairness of examinations and attestation (81.7%); conducted tests and exams (83.3%).

Analytical part

At the same time, the commission notes that the following questions regarding this standard are not fully reflected in the self-report and were not confirmed during the visit of the EEC.

Mechanisms for an adequate evaluation of the results of independent work are given in syllabuses, which are distributed and explained to the students, but it is not shown how the AIS of ARSU and the site www.arsu.kz are used for this.

The possibility of choosing educational trajectories for training under accredited EP has not been proved, since the existence of such trajectories is not presented. The following are possible, for example: individual educational trajectories: IOT 1. "Mathematical modeling" or IOT 2. "Computational mathematics and high-performance computing" or IOT 3. "Computer modeling."

The submitted additional modules in the Municipal Unitary Enterprise are formal in nature and do not work in practice. Little attention is paid to the introduction of student-centered learning into the learning process. During the visit of the EEC, it was noted that most of the classes are conducted in the traditional form, ie. Academic staff uses, as a rule, the method of "transfer" of knowledge.

Surprising (or alarming) 100% successful results of the students' progress in PS 5B070500 "Mathematical and Computer Modeling" and 6M070300 "Information Systems".

Strengths / best practices:

- availability of a feedback system on the use of different teaching methods and evaluation of learning outcomes;
- Supporting the autonomy of students with simultaneous guidance and assistance from the teacher.

EEC recommendations

1. Conduct a training seminar for the leaders of the EP and AS on student-centered learning, which involves shifting the emphasis in the educational process from teaching to teaching as an active educational activity of the student.
2. Ensure that the procedures for evaluating the learning outcomes of the students who are studying the program are consistent with the planned learning outcomes and program objectives.
3. To provide for the possibility of selecting additional trajectories for training under accredited EP.

Conclusions of the EEC on the criteria for 5B070400 - "Computer technology and software", OP 5B070300 - "Information systems", 6M070300 - "Information systems": strong positions - 2, satisfactory positions - 8.

Conclusions of the EEC on the criteria for 5B070500 - "Mathematical and Computer Modeling": strong positions - 2, satisfactory positions - 7, 1 needs to be improved.

5.6. Standard "Students"

The Evidence

The management of the EP demonstrates the policy of forming a contingent of trainees from receiving up to graduation and ensures the transparency of its procedures. To form a contingent of students, the teaching staff of the department conducts large career guidance work in urban secondary schools in Aktobe and in other regions of Kazakhstan. For the formation of the contingent, an "Open Doors Day" is held annually at the university and at the faculty for students of schools in the city and the region, where reference books, booklets about the university, faculty and specialties are distributed. Regularly the staff of the department according to the established schedule conducts meetings with the pupils of the graduation classes of Aktobe city, as well as other cities and villages of the Republic of Kazakhstan. During these meetings with senior pupils and graduates, faculty members conduct conversations, present presentations and give out booklets that contain information about educational programs

Students and undergraduates are the main consumers of educational services, therefore at the head of the implementation of educational programs are their interests. The educational environment models the following characteristics of students: individuality, the desire for greater

freedom, the process of achieving integrity, personal and professional growth, self-reliance and self-esteem.

According to EP 5B070300- "Information systems" 117 students are trained, 25 of them are on the state educational grant, on a contractual basis - 92 people. Employment in the current year is 81.8% (18 people).

According to EP 5B070400 - "Computer equipment and software", 113 students are trained, including 98 full time students, 35 of them are grantees. 15 part-time students study on a paid basis. In 2017, 12 graduates were employed (70.5%).

The number of students in the EP 5B070500 - "Mathematical and Computer Modeling" is 86 students, 53 of them are grantees. This year, 6 graduates are employed, which is 54.5%.

Currently, according to EP 6M070300 - "Information Systems", 3 graduate students are trained. In 2017, 6 out of 7 graduates (86%) were employed.

Table 1 - Dynamics of a the students number

EP	2014-2015		2015-2016		2016-2017	
	Grant	Fee-paying	Grant	Fee-paying	Grant	Fee-paying
5B070300	16	90	11	85	14	98
5B070400	38	69	32	60	37	50
5B070500	13	41	11	40	34	33
6M070300		12		17	1	6

The formation of the contingent of students corresponds to the legislation of the Republic of Kazakhstan and is based on the principle of electivity of higher education institutions and the educational program.

The main professional and social roles of the trainee are determined by the following activities: production, management, research and teaching. During the training, students, undergraduates can actively participate in the work of the department, faculty and university, being part of various management bodies. Actively participating in the life of the department, faculty, university, students acquire the experience of leaders, which in the future can affect their social status and professional growth. To increase their social status in the future, in addition to studying the courses provided by the program, students can attend various seminars and trainings, summer and winter schools with the aim of improving their professional qualifications.

The University's management makes every effort to ensure the employment of graduates and maintain continuous communication with them. Due to close interaction with regional and regional enterprises, young specialists are given a unique opportunity to pass industrial practice on the proposed place of work. Particular attention is given to work related to the organization of employment and the distribution of graduates who have been trained in the rural quota, under the grant "Serpin".

Monitoring is carried out through direct activity: student - department - department of practice and employment - organizations and enterprises where the graduate works. The analysis of the employment of graduates accredited by the EP is shown in the figures.

According to EP 5B070400 - "Computer equipment and software", 113 students are trained, including 98 full-time students, 35 of them are grantees. 15 part-time students study on a paid basis. In 2017, 12 graduates were employed (70.5%).

The number of students in the EP 5B070500 - "Mathematical and Computer Modeling" is 86 students, 53 of them are grantees. In the 2016-2017 academic year, 6 graduates were employed, which is 54.5%.

Currently, according to EP 6M070300 - "Information Systems", 3 graduate students are trained. In 2017, 6 out of 7 graduates (86%) were employed.

Analyzing the data of the employment diagrams, we can state that, in the main, graduates are in demand, while we see a positive dynamics in the growth of the number of graduates who find work in the city and in the countryside.

The students express full satisfaction with the availability of academic counseling (72.2%); access to health services (81%); availability of library resources (88.1%); existing educational resources (75.4%); general quality of curricula (80.2%); the relationship between the student and the teacher (85.7%).

Analytical part

The ARSU organizes work in the field of vocational guidance and subsequent support for students, provides policies and principles for the formation of a contingent of students, the principles for creating an educational environment for students to reach the required professional level, the representation of students in collegiate management bodies of the university, methods of feedback and informing learners, aspects of cultural and social life of students.

The materials of the self-assessment report speak in general about the policy of forming the contingent of trainees, but neither in the materials of this section of the Report and Appendices nor during the visit of the EEC there are the procedures of the quality assurance system regulating the life cycle of the trainees (from admission to completion), including adaptation and support for newly enrolled and foreign students

It should be noted the problem of small groups of EP, for example, for one undergraduate in the profile direction of EP 6M070300 "Information Systems", or 5 undergraduate students, EP 5B070500 "Mathematical and Computer Modeling". As well as regarding the employment of EP 5B070500 for the graduation of 2017, 6 graduates are employed, which is 54.5%.

It was not possible to find confirmation of the University's assistance in relation to the Lisbon Convention on Recognition and Cooperation with National Centers of ENIC/NARIC. Internal documents are not provided, on the basis of which recognition of previous learning outcomes and qualifications is carried out, including within the academic mobility of students.

The Commission notes the insufficient academic, including the external mobility of students of the EP in question.

The mechanism of support for gifted students is not fully disclosed, including the characterizing research work of students (topics of work, projects, publications)

The University has developed the practice of maintaining contacts with alumni, the leadership has created conditions for the functioning of the alumni community, however, during the visit and during the conversation with the graduates of the accredited EPs, it was discovered that not everyone knows about the existence of the Association, none of those present is its member. Thus, the functioning of the Alumni Association has not been proven, nor is the information on the career growth of the graduates of the EP.

Strengths / best practices:

- availability of a mechanism to support gifted students.

EEC recommendations:

1. Provide graduates with documents confirming the received qualification, including the results achieved, as well as the context, content and status of the education received and evidence of its completion.

2. Organize work on adaptation and support for international students

Conclusions of the EEC on the criteria for 5B070400 - "Computer equipment and software", EP 5B070300 - "Information systems", 6M070300 - "Information systems": strong positions - 1, satisfactory positions - 10, 1 needs to be improved.

Conclusions of the EEC on the criteria for 5B070500 - "Mathematical and Computer Modeling": strong positions - 1, satisfactory positions - 9, 2 need to be improved.

5.7. Standard "Academic staff"

The Evidence

EP 5B070300 - «Information systems», 5B070400 - «Computer equipment and software», 5B070500 - «Mathematical and computer modeling», 6M070300-«Information systems» (scientific and pedagogical direction, profile direction) is provided by the Department of Information Systems and Software security". At present, the staff of the Department of Information Systems and Software is 32 teachers. 9 full-time teachers have a research degree, which is 41%.

The management of the EP demonstrates the application of the HR policy of the HEI for the AS involved in the implementation of the EP. Personnel selection is carried out on the basis of the analysis of the needs of the educational program, which results in the announcement of a competition for filling vacancies. The competition for the filling of vacant posts of teaching staff and researchers in the ARSU is carried out in accordance with the current legislation

The main provisions of the University's personnel policy are compliance with standard qualification characteristics for employees of educational institutions, approved by the order of the Ministry of Education and Science; availability of higher and postgraduate education in relevant specialties, productive scientific activity, as well as competency and competitiveness Indicators on the qualitative and quantitative composition of PPPs confirm the availability of the human resources necessary for the implementation of the entire spectrum of educational programs and corresponding to the qualification requirements for licensing educational activities. At the department of "Information systems and software" there are 19 teachers, including those with academic degrees - 9.

The management of the EP demonstrates the awareness of responsibility for their employees and the provision of favorable working conditions for them and the changing role of the teacher in connection with the transition to student-centered learning.

The EP management monitors AS's activities, systematically assesses the competence of teachers, assesses the overall quality of teaching, including the assessment of the satisfaction of teachers and students. An Academic staff's survey is systematically conducted on the question of satisfaction

A systematic assessment of the competence of teachers, an assessment of the effectiveness of the quality of teaching at the department to disclose the content of training courses and the formation of students' knowledge, skills and competences necessary to achieve learning outcomes as envisaged by the program objectives is realized through internal evaluation (open classes, mutual visits, chair, speeches at the scientific-theoretical and scientific-methodological seminars).

There is a significant degree of proficiency in teaching methods, which are accepted by the EP for a group of training courses implemented by them (the journal of mutual visits, analyzes of open classes, etc.).

The EP management ensures completeness and adequacy of individual planning of the work of the AS for all types of activities, monitoring the effectiveness and effectiveness of individual plans, demonstrates the evidence of the teachers performing all types of planned workload

The workload of the teaching staff includes teaching, educational, methodological, scientific, organizational and methodological work, and increasing professional competence. The maximum training load of the teaching staff does not exceed 600 hours per academic year at the basic rate.

In all disciplines of the departments there have been developed educational and methodical complexes, where syllabuses of educational disciplines are presented, lectures, seminar plans, SIW tasks, types of control, questions and assignments, rating tasks, exam materials

The management of the EP demonstrated the support of the research activities of the teaching staff, the link between research and training.

The leadership of the EP demonstrates the mechanisms for stimulating the professional and personal development of teachers and workers. One of the key areas of the EP leadership's work is the creation of favorable conditions for the professional and personal development of the teaching staff, including advanced training.

Raising the qualification of the faculty is carried out in order to: constantly update the theoretical and practical knowledge of scientific and pedagogical workers in connection with changes in the requirements for the level of qualification; perfection of methodical abilities and skills; mastering of new pedagogical technologies; acquisition and improvement of skills and skills of conducting educational work with students; improvement of pedagogical skills and competences; the teachers receive additional competencies that enable them to solve the set large-scale tasks in the system of higher education. The faculty expresses full satisfaction with the level of accessibility of the university administration (94.9%); encouraging innovation (88.1%).

Analytical part

The university is responsible for its employees, provides them with favorable working conditions. The activities of the university in this direction are reflected in the Charter of the A. Zhubanov ARSU, in the social package for ARSU workers, in the wage system. There are no explanations that include the notion of favorable working conditions in general for the university and taking into account the specifics of the EP, whether the certification of workplaces in the framework of the EP, how social support for employees is carried out, for which complete information was not obtained when interviewing the Academic staff.

Incorrect information on the composition of the department is given: so in the report 19 people, in Table 6 - 12 people, on the site www.arsu.kz in the section "Profile of the Academic staff" very different data are indicated.

Since the information on the possibility of career growth and professional development of the teaching staff is given in general in the "Information systems and software" department, which realizes all the EPs of this cluster, it is impossible to assess in what directions and why the qualification of EP 5B070500 "Mathematic and computer modeling" is going on. Perhaps due to the scientific and professional training and the field of interests of the AS of the department that produces the department, there is clearly a shift in the implementation of the program towards the training of specialists in the operation of information systems. There is not enough work to attract practitioners of relevant industries to the teaching, academic mobility within the framework of the EP.

It should be noted that the publication of AS in the cited publications belongs to 1 employee out of 19. The list of publications of the department includes works even in 1985, and not for the last 3 years, as is customary. The subject matter of these publications is not related to the directions of accredited EPs.

Strengths / best practices:

- Presence of objective and transparent personnel policy, including hiring, professional growth and development of personnel providing the professional competence of the whole state.
- Ensuring that the leadership of the university is focused on providing opportunities for the development of young teachers.

EEC recommendations:

1. Consider the possibility of inviting AS with practical experience in the relevant field.
2. Organize the AS qualification improvement in the context of the specifics of the EP.
3. Monitor and analyze the needs of the EP in the AS.

Conclusions of the EEC on the criteria for 5B070400 - "Computer technology and software", EP 5B070300 - "Information systems", 6M070300 - "Information systems", 5B070500 - "Mathematical and computer modeling": strong positions - 4, satisfactory positions - 8.

5.8. Standard "Educational resources and student support systems"

The Evidence

The University has a material and technical base that provides all types of practical training and research work for students, as stipulated in the educational programs of the university and corresponding sanitary-epidemiological and fire-fighting norms and rules. Creating an effective education infrastructure is a prerequisite for the university to successfully fulfill its mission.

The trainees are provided with necessary living conditions, a cultural environment, and conditions for exercising. Opportunity and access to the use of social, cultural, sports facilities of the University: the Palace of Students for 800 seats, Zhastarsaray (1750.2 m²), the Students' House with a total area of 7157 m², a dining room (493 m²), a sports hall (1190 m²), a sports complex (1761, 4 m²), the Dolphin Pool (1491.7 m²), the sports facilities (1272 m²), the gym with the educational building No. 5 (1134 m²), the gym with the training building (576 m²), the sports complex with the educational building No. 3, (3519 m²), a sports complex at the main building (1732.4 m²), Students' houses (6516.2 m²), a polyclinic (1304.8 m²).

The management of educational programs 5B070300- "Information systems", 5B070400- "Computer equipment and software", 5B070500- "Mathematical and computer modeling", 6M070300- "Information systems" demonstrated the sufficiency of material and technical resources and infrastructure.

In particular, with visual inspection, the existing auditor fund of the Faculty of Physics and Mathematics (educational building No. 7), training laboratories, computer classes, methodical room, including: streaming audiences - 3; lecture audience - 4; specialized cabinets - 15 provides the need for students in the classrooms.

In computer classes, licensed software is purchased. For example, Pascal and C ++ programming languages are used to study the basics of algorithmization and programming. There are also educational versions of DelphiXE, VisualStudio, RationalRose, AutoCAD, 1C: Enterprise. IBM RationalRose software is used in the study of the discipline "Software Development Tools", DelphiXE - Programming in the RadStudio environment for the development of software for mobile devices, VisualProlog - Artificial Intelligence, MatLab, CorelDraw - Computer graphics. When studying the discipline "Development of client-server database applications," the VisualStudio development environment and MS SQL Server are used. In studying the discipline, the mobile application development languages consider modern libraries for developing dynamic web applications such as HTML 5, Bootstrap, LESS, and JQuery. When you study the C # programming language, you use the VisualStudio development environment.

In each laboratory, specialized audience, cabinets during the training, the safety requirements of students are observed, information stands are available that regulate the rules of behavior of trainees, there are passports of cabinets and the corresponding equipment.

For students who are enrolled for 1 course of study, the adviser is provided with a guide-guide, an academic calendar, a code of honor for a student.

Informing the students of the EP is also carried out with the help of bench materials, with which the building of the Physics and Mathematics Faculty of the academic building No. 7 of the University is designed. The stand under the name "Physics and Mathematics Faculty" contains: the schedule of classes, schedules of the SIWT, boundary control and examinations; stand "Professional orientation of future specialists" contains materials on problems of education, educational process; stand "Formation of the general professional and pedagogical culture of students - the main condition for the formation of a modern teacher" consists of a subtopic: "the methodology of teaching disciplines," "modern technology training", etc. Stands are also available in specialized audiences, for example, in a specialized computer lab on computer graphics there is a stand "Computer Graphics" with kinds of computer graphics. In the specialized computer laboratory "Computer Modeling and Numerical Methods" there is a stand

"Physics and Mathematics", "Computer Modeling". Also, the teachers of the department conduct additional consultations on the disciplines read, which are reflected in the journal of consultations

The library is located in all educational buildings, in the House of Students and in the Confucius Institute. The university library works on the computer program "IRBIS-64", the total volume of bibliographic databases of the electronic catalog contains more than 60 000 records. There are 2 electronic reading rooms with an area of 1,728.8 square meters. m and the total number of seats - 940 seats. Taking into account the book fund of the scientific and technical library, the number of basic and auxiliary textbooks on special subjects is 145 copies for one reduced student.

Presence of the fund of educational and educational-methodical literature of accredited EP.

The annual indicator of the provision of educational, teaching, methodological and scientific literature of disciplines of the OP has a positive dynamics. It should be noted the increase in the share of the published textbooks of Kazakhstani authors, in particular, the teaching and methodological products of the Kazakh National University named after al-Farabi, KazNPU named after Abay.

There is also a center for IT technology and robotics, where equipment was purchased using LEGO technology. The Virtual Academy is also functioning at the faculty, where classes are held jointly with foreign scientists. For example, Professor N. Popivanov (Sofia, Bulgaria) gave a lecture for students of accredited programs. In 2017, the University opened a park of innovative technologies. Currently, the university's information network has a speed of access to the Internet 200 Mb \ c, with the condition of connection - "Unlimited". Connection to the Internet is carried out on a dedicated line ("Kazaktelecom"), Internet traffic is provided by the association of users of the scientific and educational computer network of Kazakhstan "KazRENA".

The library of the University has its own electronic library (http://arsu.kz/library_agu) and 6440 titles of educational resources (textbooks, teaching aids, syllabuses, scientific articles of university teachers, basic and rare books) are presented in it. You can access the following databases:

- KAZNEB (Kazakhstan National Electronic Library Electronic State National Fund). Language - Kazakh, Russian, English;
- RMEB (Republican Inter-College Electronic Library of Kazakhstan) - a unified database that integrates electronic resources of the universities of the Republic of Kazakhstan;
- Polpred.com Media Review, which provides an overview of the media: articles, publications, analytics;

To introduce new information technologies, the library of ARSU became a member of the Information Consortium of Libraries of Kazakhstan, where users have free access to the databases "RUBRICON", "INION", "EBSKO" through the Internet. The students have access to the Republican Interuniversity Electronic Library (www.rmeb.kz), etc.

According to the results of the questionnaire, 77.8% of trainees were fully satisfied with the availability of computer classes and Internet resources; educational rooms, audiences for large groups - 73%; rest rooms for students - 52.4%; available computer classes - 81.7%; scientific laboratories - 80.2%. The overall satisfaction with the hostel is 73% (not satisfied - 7.1%).

Analytical part

Information on material and technical and information resources are of a general nature and do not fully reflect the state of resource support for the implementation of accredited PAs.

The list of licensed software used is incomplete; it does not include such widely used in the world systems of simulation and design as AnyLogic and VISSIM, as well as information systems (Navision, Oracle). Some of the software used (Borland Delphi, Turbo Pascal, Borland

C ++, Microsoft Windows XP Professional) is morally obsolete because the software companies are not used by the software companies and the technical support for the products is completed.

The technical capabilities of laboratories for providing scientific research and performing graduate work of the OP, as well as adults, working, foreign students, students with disabilities are not specified.

Expertise of the results of research work, graduate works, dissertations on plagiarism is not systematized.

The needs of different groups of students in the context of the EP (foreign students and students with disabilities) are not taken into account.

The needs of the university's higher educational institution in various types of resources are not defined, including the correspondence of information resources to the specifics of the EP. The dynamics of the state of the learning environment has not been shown for at least 3 years.

EEC recommendations

1. For a qualitative implementation of the examination of the results of research, final works, organize the functioning of the system antiplagiat.

2. To create greater opportunities for support and social protection of different groups of students on accredited EPs, as well as for access to education for socially vulnerable segments of the population.

3. Improve the learning environment by providing technological support to students and faculty in accordance with educational programs (for example, online training, modeling, data analysis programs).

Conclusions of the EEC on the criteria for 5B070400 - "Computer equipment and software", EP 5B070300 - "Information systems", 6M070300 - "Information systems": strong positions - 0, satisfactory positions - 7, 2 need to be improved.

Conclusions of the EEC on the criteria for 5B070500 - "Mathematical and Computer Modeling": satisfactory positions - 6, 3 need to be improved.

5.9. Standard "Public Awareness"

The Evidence

Information on the activities of the university and the implementation of educational programs is posted on the official website www.arsu.kz in accordance with the Regulations on the official site of the Aktobe Regional State University named after K. Zhubanov".

The university has a variety of ways to disseminate information to inform the public and interested persons. Information is available on the following information media and materials:

1. The main channel for informing the public (future students, their parents, students, graduates and employers) is the official website of K. Zhubanov's ARSU - www.arsu.kz and information in the section of faculties.

2. The university newspaper Aktobe University is published monthly.

3. With a periodicity of 1 time per quarter, the journal "University khabarshysy" is published.

The University annually reissues the advertising and information booklet, a video about the university, the department, made image products with the logo of the ARSU, prepared and posted information on the university, faculty, department, specialty.

The faculties have developed brochures, flyers or booklets containing general information on the specialties, the advantages of studying at this faculty, student exchange programs, teachers, partners, graduates, information on admission, terms and form of education, and prices. To inform applicants, information boards, posters, stands, banners, as well as nameplates of institutes, faculties and specialties are hung in the foyer of the university building. Also, for recruiting activities in schools, presentations and videos containing the above information were developed.

To inform the public about the activities of the K. Zhubanov ARSU, the Faculty of Physics and Mathematics, the Department of Information Systems and Software, information resources have been developed that provide information, from the organization of the educational process, to all major events conducted by the university.

The feedback of the university's leadership by the public through the functioning blog of the rector is operational. After the next request or question is published in the blog, an answer is published during the working day.

The university holds meetings of the rector, vice-rectors, directors of scientific schools, department heads with student assets, employers, teachers and employees, where each participant can ask any question of interest to any manager and get reliable information.

One of the most optimal forms of school propaganda is the holding of various cultural events. It is the education of the spirit of patriotism among young people, the strengthening and propaganda of national and family values.

The university's website is a visiting card in the K.Zhubanov ARSU in the global virtual space and provides the image of the university, focused on the learner and the requirements of production.

There is a system of intra-university monitoring of information on the activities of the university, which allows for systematic implementation of organizational measures for comprehensive analysis and objective assessment of the activities of all structural divisions of the university, to receive full information about activities and its results at all levels of information management in the university, to adjust the educational, scientific and educational processes in order to improve the quality of professional training of specialists.

The mass media for publication have been determined - these are the republican and regional newspapers and the television and radio. All publications are informational, image, explanatory characters.

The academic staff and students of the university systematically inform the general public about the activities of K. Zhubanov ARSU by means of the following forms: publications on the university's website, in the newspaper "Aktobe University".

The academic staff of the department annually update information stands of the department "Information systems and software", publish banners and portable rolls (stands), make videos, create a database of presentations of accredited EP. As part of career guidance, booklets on accredited EPs are updated, which are distributed throughout the territory of the Aktyubinsk region to comprehensive schools, a center for supplementary education under the Ministry of Education and Science of the Republic of Kazakhstan.

Evaluation of satisfaction with information on the activities of the university, the specifics and progress of the implementation of the EP is conducted annually through questionnaires, interviews, feedback, and also through the rector's blog (<http://arsu.kz/ru/content/blog-rektora-0>). Questioning of students, conducted during the visit of the EEC of the IAAR showed that satisfaction with the students' knowledge of courses, EP, and academic degrees - 76.2%.

The EPs take part annually in the National rating of the EP among the universities of Kazakhstan. This procedure is carried out voluntarily, the results are published in open sources. It is planned to intensify the publication activity on educational policy and current trends.

Analytical part

Information on the activities of the ARSU and the implementation of the EP is published on the university's website, the university's newspaper Aktobe University, the journal University of Khabarshys, local and national media, and social networks. The official page of the university is present in the social network "VKontakte".

The information on the site is not presented systematically, mainly by structural units, respectively, does not fully reflect the results of the university. Most of the site www.arsu.kz was not available (there is only a layout with section headers), and the rest contains outdated and incomplete information (<http://95.57.215.13/old.arsu.kz>).

In the self-assessment report, the publication on its own web resource of audited financial statements, including in the context of the EP, is mentioned only in the part of measures to improve in the future and was not confirmed during the visit of the EEC.

There are no analytical data and the results of the participation of the university and the EP implemented in the procedures for external evaluation and placement of information and links to external resources based on the results of external evaluation procedures, as well as information in the context of accredited educational programs. There are no references to the availability of adequate and objective site in the improvement of the educational process is not high enough.

Members of the commission note the need for accurate, objective and up-to-date information within the framework of the EP including:

- implemented by the EP, indicating the expected learning outcomes;
- information on the possibility of assigning qualifications at the end of the EP;
- information on teaching, learning, evaluation procedures;
- information on passing scores and educational opportunities provided to students.

Evaluation of satisfaction with information on the activities of the university, the specifics and progress of the implementation of the EP is conducted annually through questionnaires, interviews, feedback, and through the rector's blog (<http://arsu.kz/ru/content/blog-rekatora-0>). Questioning of students, conducted during the visit of the EEC of the IAAR showed that satisfaction with the students' knowledge of courses, EP, and academic degrees - 76.2%.

The EPs take part annually in the National rating of the EP among the universities of Kazakhstan. This procedure is carried out voluntarily, the results are published in open sources.

Strengths / best practices:

- Conducting conferences and forums, publishing activity on educational policy, supporting and explaining national development programs of the country and the system of higher and postgraduate education.

EEC recommendations

1. Carry out periodic internal monitoring of the website and evaluate to what extent the available information resource meets modern requirements, goals and objectives of the University as a whole and in the context of educational programs. In this case, take into account the technical requirements for standard resources: to site design, usability, technical characteristics, to the content management system (CMS).

2. Post information about the programs being implemented, indicating the expected results of the training, the possibility of assigning qualifications at the end of the EP, about teaching, training, evaluation procedures, information on passing scores and educational opportunities provided to the trainees.

3. Place audited financial statements on the university's website.

Conclusions of the EEC on the criteria for 5B070400 - "Computer technology and software", EP 5B070300 - "Information systems", 6M070300 - "Information systems": strong positions - 1, satisfactory positions - 7, 5 need to be improved.

Conclusions of the EEC on the criteria for 5B070500 - "Mathematical and Computer Modeling": strong positions - 1, satisfactory positions - 6, 6 need to be improved.

5.10. Standard "Standards in the context of individual specialties"

In accordance with the Civil Code of the Republic of Kazakhstan 08-2009 "Classifier of specialties of higher and postgraduate education of the Republic of Kazakhstan" approved by Order No. 31 of the Minister of Education and Science of the Republic of Kazakhstan dated June 21, 2010, educational programs 5B070300- "Information systems", 5B070400- "Computer equipment and software", 5B070500- "Mathematical and computer modeling", 6M070300- "Information systems" belong to the group of specialties "Technical sciences and technologies". information about the PPP of the EP in the context of personalities. Thus, the effectiveness of

The Evidence

The development of educational programs 5B070300/6M070300- "Information Systems", 5B070400- "Computers and Software", 5B070500- "Mathematical and Computer modeling" directed to graduates the necessary theoretical and practical training.

The current state of training within the framework of the EP is supported by the active use of ICT, the annual updating of the subject of course and diploma papers, as well as the introduction of new elective disciplines, taking into account the recommendations of employers.

One of the priorities in the university is the development of interactive and information and communication technologies (ICT). To conduct classes, perform tasks on the CDS, including course projects, diploma works, there are specially equipped audiences. The educational process uses licensed software products.

The graduating department organized and conducted seminars on the introduction of modern pedagogical technologies and new teaching methods into the educational process. On January 17 and May 28, 2017, the seminar in the format of the open session "Innovations in the educational process of the university: the experience of implementation" was held on the basis of the Innovative Center for Teacher Education of the ARSU after K. Zhubanov. Teachers of the department Talipova M.Zh., Kaparova L.E., Sartabanova J.E. and Buranbaeva B.S. shared their results using innovative methods, technologies in the process of teaching students.

In order to familiarize students with the professional environment and current issues in the field of specialization, as well as for the acquisition of skills through theoretical training education program includes subjects and activities aimed at obtaining practical experience and skills in general and specialty majors in particular.

Practical training of students is carried out through the guided tour of the enterprise, organization of professional practice, conduct individual disciplines at the branch of the department and on the bases of practices AFP Kazchrome, a branch of JSC "NC" KTZ Aktobe Regional Information Center" in the city of Aktobe, TOO "IR StroyTehno" Department of State revenue of Aktobe region, Karachaganak Petroleum Operating BV (KarachaganakPetroleumOperating BV), Aktobe branch of RSE on PVC "Information and computing center of the Committee for a hundred ISTIC Ministry of National Economy of Kazakhstan "and others., focused on deepening, systematization, generalization and concretization of the theoretical knowledge acquired at the university to improve professionally significant skills.

Analytical part

Teaching on educational programs is based on the achievements of science and practice in the field of specialization, as well as using modern pedagogical technologies. Based on the results of the analysis, WEC members came to the following conclusion.

Presented and confirmed by facts information about the types of practices and related aspects, identifies the basic skills acquired through training. The EPs under consideration include various types of practice: educational, industrial and pre-diploma, for undergraduates - research, pedagogical and production practices. Trainees of the EP 6M070300-Information systems have the opportunity to undergo a foreign scientific internship.

At the same time, professional certification of trainees under review is not carried out. Harmonization of educational programs with the programs of leading domestic and foreign universities is presented only as a process of academic mobility, and does not affect the joint development of the courses taught.

Information is not provided on the conduct of individual classes or disciplines at the enterprise of specialization and was not confirmed during the visit of the EEC.

There are no references to full-time faculty members who have long experience as staff members at enterprises in the field of specialization of the EP.

There are statistics to analyze the employment of graduates of the EP. So, there are the following information about the graduates of EP 5B070500 - Mathematical and computer

modeling: Aktaev N. - programmer, railway department (Aktobe); Aliyeva A. - software specialist, SCC "City Palace of Schoolchildren" (Aktobe); Mazhit A. - teacher of mathematics and physics, Aktobe Technical College (Aktobe); Aitzhanova M. - programmer, AlfaBank JSC (Aktobe); Bibitova A. - teacher of mathematics and physics, Aktobe Technical College (Aktobe); Karagoyshina M. - teacher of computer science, secondary school №6 named after G.Aktayev (Aktobe). It should be noted that this is not about the graduates of the specialties "Mathematics and Informatics" or "Computer Science and Software". It is quite obvious that the results of employment confirm the nonconformity of the model of the graduate of this program with the requirements of the qualification characteristic of the specialty "Mathematical and Computer Modeling". The requirement of coordination of the specialty program with the National Framework of Qualifications of the Republic of Kazakhstan and mandatory with potential employers is not observed.

EEC recommendations

1. Strengthen the practice-oriented educational programs by increasing the share of practical classes at specialization enterprises; increase in the number of seminars to solve practical problems relevant to enterprises in the field of specialization.

2. The management of the EP on a systematic basis to harmonize educational programs with the programs of leading domestic and foreign universities and to provide opportunities for implementing joint EP.

3. To align the goals and results of the training in the model of the graduate of EP 5B070500 - "Mathematical and computer modeling". To revise the content of the program with the aim of restoring the balance between the blocks of DB and PD of educational disciplines in the field of mathematical, applied and information technologies, taking into account innovative strategies for the development of mathematical and computer modeling methods in solving complex control problems.

4. Using the methodology of competitive benchmarking, carry out the specification of the educational program 5B070500 - "Mathematical and computer modeling".

Conclusions of the EEC on the criteria for 5B070400 - "Computer equipment and software", EP 5B070300 - "Information systems", 6M070300 - "Information systems": strong positions - 0, satisfactory positions - 5, 0 need to be improved.

Conclusions of the EEC on the criterion for 5B070500 - "Mathematical and Computer Modeling": satisfactory positions - 4, 1 needs to be improved.

(VI) REVIEW OF STRONG SIDES / BEST PRACTICES FOR EVERY STANDARD

The standard "Management of the educational program":

- At the university, the work on management of innovations, introduction of innovative processes within the framework of the EP is put at a proper level.

- The principle of openness and accessibility of the EP management for trainees, teachers, employers and other interested persons is observed.

The standard "Information Management and Reporting":

- The periodicity, forms and methods for evaluating the management of the EP, the activities of collegial bodies and structural subdivisions, top management, and the implementation of scientific projects have been established.

- Information collected and analyzed within the framework of the EP takes into account the dynamics of the contingent of learners in the context of forms and species.

- At the university, the work on ensuring the measurement of the degree of satisfaction, trained in the implementation of vocational training and the quality of education at the university, is set at the proper level;

- The procedure for collection and processing, established by the Law, of information for the subsequent systematization and use for personal purposes of personal data of trainees, employees and teaching staff who have documented their consent has been established.

The Standard "Development and approval of the educational program":

- availability of developed graduate models describing learning outcomes and personal qualities;

- conducting external examinations of the EP;

- The complexity of the EP is clearly defined in Kazakhstan credits and ECTS.

The standard "Student-centered learning, teaching and learning achievement":

- availability of a feedback system on the use of different teaching methods and evaluation of learning outcomes;

- Supporting the autonomy of students with simultaneous guidance and assistance from the teacher.

The Standard "Students":

- Presence of a mechanism to support gifted students.

The Standard "Teaching staff":

- Presence of objective and transparent personnel policy, including hiring, professional growth and development of personnel providing the professional competence of the whole state.

- Ensuring that the leadership of the university is focused on providing opportunities for the development of young teachers.

The Standard "Public Awareness":

- Conducting conferences and forums, publishing activity on educational policy, supporting and explaining national development programs of the country and the system of higher and postgraduate education.

(VII) REVIEW OF RECOMMENDATIONS FOR IMPROVING QUALITY

1. To strengthen the development of a quality culture in the university, which includes continuous monitoring of activities with the aim of improving and taking measures when goals and tasks are not achieved. Commitment to quality assurance should apply to any activities performed by contractors and partners (outsourcing), including in the implementation of joint / two-degree education and academic mobility.

2. Develop an intra-university quality assurance system, including design of the EP, risk management, monitoring, improvement, decision-making on the basis of facts.

3. The management of the EP to conduct systematic work to define and formulate the individuality, and uniqueness of the EP, the coherence of the development plan with the national development priorities and the development strategy of the University.

4. Organize courses on management education and student-centered training for managers of the EP.

5. Apply strategic KPIs (key performance indicators) to cascade first to the level of structural units, and then to the level of employees.

6. Document the information management processes, determine the order and ensure the protection of information, responsibility for their functioning, reliability and systematic use of adequate information to improve the internal quality assurance system.

7. Conduct on a systematic basis a set of activities to harmonize the content of educational programs with educational programs of leading Kazakhstan and foreign universities, as well as

the recommendations of international professional associations IEEE and ASM (Computer Curricula).

8. Consider the possibility of training students for professional certification.

9. The content of EP 5B070500 to bring into compliance with the requirements of the qualification characteristics of the graduate of the specialty "Mathematical and Computer Modeling". To this end:

- review the content of the program in order to restore the balance between the blocks of databases and PD of educational disciplines in the field of mathematical and information technologies;

- align the goals and outcomes of the training in the graduate student model.

10. The management of the EP to ensure the revision of the content of the EP taking into account the latest scientific achievements, changes in the labor market and the requirements of employers.

11. Provide for the possibility of selecting additional trajectories for training under accredited EP.

12. Provide the alumni with documents confirming their qualifications, including the results achieved, as well as the context, content and status of the education received and evidence of its completion.

13. Consider the possibility of inviting Academic staff with practical experience in the relevant field.

14. To organize the upgrading of the qualifications of the teaching staff in the context of the specifics of the EP.

15. Monitor and analyze the needs of the EP in the AS.

16. For high-quality implementation of examination of research results, final works, organize the functioning of the anti-plagiarism system.

17. Create great opportunities for the support and social protection of various groups of students on accredited EPs, as well as for access to the education of socially vulnerable segments of the population.

18. Improve the learning environment by providing technological support to students and faculty in accordance with educational programs (for example, online training, modeling, data analysis programs).

19. Carry out periodic internal monitoring of the website and evaluate to what extent the available information resource meets the modern requirements, goals and objectives of the University as a whole and in the context of educational programs. In this case, take into account the technical requirements for standard resources: to site design, usability, technical characteristics, to the content management system (CMS).

20. To place information on the programs being implemented, indicating the expected results of the training, the possibility of assigning qualifications at the end of the EP, about teaching, training, evaluation procedures, information on passing scores and educational opportunities provided to the trainees.

21. Place on the university's website audited financial statements.

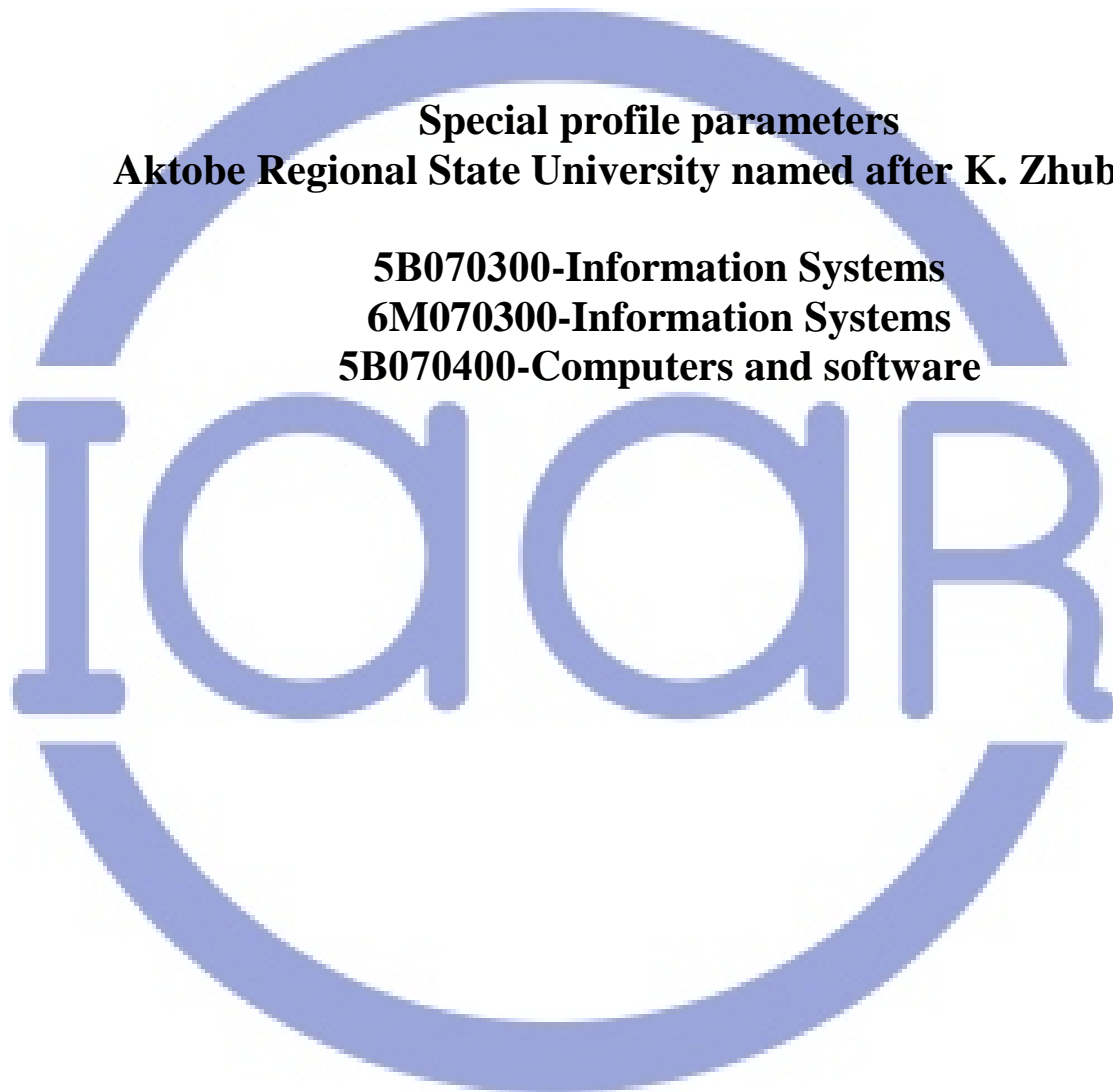
22. Strengthen the practical orientation of educational programs by increasing the share of practical classes at specialization enterprises; increase in the number of seminars to solve practical problems relevant to enterprises in the field of specialization.

23. To reconcile the goals and results of the training in the graduate model of EP 5B070500 - "Mathematical and Computer Modeling". To revise the content of the program with the aim of restoring the balance between the blocks of DB and PD of educational disciplines in the field of mathematical, applied and information technologies, taking into account innovative strategies for the development of mathematical and computer modeling methods in solving complex control problems.

24. Using the methodology of competitive benchmarking, to carry out the specification of the educational program 5B070500 - "Mathematical and computer modeling".

Evaluation table "SPECIALIZED PROFILE PARAMETERS"

INDEPENDENT AGENCY OF ACCREDITATION AND RATING



Special profile parameters
Aktobe Regional State University named after K. Zhubanov

5B070300-Information Systems
6M070300-Information Systems
5B070400-Computers and software

Aktobe 2017

№ п\п	№ п\п	Criteria for evaluation	Position of the organization of education			
			Strong	Satisfactory	Assumes improvement	Unsatisfactory
		Standard "Management of the educational program"				
1.	1	The institution should have a published quality policy.		+		
2	2	The quality assurance policy should reflect the relationship between research, teaching and learning.		+		
3	3	The university should demonstrate the development of a culture of quality assurance, including in the context of the OP.			+	
4	4	Commitment to quality assurance should apply to any activities performed by contractors and partners (outsourcing), including in the implementation of joint / two-degree education and academic mobility.			+	
5	5	The management of the EP provides transparency in the development of an EP development plan based on an analysis of its functioning, the actual positioning of the institution and the focus of its activities on meeting the needs of the state, employers, stakeholders and trainees.		+		
6	6	The management of the EP demonstrates the functioning of the mechanisms for the formation and regular revision of the EP development plan and monitoring of its implementation, assessing the achievement of the training objectives, meeting the needs of students, employers and society, and making decisions aimed at the continuous improvement of the EP .		+		
7	7	The management of the EP should involve representatives of stakeholder groups, including employers, trainees and PPPs, in forming an EP development plan.		+		
8	8	The management of the EP should demonstrate the individuality and uniqueness of the development plan for the OP, its coherence with national development priorities and the development strategy of the education organization.			+	
9	9	The university should demonstrate a clear definition of those responsible for business processes within the framework of the EP, unambiguous distribution of the duties of personnel, delineation of the functions of collegial bodies.		+		
10	10	The management should provide evidence of transparency in the management of the educational program.		+		
11	11	The management should demonstrate the successful functioning of the internal quality assurance system of the EP, including its design, management and monitoring, their improvement, decision-making on the basis of facts.			+	
12	12	The management of the EP shall implement risk management.		+		

13	13	The management of the EP should ensure the participation of representatives of interested persons (employers, teaching staff, students) in the collegial bodies of management of the educational program, as well as their representativeness in making decisions on the management of the educational program.		+		
14	14	The university should demonstrate the management of innovation within the framework of the EP, including the analysis and implementation of innovative proposals.	+			
15	15	The management of the EP should demonstrate evidence of openness and accessibility for trainees, AS, employers and other stakeholders.	+			
16	16	The management of the EP must receive training in educational management programs.		+		
17	17	The management of the EP should strive to ensure that the progress achieved since the last external quality assurance procedure is taken into account when preparing for the next procedure.		+		
		Total according to the standard	2	11	4	0
		Standard "Information Management and Reporting"				
18	1	The university should ensure the functioning of a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software.		+		
19	2	The EP management should demonstrate the systematic use of processed, adequate information to improve the internal quality assurance system.		+		
20	3	Within the framework of the EP there should be a system of regular reporting, reflecting all levels of the structure, including an assessment of the effectiveness and effectiveness of the departments and departments, scientific research.		+		
21	4	The university should establish periodicity, forms and methods for evaluating the management of the EP, the activities of collegial bodies and structural units, senior management, the implementation of scientific projects.	+			
22	5	The university should demonstrate the definition of order and ensure the protection of information, including the identification of responsible persons for the reliability and timeliness of analyzing information and providing data.		+		
23	6	An important factor is the involvement of trainees, workers and AS in the processes of information gathering and analysis, as well as decision-making on their basis.		+		
24	7	The management of the EP should demonstrate the existence of a mechanism of communication with trainees, employees and other stakeholders, including the presence of conflict resolution mechanisms.		+		
25	8	The institution should provide a measure of the degree of satisfaction of the needs of the teaching staff, staff and trainees within the EP and demonstrate evidence of addressing the deficiencies found.		+		

26	9	The university should evaluate the effectiveness and effectiveness of activities, including in the context of the EP.		+		
		The information collected and analyzed by the university should take into account:				
27	10	key performance indicators;			+	
28	11	dynamics of the contingent of students in the context of forms and species;	+			
29	12	level of academic achievement, student achievement and deduction;		+		
30	13	satisfaction of students with the implementation of the EP and the quality of education in the university;	+			
31	14	accessibility of educational resources and support systems for students;	+			
32	15	employment and career growth of graduates.		+		
33	16	Trainees, employees and AS must confirm documentary consent to the processing of personal data.	+			
34	17	The management of the EP should facilitate the provision of all the necessary information in the relevant fields of science.	+			
		Total according to standard	6	10	1	
		Standard "Development and approval of educational programs"				
35	1	The university should define and document the procedures for the development of the EP and their approval at the institutional level.		+		
36	2	The management of the EP should ensure that the developed EP meets the set goals, including the expected learning outcomes.		+		
37	3	The EP management should ensure that there are developed models of the graduate student who describe the results of training and personal qualities.	+			
38	4	The management of the EP should demonstrate the conduct of external assessments of the EP.	+			
39	5	The qualification obtained at the conclusion of the EP shall be clearly defined, clarified and consistent with a certain level of the NQS.		+		
40	6	The management should determine the impact of disciplines and professional practices on the formation of learning outcomes.		+		
41	7	An important factor is the possibility of training students for professional certification.			+	
42	8	The management of the EP should provide evidence of the participation of trainees, staff and other stakeholders in the development of the EP, ensuring their quality.		+		
43	9	The complexity of EP should be clearly defined in Kazakhstan credits and ECTS.	+			
44	10	The management should ensure that the contents of the academic disciplines and the results of the training are provided to the level of study (bachelor's, master's, doctoral).		+		

45	11	In the structure of the EP, various activities corresponding to the learning outcomes should be envisaged.		+		
46	12	An important factor is the existence of joint EP with foreign educational organizations.			+	
		Total according to standard	3	7	2	
		Standard "Continuous monitoring and periodic evaluation of educational programs"				
47	1	The institution should monitor and periodically evaluate the EP in order to achieve the goal and meet the needs of students and society. The results of these processes are aimed at the continuous improvement of the EP.		+		
		Monitoring and periodic evaluation of EP should consider:				
48	2	the content of the programs in the light of the latest achievements of science in a specific discipline to ensure the relevance of the discipline being taught;		+		
49	3	changes in the needs of society and the professional environment;		+		
50	4	load, academic performance and graduation;		+		
51	5	the effectiveness of evaluation procedures for students;		+		
52	6	expectations, needs and satisfaction of students learning by the EP;		+		
53	7	educational environment and support services and their compliance with the objectives of the EP.		+		
54	8	The university and the management of the OT must provide evidence of the participation of trainees, employers and other stakeholders in the revision of the EP.		+		
55	9	All interested persons should be informed of any planned or undertaken actions in relation to the EP. All changes made to the EP shall be published.		+		
56	10	The management of the EP should ensure that the content and structure of the EP are reviewed, taking into account changes in the labor market, the requirements of employers and the social demand of the society.		+		
		Total according to standard	0	10	0	0
		Standard "Student-centered learning, teaching and assessment of progress"				
57	1	The EP management should ensure respect and attention to different groups of learners and their needs, providing them with flexible learning paths.		+		
58	2	The EP management should ensure the use of various forms and methods of teaching and learning.		+		
59	3	An important factor is the availability of our own research in the field of methods of teaching the academic disciplines of the EP.		+		
60	4	The EP management should demonstrate the availability of a feedback system on the use of different teaching methods and evaluation of learning outcomes.	+			
61	5	The EP management should demonstrate support for the autonomy of trainees with simultaneous guidance and	+			

		assistance from the teacher.				
62	6	The management should demonstrate the existence of a procedure for responding to complaints from students.		+		
63	7	The institution should ensure the consistency, transparency and objectivity of the evaluation mechanism for each training program, including an appeal.		+		
64	8	The university should ensure that the procedures for assessing the learning outcomes of the students of the OT are consistent with the planned learning outcomes and program objectives. Criteria and methods of evaluation within the framework of the EP should be published in advance.		+		
65	9	In the institution, the mechanisms for ensuring the learning outcomes of each graduate should be determined and the completeness of their formation ensured.		+		
66	10	Evaluators should possess modern methods for evaluating learning outcomes and regularly improve their qualifications in this field.		+		
		Total according to standard	2	8	0	0
		Standard "Students"				
67	1	The university should demonstrate the policy of forming a contingent of students from admission to release and ensure the transparency of its procedures. Procedures regulating the life cycle of trainees (from admission to completion) should be identified, approved, published.		+		
68	2	The management of the EP should demonstrate special adaptation and support programs for newly enrolled and foreign students.		+		
69	3	The university should demonstrate the conformity of its actions to the Lisbon Recognition Convention.		+		
70	4	The university should cooperate with other educational organizations and national centers of the "European Network of National Information Centers for Academic Recognition and Mobility / National Academic Recognition Information Centers" ENIC / NARIC in order to ensure comparable recognition of qualifications.		+		
71	5	The management should demonstrate the availability and application of a mechanism to recognize the results of academic mobility of students, as well as the results of additional, formal and informal training.		+		
72	6	The university should provide an opportunity for external and internal mobility of trainees, and also assist them in obtaining external grants for training.		+		
73	7	The management of the EP should make the maximum amount of efforts to provide practice-based practices, facilitate the employment of graduates, and maintain communication with them.		+		
74	8	The institution should provide the graduates with documents confirming the received qualification, including the results of the training achieved, as well as the context, content and status of the education received and evidence of its			+	

		completion.				
75	9	An important factor is the monitoring of the employment and professional activities of the graduates of the EP.		+		
76	10	The EP leadership should actively encourage students to self-education and development outside the main program (extracurricular activities).		+		
77	11	An important factor is the existence of an active association / association of graduates.		+		
78	12	An important factor is the availability of a support mechanism for gifted students.	+			
		Total according to standard	1	10	1	
		Standard "Academic staff"				
79	1	The university should have an objective and transparent personnel policy, which includes hiring, professional growth and development of personnel, which ensures the professional competence of the whole state.	+			
80	2	The university should demonstrate the conformity of the personnel potential of the PPP with the development strategy of the university and the specifics of the EP.	+			
81	3	The management of the EP should demonstrate awareness of responsibility for its employees and providing them with favorable working conditions.		+		
82	4	The management of the EP should demonstrate the changing role of the teacher in connection with the transition to student-centered learning.		+		
83	5	The university should determine the contribution of the AS of the EP to the implementation of the development strategy of the university, and other strategic documents.		+		
84	6	The university should provide opportunities for career development and professional development of the AS of the EP.	+			
85	7	The management of the EP should involve practitioners in the relevant sectors in the teaching.		+		
86	8	The management of the EP should provide targeted actions for the development of young teachers.	+			
87	9	The university should demonstrate the motivation for the professional and personal development of the teachers of the EP, including the promotion of both the integration of research and education, and the use of innovative teaching methods.		+		
88	10	An important factor is the active use of AS information and communication technologies in the educational process (for example, on-line training, e-portfolio, MEP, etc.).		+		
89	11	An important factor is the development of academic mobility within the framework of the EP, attracting the best foreign and		+		

		domestic teachers.				
90	12	An important factor is the involvement of the AS of the EP in the life of society (the role of teaching staff in the education system, the development of science, the region, the creation of a cultural environment, participation in exhibitions, creative competitions, charity programs, etc.).		+		
		Total according to standard	4	8	0	0
		Standard "Educational resources and student support systems"				
91	1	The management should demonstrate the adequacy of the material and technical resources and infrastructure.		+		
92	2	The EP management should demonstrate the existence of support procedures for different groups of learners, including information and counseling.		+		
		The management of the EP should demonstrate the correspondence of information resources to the specifics of the EP, including compliance:				
93	3	technological support of students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs);		+		
94	4	library resources, including the fund of educational, methodological and scientific literature on general educational, basic and profiling disciplines on paper and electronic media, periodicals, access to scientific databases;		+		
95	5	examination of the results of research, final works, dissertations on plagiarism;			+	
96	6	functioning WI-FI in the territory of the organization of education.		+		
97	7	The university should strive to ensure that the training equipment and software used to develop the EP are similar to those used in the relevant industries.		+		
98	8	The institution must ensure that it meets safety requirements in the learning process.		+		
99	9	The university should strive to take into account the needs of different groups of students in the context of the EP (adults, working, foreign students, as well as students with disabilities).			+	
		Total according to standard	0	7	2	0
		Standard "Public Awareness"				
		The information published by the university within the framework of the EP should be accurate, objective, relevant and should include:				
100	1	Implemented programs, indicating the expected learning outcomes;			+	

101	2	information on the possibility of assigning qualifications at the end of the EP;			+	
102	3	information on teaching, training, evaluation procedures;			+	
103	4	information on passing scores and educational opportunities provided to students;			+	
104	5	information on job opportunities for graduates.		+		
105	6	The management should use a variety of ways to disseminate information (including media, web resources, information networks etc.) to inform the general public and interested parties.		+		
106	7	Informing the public should provide support and explanation of national development programs of the country and the system of higher and postgraduate education.	+			
107	8	The university should publish audited financial statements on its own web resource.		+		
108	9	The university should demonstrate the reflection on the web resource of information characterizing the university in general and in the context of the EP.			+	
109	10	An important factor is the availability of adequate and objective information about the AS of the EP, in the context of personalities.		+		
110	11	An important factor is informing the public about cooperation and interaction with partners within the framework of the EP, including with scientific / consulting organizations, business partners, social partners and educational organizations.		+		
111	12	The university should post information and links to external resources based on the results of external evaluation procedures.		+		
112	13	An important factor is the participation of the university and implemented EP in various external evaluation procedures.		+		
		Total according to standard	1	7	5	
		Standards in the context of individual specialties				
		TECHNICAL SCIENCES AND TECHNOLOGIES				
		Educational programs in the areas of "Natural sciences", "Engineering sciences and technologies", such as "Mathematics", "Physics", "Information systems", etc., should meet the following requirements:				
113	1	In order to familiarize students with the professional environment and relevant issues in the field of specialization, as well as to acquire skills on the basis of theoretical training, the education program should include disciplines and activities aimed at obtaining practical experience and skills in the specialty in general and in the relevant disc excursions to enterprises in the field of specialization (factories, workshops, research institutes,		+		

		laboratories, training facilities, etc.), - holding separate classes or whole disciplines at the enterprise of specialization, - Conducting seminars to solve practical problems relevant to enterprises in the field of specialization in particular, etc.				
114	2	Teaching staff involved in the education program should include full-time teachers who have a long-term experience of working as a staff member at enterprises in the field of specialization of the education program.		+		
115	3	The content of all disciplines should be based in one way or another and include a clear relationship with the content of the fundamental natural sciences, such as mathematics, chemistry, physics.		+		
116	4	The EP management should provide measures to strengthen practical training in the field of specialization.		+		
117	5	The management of the EP should ensure the training of students in the field of application of modern information technologies.		+		
		Total according to standard	0	5	0	0
		TOTAL	19	83	15	0

INDEPENDENT AGENCY OF ACCREDITATION AND RATING



Special profile parameters

Aktyubinsk Regional State University K. Zhubanov

5B070500-Mathematical and Computer Modeling

Aktobe 2017

№	№	Criteria for evaluation	Position of the organization of education			
			Strong	Satisfactory	Assumes improvement	Unsatisfactory
		Standard "Management of the educational program"				
1	18	The institution should have a published quality policy.		+		
2	19	The quality assurance policy should reflect the relationship between research, teaching and learning.		+		
3	20	The university should demonstrate the development of a culture of quality assurance, including in the context of the EP.			+	
4	21	Commitment to quality assurance should apply to any activities performed by contractors and partners (outsourcing), including in the implementation of joint / two-degree education and academic mobility.			+	
5	22	The management of the EP provides transparency in the development of an EP development plan based on an analysis of its functioning, the actual positioning of the institution and the focus of its activities on meeting the needs of the state, employers, stakeholders and trainees.		+		
6	23	The management of the EP demonstrates the functioning of the mechanisms for the formation and regular revision of the EP development plan and monitoring of its implementation, assessing the achievement of the training objectives, meeting the needs of students, employers and society, and making decisions aimed at the continuous improvement of the EP.		+		
7	24	The management of the EP should involve representatives of stakeholder groups, including employers, trainees and PPPs, in forming an EP development plan.		+		
8	25	The management of the EP should demonstrate the individuality and uniqueness of the development plan for the EP, its coherence with national development priorities and the development strategy of the education organization.			+	
9	26	The university should demonstrate a clear definition of those responsible for business processes within the framework of the EP, unambiguous distribution of the duties of personnel, delineation of the functions of collegial bodies.		+		
10	27	The management should provide evidence of transparency in the management of the educational program.			+	
11	28	The management should demonstrate the successful functioning of the internal quality assurance system of the EP, including its design, management and monitoring, their			+	

		improvement, decision-making on the basis of facts.				
12	29	The management of the EP shall implement risk management.		+		
13	30	The management of the EP should ensure the participation of representatives of interested persons (employers, teaching staff, students) in the collegial bodies of management of the educational program, as well as their representativeness in making decisions on the management of the educational program.		+		
14	31	The university should demonstrate the management of innovation within the framework of the EP, including the analysis and implementation of innovative proposals.	+			
15	32	The management of the EP should demonstrate evidence of openness and accessibility for trainees, AS, employers and other stakeholders.	+			
16	33	The management of the EP must receive training in educational management programs.		+		
17	34	The management of the EP should strive to ensure that the progress achieved since the last external quality assurance procedure is taken into account when preparing for the next procedure.		+		
		Standard "Information Management and Reporting"	2	10	5	0
18	18	The university should ensure the functioning of a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software		+		
19	19	The EP management should demonstrate the systematic use of processed, adequate information to improve the internal quality assurance system.		+		
20	20	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 effectiveness of the departments and departments, scientific research.		+		
21	21	The university should establish periodicity, forms and methods for evaluating the management of the EP, the activities of collegial bodies and structural units, senior management, the implementation of scientific projects.	+			
22	22	The university should demonstrate the definition of order and ensure the protection of information, including the identification of responsible persons for the reliability and timeliness of analyzing information and providing data.		+		
23	23	An important factor is the involvement of trainees, workers and AS in the processes of information gathering and analysis, as well as decision-making on their basis.		+		
24	24	The management of the EP should demonstrate the existence of a mechanism of communication with trainees, employees and other stakeholders, including the presence of conflict		+		

		resolution mechanisms.				
25	25	The institution should provide a measure of the degree of satisfaction of the needs of the teaching staff, staff and trainees within the EP and demonstrate evidence of addressing the deficiencies found.		+		
26	26	The university should evaluate the effectiveness and effectiveness of activities, including in the context of the EP.		+		
		The information collected and analyzed by the university should take into account:				
27	27	key performance indicators;			+	
28	28	dynamics of the contingent of students in the context of forms and species;	+			
29	29	level of academic achievement, student achievement and deduction;		+		
30	30	satisfaction of students with the implementation of the EP and the quality of education in the university;	+			
31	31	accessibility of educational resources and support systems for students;	+			
32	32	employment and career growth of graduates.		+		
33	33	Trainees, employees and AS must confirm documentary consent to the processing of personal data.	+			
34	34	The management of the EP should facilitate the provision of all the necessary information in the relevant fields of science.	+			
		Total according to standard	6	10	1	0
		Standard "Development and approval of educational programs"				
35	13	The university should define and document the procedures for the development of the EP and their approval at the institutional level.		+		
36	14	The management of the EP should ensure that the developed EP meets the set goals, including the expected learning outcomes.			+	
37	15	The EP management should ensure that there are developed models of the graduate student who describe the results of training and personal qualities.	+			
38	16	The management of the EP should demonstrate the conduct of external assessments of the EP.	+			
39	17	The qualification obtained at the conclusion of the EP shall be clearly defined, clarified and consistent with a certain level of the NQS.		+		

40	18	The management should determine the impact of disciplines and professional practices on the formation of learning outcomes.		+		
41	19	An important factor is the possibility of training students for professional certification.			+	
42	20	The management of the EP should provide evidence of the participation of trainees, staff and other stakeholders in the development of the EP, ensuring their quality.		+		
43	21	The complexity of EP should be clearly defined in Kazakhstan credits and ECTS.	+			
44	22	The management should ensure that the contents of the academic disciplines and the results of the training are provided to the level of study (bachelor's, master's, doctoral).		+		
45	23	In the structure of the EP, various activities corresponding to the learning outcomes should be envisaged.		+		
46	24	An important factor is the existence of joint EP with foreign educational organizations.			+	
			3	6	3	
		Standard "Continuous monitoring and periodic evaluation of educational programs"				
47	11	The University should monitor and periodically evaluate the EP in order to achieve the goal and meet the needs of students and society. The results of these processes are aimed at the continuous improvement of the EP.		+		
		Monitoring and periodic evaluation of EP should consider:				
48	12	the content of the programs in the light of the latest achievements of science in a specific discipline to ensure the relevance of the discipline being taught;		+		
49	13	changes in the needs of society and the professional environment;		+		
50	14	load, academic performance and graduation;		+		
51	15	the effectiveness of evaluation procedures for students;		+		
52	16	expectations, needs and satisfaction of students learning by the EP;		+		
53	17	educational environment and support services and their compliance with the objectives of the EP.		+		
54	18	The university and the management of the EP must provide evidence of the participation of trainees, employers and other stakeholders in the revision of the EP.		+		
55	19	All interested persons should be informed of any planned or undertaken actions in relation to the EP. All changes made to the EP shall be published.		+		
56	20	The management of the EP should ensure that the content and structure of the EP are reviewed, taking into account changes in the labor market, the requirements of employers and the social demand of the society.		+		
		Total according to standard	0	10	0	0

		Standard "Student-centered learning, teaching and assessment of progress"				
57	11	The EP management should ensure respect and attention to different groups of learners and their needs, providing them with flexible learning paths.		+		
58	12	The EP management should ensure the use of various forms and methods of teaching and learning.		+		
59	13	An important factor is the availability of our own research in the field of methods of teaching the academic disciplines of the EP.		+		
60	14	The EP management should demonstrate the availability of a feedback system on the use of different teaching methods and evaluation of learning outcomes.	+			
61	15	The EP management should demonstrate support for the autonomy of trainees with simultaneous guidance and assistance from the teacher.	+			
62	16	The management should demonstrate the existence of a procedure for responding to complaints from students.		+		
63	17	The institution should ensure the consistency, transparency and objectivity of the evaluation mechanism for each training program, including an appeal.		+		
64	18	The university should ensure that the procedures for assessing the learning outcomes of the students of the EP are consistent with the planned learning outcomes and program objectives. Criteria and methods of evaluation within the framework of the EP should be published in advance.			+	
65	19	In the institution, the mechanisms for ensuring the learning outcomes of each graduate should be determined and the completeness of their formation ensured.		+		
66	20	Evaluators should possess modern methods for evaluating learning outcomes and regularly improve their qualifications in this field.		+		
			2	7	1	0
		Standard "Students"				
67	13	The university should demonstrate the policy of forming a contingent of students from admission to release and ensure the transparency of its procedures. Procedures regulating the life cycle of trainees (from admission to completion) should be identified, approved, published.		+		
68	14	The university should demonstrate the policy of forming a contingent of students from admission to release. Procedures regulating the life cycle of trainees (from admission to completion) should be identified, approved, published.			+	
69	15	The university should demonstrate the conformity of its actions to the Lisbon Recognition Convention.		+		
70	16	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.				
71	17	The management should demonstrate the availability and application of a mechanism to recognize the results of academic mobility of students, as well as the results of additional, formal and informal training.		+		
72	18	The university should provide an opportunity for external and internal mobility of trainees, and also assist them in obtaining external grants for training.		+		
73	19	The management of the OP should make the maximum amount of efforts to provide practice-based practices, facilitate the employment of graduates, and maintain communication with them.		+		
74	20	The institution should provide the graduates with documents confirming the received qualification, including the results of the training achieved, as well as the context, content and status of the education received and evidence of its completion.			+	
75	21	An important factor is the monitoring of the employment and professional activities of the graduates of the EP.		+		
76	22	The EP leadership should actively encourage students to self-education and development outside the main program (extracurricular activities).		+		
77	23	An important factor is the existence of an active association / association of graduates.		+		
78	24	An important factor is the availability of a support mechanism for gifted students.	+			
		Total according to standard	1	9	2	
		Standard "Academic staff"				
79	13	The university should have an objective and transparent personnel policy, which includes hiring, professional growth and development of personnel, which ensures the professional competence of the whole state.	+			
80	14	The management of the EP should demonstrate awareness of responsibility for its employees and providing them with favorable working conditions.	+			
81	15	The management of the EP should demonstrate awareness of responsibility for its employees and providing them with favorable working conditions.		+		
82	16	The management of the EP should demonstrate the changing role of the teacher in connection with the transition to student-centered learning.		+		
83	17	The university should determine the contribution of the AS of the EP to the implementation of the development strategy of the university, and other strategic documents.		+		
84	18	The university should provide opportunities for career development and professional development of the AS EP.	+			
85	19	The management of the EP should involve practitioners in the relevant sectors in the teaching.		+		

86	20	The management of the EP should provide targeted actions for the development of young teachers.	+			
87	21	The university should demonstrate the motivation for the professional and personal development of the teachers of the EP, including the promotion of both the integration of research and education, and the use of innovative teaching methods.		+		
88	22	An important factor is the active use of AS information and communication technologies in the educational process (for example, on-line training, e-portfolio, MEP, etc.).		+		
89	23	An important factor is the development of academic mobility within the framework of the EP, attracting the best foreign and domestic teachers.		+		
90	24	An important factor is the involvement of the AS of the EP in the life of society (the role of teaching staff in the education system, the development of science, the region, the creation of a cultural environment, participation in exhibitions, creative competitions, charity programs, etc.).		+		
			4	8	0	0
		Standard "Educational resources and student support systems"				
91	1	The management should demonstrate the adequacy of the material and technical resources and infrastructure.		+		
92	2	The EP management should demonstrate the existence of support procedures for different groups of learners, including information and counseling.		+		
		The management of the EP should demonstrate the correspondence of information resources to the specifics of the EP, including compliance:				
93	3	technological support of students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs);		+		
94	4	library resources, including the fund of educational, methodological and scientific literature on general educational, basic and profiling disciplines on paper and electronic media, periodicals, access to scientific databases;		+		
95	5	examination of the results of research, final works, dissertations on plagiarism;			+	
96	6	functioning WI-FI in the territory of the organization of education.			+	
97	7	The university should strive to ensure that the training equipment and software used to develop the EP are similar to those used in the relevant industries.		+		
98	8	The institution must ensure that it meets safety requirements in the learning process.		+		
99	9	The university should strive to take into account the needs of different groups of students in the context of the EP (adults, working, foreign students, as well as students with disabilities).			+	
		Total according to standard	0	6	3	0

		Standard "Public Awareness"				
100	1	The information published by the university within the framework of the EP should be accurate, objective, relevant and should include:			+	
101	2	Implemented programs, indicating the expected learning outcomes;			+	
102	3	information on the possibility of assigning qualifications at the end of the EP;			+	
103	4	information on passing scores and educational opportunities provided to students;			+	
104	5	information on job opportunities for graduates.			+	
105	6	The management should use a variety of ways to disseminate information (including media, web resources, information networks etc.) to inform the general public and interested parties.		+		
106	7	Informing the public should provide support and explanation of national development programs of the country and the system of higher and postgraduate education.	+			
107	8	The university should publish audited financial statements on its own web resource.		+		
108	9	The university should demonstrate the reflection on the web resource of information characterizing the university in general and in the context of the EP.			+	
109	10	An important factor is the availability of adequate and objective information about the AS of the EP, in the context of personalities.		+		
110	11	An important factor is informing the public about cooperation and interaction with partners within the framework of the EP, including with scientific / consulting organizations, business partners, social partners and educational organizations.		+		
111	12	The university should post information and links to external resources based on the results of external evaluation procedures.		+		
112	13	An important factor is the participation of the university and implemented EP in various external evaluation procedures.		+		
		Total according to standard	1	6	6	
		Standards in the context of individual specialties				
		TECHNICAL SCIENCES AND TECHNOLOGIES				
		Educational programs in the areas of "Natural sciences", "Engineering sciences and technologies", such as "Mathematics", "Physics", "Information systems", etc., should meet the following requirements:				
113	1	In order to familiarize students with the professional environment and relevant issues in the field of specialization, as well as to acquire skills on the basis of theoretical training, the education program should include		+		

		disciplines and activities aimed at obtaining practical experience and skills in the specialty in general and in the relevant disciplines in particular, etc.: - excursions to enterprises in the field of specialization (factories, workshops, research institutes, laboratories, training facilities, etc.), - holding separate classes or whole disciplines at the enterprise of specialization, - Conducting seminars to solve practical problems relevant to enterprises in the field of specialization, etc.				
114	2	Teaching staff involved in the education program should include full-time teachers who have a long-term experience of working as a staff member at enterprises in the field of specialization of the education program.		+		
115	3	The content of all disciplines should be based in one way or another and include a clear relationship with the content of the fundamental natural sciences, such as mathematics, chemistry, physics.			+	
116	4	The RP management should provide measures to strengthen practical training in the field of specialization		+		
117	5	The management of the EP should ensure the training of students in the field of application of modern information technologies.		+		
		Total according to standard	0	4	1	0
		TOTAL	19	76	22	0