«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING

REPORT

on the results of the work of an external expert commission on assessment for compliance with the criteria of standards for specialised accreditation of educational programmes "5V071600 Instrument Making", "6M071600 Instrument Engineering", "5V071900 Radio Engineering, Electronics and Telecommunications", "6M071900 Radio Engineering, Electronics and Telecommunications", "6D071900 Radio engineering, electronics and telecommunications", "5B074600 Space Engineering and Technology"

Non-profit JSC "Almaty University of Power Engineering and Telecommunication"

March 4-7, 2019

Almaty city **March , 2019**

INDEPENDENT ACCREDITATION AND RATING AGENCY

External expert committee

Addressed
to the Accreditation Council
IAAR

АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ ТӘУЕЛСІЗ АГЕНТТІГІ
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CONTENT

(I) LIST OF DESIGNATIONS AND ABBREVIATIONS

RK - Republic of Kazakhstan
MES RK - Ministry of Education and Science of the Republic of Kazakhstan
AC - Accreditation Board
BA - undergraduate
MA - magistracy
PhD - doctorate
EEC - external expert commission
GPRO - State Programme for the Development of Education
NAAR - Independent Accreditation and Rating Agency
NPA - normative legal acts
NQF - national qualifications framework
NSC - national qualifications system
RW - research work
NIRS - student research work
NIRM - undergraduate research work
EP - educational programme
QMS - quality management system
OO - Educational Organisation
OOD - general education
DB - basic disciplines
PD - major disciplines
SRO - independent work of students
SRTP - independent work of students under the guidance of a teacher
CPCM - independent work of undergraduates under the guidance of a teacher
SAUD - external evaluation of educational achievements
IGA - final state control
AIC - agro-industrial complex
NRI - Research Institute
KVN - club cheerful and resourceful
KDM - Youth Committee
FOP - Faculty of Social Professions
SMI - mass media
AO - joint stock company
TUP - Model Curriculum
OHR - educational support staff
UMK - educational complex
UMKD - educational complex of the discipline
MA PK - Ministry of Agriculture of the Republic of Kazakhstan –
RUP - working curriculum
QED - catalog of elective disciplines
IEP - Individual Curriculum
UMKS - educational complex of specialty
UMC - educational and methodical council
MOS - modular educational programme
UE - curriculum
RK - boundary control
BRS - point-rating system
IR - final control
TC - current control

II INTRODUCTION

In accordance with the order No. 7-19-OD of January 24, 2019 of the Independent Agency for Accreditation and Rating, from March 4 to March 7, 2019, the Almaty University of Energy and Communications by an external expert commission assessed the compliance of the university with the requirements of the standards of specialised accreditation of the IAAR (dated February 24, 2017 No. 10-17-OD, fifth edition).

The report of the external expert commission (EEC) contains an assessment of the conformity of the university's activities within the framework of specialised accreditation with the IAAR criteria, recommendations of the EEC on further improvement of the parameters of EPs and profile parameters of EPs.

The composition of the EEC:

Chairman - Shunkeev Kuanyshbek Shunkeevich, Doctor of Physical and Mathematical Sciences, Professor, First Vice-Rector of Aktobe Regional State University named after K.Zhubanova;

Foreign expert - Zarginava Tamar Tengizovna, Vice-Rector for International Relations of the European EP University (Tbilisi, Republic of Georgia);

Foreign expert - Tairov Mitalip Muratovich, Doctor of Physical and Mathematical Sciences, Professor of Batken State University (Kyzyl-Kya, Kyrgyz Republic);

Foreign expert - Lushchik Alexander Cheslavovich, Doctor of Philosophy, Professor, Head of the Laboratory of Ionic Crystal Physics, Institute of Physics, University of Tartu (Tartu, Estonia);

National expert - Movkebaeva Galiya Akhmetvalievna, professor at the Department of International Relations and World Economy of Kazakh National University named after al-Farabi (Almaty);

National expert - Kulzhumieva Aiman Amangeldinovna, candidate of physical and mathematical sciences, associate professor of the Department of Mathematics of West Kazakhstan University named after M. Utemisova (Uralsk);

National expert - Urmashev Baidaulet Amantayevich, Ph.D., associate professor, head of the department of informatics of Kazakh National University named after al-Farabi (Almaty);

National expert - Baklanov Alexander Evgenievich, candidate of physical and mathematical sciences, head of the department of instrumentation and automation of technological processes of East Kazakhstan State Technical University named after D. Serikbayev (Ust-Kamenogorsk);

National expert - Chidunchi Irina Yuryevna, PhD, senior lecturer of the department of vocational training and environmental protection of Pavlodar State University named after S. Toraigyrova, Chairman of the Council of Young Scientists of Pavlodar Region (Pavlodar);

National expert - Alimgazin Altay Shurumbaevich, Doctor of Technical Sciences, professor of the Department of Heat Power Engineering of the L.N. Gumilyov Eurasian National University (Astana);

National expert - Zhumazhanov Serik Karataevich, Ph.D., lecturer, Department of Electrical Equipment Operation, Kazakh Agro Technical University named after S.Seifullina (Astana);

National expert - Markovsky Vadim Pavlovich, Ph.D., Associate Professor, Head of the Department of Electric Power of Pavlodar State University named after S. Toraigyrova (Pavlodar);

Employer - Nurusheva Alia Zinedenovna, expert of the 1st category of the human capital development department of the Chamber of Entrepreneurs of Almaty;

Student - Imankazy Yermurat Sagatuly, a 4th year student of the specialty “5B075200 Engineering Systems and Networks” of the Kazakh Head Academy of Architecture and Civil Engineering, member of the Student Alliance of Kazakhstan (Almaty);

Student - Kasymkhan Aizada Aydıngyzy, a 3-year student of the specialty “5B070400 Computer Engineering and Software” of Kazakh National University named after al-Farabi (Almaty);

Student - Kuyshybaeva Rosa Maratkizi, 1st-year undergraduate specialty "6M070200 Automation and Control" of Kazakh National Technical University K.I. Satpayev (Almaty);

IAAR observer - Guliyash Balkenovna Niyazova, project manager for institutional and specialised accreditation of IAAR universities.

III REPRESENTATION OF EDUCATION ORGANISATION

The educational institution "Almaty University of Energy and Communications" (hereinafter - the University) was established in 1975 in Almaty.

The structure of the University includes 4 institutes, 19 departments, 4 laboratory buildings, 4 dormitories, sports facilities, within the framework of a housing fund, the following departments are being implemented: 82 laboratories, 3 business incubators, 39 computer classes, 6 television lecture laboratories, AUPET College, office commercialization, advanced training institute, DAU KEY Robotics School, Entel Youth Center, Cisco Regional Academy, D-link Training Center, Kaspersky Lab, Oracle Academy, Microsoft Regional Academy.

The University trains the 3rd cluster in 3 areas of undergraduate, 2 master's and 1 doctoral studies.

The contingent of students in cluster 3 as of February 1, 2019 amounted to 1,055 people. Of these, 862 on a grant, 193 students on a contractual basis.

The contingent of undergraduate studies is 1005 (of which 862 on the grant).

The contingent of undergraduates - 35 people, all are trained in state. grant

The contingent of doctoral students - 15. people, all are trained in state. grant

Foreign students from Uzbekistan and China study at the University - 43 people.

The educational process in cluster 3 is served by the teaching staff in the amount of 56 people, including 36 graduate students.

The degree of degree in cluster 3 of the university is 64.4%.

The university carries out educational activities on the basis of the State License of the Ministry of Education and Science of the Republic of Kazakhstan, series AB No. 0137445 dated 08/04/2010 to engage in educational activities with a validity period - without restriction.

Evaluation of the effectiveness of the University’s mission is carried out by comparing the results of work with goals and is used as a feedback mechanism for making management decisions and analyzing the functioning of the quality management system (hereinafter - QMS) in the framework of the certificate for compliance with international standards ISO 9001 - 2015. Efficiency of the QMS of the University confirmed by the numerous participation of the university in accreditation in various rating agencies and occupying fairly high positions - in 2018 year 6th place out of 15 in the agency IQAA, 7th place out of 10 in the agency IAAR, 4th place out of 10 in the agency RRA.

IV EP FOR PREVIOUS ACCREDITATION PROCEDURE

Previous accreditation was carried out by NAOKO in 2014.

V DESCRIPTION OF EEC VISIT

The visit of the external expert commission to the University was organized in accordance with the program agreed in advance with the chairman of the EEC from March 4, 2019 to March 7, 2019.

In order to coordinate the work of the EEC on March 4, 2019, an assembly meeting was held during which the powers were distributed among the members of the commission, the schedule of the visit was clarified, agreement was reached in the Education Program on the choice of examination methods.

In order to obtain objective information on assessing the activities of the university, members of the EEC used such methods as visual inspection, observation, interviewing employees of various structural divisions, teachers, students, graduates and employers, questioning of faculty, students.

The meetings of the EEC with the target groups were held in accordance with the updated program of the visit, in compliance with the established time period. On the part of the University staff, the presence of all the persons indicated in the visit program was ensured.

Information about employees and students who took part in meetings with EEC NAAR

Category of participants	**amount**
Rector	1
AUPET President	1
Vice Rector	3
Heads of structural divisions	22
Institute Directors	4
Department Heads	12
Teachers	25
Students, undergraduates	31
Graduates	116
Employers	93
Total	**308**

Experts visited the laboratories of the accredited EP, research laboratories, the library, the assembly hall, sports and gyms, the student canteen and the buffet. During the visit, members of the EEC on March 5 attended classes on accredited EPs.

A lecture in the English language on the subject “Bolistics” was attended. EP “5B074600 Space Engineering and Technologies” (group KTT-18-1), teacher Burnit Aliya), laboratory works “Algorithmic Languages and Programming” EP “5B071900 Radio Engineering, Electronics and Telecommunications ”(group RET-18-8, teacher Tolen J.). At the lecture there was a dialogue with students. The level of English is quite high. In laboratory work, it is necessary to note the work of the teacher with each student.

Within the framework of the planned program, recommendations for improving the university's activities developed by the EEC based on the results of the examination were presented at a meeting with the leadership on March 7, 2019.

VI COMPLIANCE WITH SPECIALISED ACCREDITATION STANDARDS

6.1 Standard "Management of the educational programme"

Evidence part

An analysis of the information and analytical material presented, the actual positioning of the university, as well as the results of familiarization with the technical base and meetings with interested parties allow us to draw the following conclusions.

The Institute of Space Engineering and Telecommunications implements EPs in the state, Russian and English languages, which are a system of documents developed and approved by a higher educational institution taking into account the requirements of the labor market, in accordance with the State Educational Standards of Higher Education, approved by the Government of the Republic of Kazakhstan 50 08.23.2012 No. 1080, Quality Policy and Goals, the mission of the university (Quality Policy of the NAO AUPET) using innovative educational technologies as follows yuschim areas:

Undergraduate: 5B071901 Infocommunication technologies and systems (5B071900-Radio engineering, electronics and telecommunications); 5B071601 Instrumentation and systems in robotics (5B071600-Instrument making); 5B074601 Space Engineering (5B074600-Space Engineering and Technology); Master: 6M071600 - Instrument Engineering; 6M071900 - Radio engineering, electronics and telecommunications; Doctoral degree: 6D071900 Radio engineering, electronics and telecommunications.

Mission, main goals, strategic directions of development and tasks EP of the Institute of Space Engineering and Telecommunications The EP is defined on the basis of the following documents: “Transformation Strategy of NAO AUPET, Charter of NAO AUPET,“ Quality Assurance Policy and Goals ”, listed documents The EP is published in the public domain on the AUPET website https://AUPET.kz. The quality assurance policy is considered at the university-wide meetings of faculty and curatorial watches at the beginning of the school year (Educational plans of the departments of the Institute of Space Engineering and Telecommunications).

In the framework of the quality assurance policy for the EP, there is a relationship between research, teaching and training of all the presented programs of the Institute of Space Engineering and Telecommunications.

The development of a quality assurance culture in the context of the EP is confirmed by the Development Plans of the EP of all the presented programs of the Institute of Space Engineering and Telecommunications, which are annually formed and signed.

The university is working to ensure the quality of education in the implementation of joint / two-degree education and academic mobility, which is confirmed by the presented data for 2015-2018, for example, the Institute of Space Engineering and Telecommunications has a program of academic mobility and double-degree education with the University of Cassino (University of Casinos and Southern Lotium), Italy.

According to the presented documents, the leadership of the education program of cluster 3 ensures transparency in the development of the development plan of the education program

based on the analysis of its functioning, the real positioning of AUPET and the focus of its activities on meeting the needs of the state, employers and students. According to the evidence base presented, all development plans for the EP are regularly reviewed at round tables with employers, seminars and webinars, field-based retreats of departments, meetings of NIS departments together with employers. The result of the meetings is letters from the heads of enterprises aimed at modernizing the modular curriculum, improving the educational process, involving new technologies in the educational process, analyzing the teaching staff of the department, analyzing student satisfaction through questionnaires. Monitoring the implementation of the EP and assessing the achievement of learning objectives is carried out through final testing of graduates, feedback on internships, the results of the VOUD and SAC, internal and external audit of the EP.

However, there is no clear EP, the definition of those responsible for business processes within the EP, an unambiguous distribution of the duties of staff, differentiation of the functions of collegial bodies, and the quality assurance of the EP is not fully monitored.

DEVELOPMENT PLANS EP is consistent with the national development priorities of the country, aimed at introducing information technology into the educational process, it contains fundamental training for students and practical applied skills in the field of IT technologies. The development plan EP is unique, built on the basis of the development strategy of the university, aimed at training specialists with innovative competencies in demand in the domestic, transnational and international labor market.

The management system of the EP is transparent and open, the governing and regulatory documents for the management of the EP are freely available on the AUPET website, the analysis of the management system of the EP is considered at meetings of the departments of cluster 3 and other collegial bodies of the university.

The LEARNING EP of the Institute of Space Engineering and Telecommunications considers possible risks associated with the preparation of the EP. For this, the Risk Management procedure has been developed and the risk management program of the EP is reviewed annually within the framework of the Institute's Quality Management System. The decision of the Risk Management Education Program was reflected in the Development Plan of the EP, plans for retraining and advanced training of teaching staff, plans for research of the department.

Documents are presented that the management of the EP organizes the participation of employers, teaching staff and students as part of the collegial governing bodies of the EP.

When developing the EP and analyzing its functioning, analysis and implementation of innovative proposals to improve the quality of the EP is carried out, this is reflected in the modernization of the modular curriculum at all levels of training, the inclusion of new disciplines related to the preparation of students in the IT industry, and this serves as the basis for creating a unique EP and its consistency with the country's national development priorities and the AUPET development strategy.

The management and faculty of the EP of Cluster 3 of the Institute of Space Engineering and Telecommunications were trained in education management programs in 2017, 2018, including abroad (Republic of Belarus).

The results of external and internal audits of the EP are taken into account during the work of the existing EP by making changes to the educational process: CBM, RUE, passport EP and CED, as well as in the development of future EP.

Analytical part

The mission, main goals, strategic directions of development, the quality assurance policy of the University and the objectives of the EP of the Institute of Space Engineering and Telecommunications are fully developed, the EP is described in documents and implemented in all areas of activity

The submitted documents as evidence base comply with IAAR standards.

Documents submitted that the leadership of the EP organizes the participation of employers, teaching staff and students as part of the collegial governing bodies of the EP.

There are no documents on the specific distribution of duties for business processes in the framework of the EP, allowing to understand business processes in the framework of the EP.

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Strengths / Best Practices

The quality assurance policy as a whole and the educational activities for the education program of cluster 3 are consistent with the mission, strategy, vision and values of the university, consistent with the formation of modern human resources in the specialties that meet the needs of the national labor market.

The individuality and uniqueness of development plans for the EP of cluster 3, their consistency with employers and students' requests are demonstrated.

1. 1. The management of the EP ensures transparency in the development of the development plan of the EP.
2. 2. The participation of employers in the formation of the EP.
3. 3. The link between research, teaching and learning is visible..

EEC recommendations

1. To strengthen the work on the implementation of academic mobility, both internal and external, at all levels of education.
2. Ensure that the EP guide is trained in education management programs.
3. To specify and clearly divide the distribution of duties for business processes in the framework of the EP.

To develop mechanisms for monitoring the functioning of the internal quality assurance system.

The conclusions of the EEC on the criteria: 17 criteria are disclosed, of which 9 have a strong position, 8 - satisfactory.

6.2 Standard "Information Management and Reporting"

Evidence part

The management of EPs and other activities of the Institute of Space Engineering and Telecommunications is carried out on the basis of the collection, analysis and use of relevant information. Information is collected, disseminated and used through the Documentolog, Platonus, Archit workflow systems, Moodle distance learning system, Corporate e-mail, Rabis electronic library, etc., which are introduced in AUPET. Other social networks are used to disseminate current information Instagram, Vkontakte, etc.

The university uses the systematic use of information, it is divided into groups: general information about the university, the contents of the EP, information about students, information about employees, which improves the internal quality system.

General information about the university and EPs is available on the university's Internet resources, these include the official website of the university htpps: //www.AUPET.kz and the internal site httpps: //info.AUPET.kz. On the official website, students, employees and interested parties can find information on the structure, mission, strategy, events in the scientific, educational, public life of the university, class schedules, as well as information on EPs, in particular, information about the department, studied mandatory and elective disciplines received by a graduate of competence, teaching methods, teaching staff, etc.

The evidence base for the regular reporting of all departments of the university is given, indicating the frequency, forms and methods of management evaluation EP.

To carry out systematic work on the collection, analysis, and comprehensive assessment of the quality of the educational process, these processes were automated within the corporate information environment of Moodle University, the Platonus-based registrar IT system, cloud storage technologies for feedback from students and employers.

To adequately respond to changes in the market of educational services at the university, a number of management systems and databases have been developed that allow for continuous improvement of the process of their provision, which is based on the Platonus automated information system, which provides a link between the information and software systems for managing educational activities, and an assessment system quality of student training, personnel records, document management, Internet resources and library systems.

To ensure information security at the university, to access Documentolog, Platonus, Arch, and the Moodle distance learning system, each employee and student receives a login and password individually, depending on the level of access to the databases. The reliability of the information provided is confirmed by the developer, the head of the unit, and depending on the level of information provided, the director of the institute, vice-rector, rector.

Teaching materials (lecture notes, presentations, guidelines) are included in the teaching materials of disciplines, as well as introduced by the teachers themselves through personal accounts into the Platonus and Moodle systems. Employees of the library and the department of information technology ensure the availability of educational literature in the library and on the university's internal website, as well as access to international databases.

Information about students in EPs is available in the documents of the Directorate of the Institute of Space Engineering and Telecommunications, office registrar. It includes statistical data on groups and courses, individual programs of students, as well as information on educational achievements of students, their participation in research work, in public measures.

Information on educational achievements is available in the Platonus system, which is accessible to employees of the Office Registrar and teachers. In the teacher's personal account there is the possibility of setting grades, informing students about the deadlines for completing assignments, placing training cases, certificates and other materials.

Inside the university, annually, at the end of each academic semester, a questionnaire is conducted among students, there are reflected in the EP about satisfaction with the implementation of the EP and the quality of education.

Statistics on the contingent of students and graduates, information on available resources, staff, scientific and international activities, employment of graduates and other areas are used in the management processes EP in planning the teaching load of teaching staff, preparing the classroom fund for the new academic year taking into account the contingent of students and planning internal and external academic mobility. At the beginning of the school year, the teaching load of the teaching staff is adjusted taking into account the enrollment of students, which is fixed in the minutes of the meeting of the department, orders.

When hiring staff (employees, teaching staff), they sign a two-sided labor contract with a university acting on the basis of the Charter, in paragraph 12 of this contract, the staff gives their consent to the processing of their personal data.

The university management provides all the necessary information in various fields of science for employees, faculty and students through a constantly EP, a library fund, access to Internet resources, held Olympiads and scientific conferences, seminars, etc.

Analytical part

The University has a well-developed information management policy and structure for the collection of information and reporting.

The use of information databases is carried out in all areas of the university, I would also like to note the availability of information on the university website.Сильные стороны/лучшая практика

1. The application of a systematic approach and modern information bases to the collection, analysis and management of information allows us to ensure high quality implementation of the EP of cluster 3 and the functioning of the university as a whole.

2. The accessibility of the university's website, teaching staff information bases, students, employers and other interested parties allows not only to improve the learning process and implementation of the EDUCATION PROGRAM of cluster 3, but also to organize accessibility and transparency

EEC recommendations

1. Systematically monitor satisfaction with quality EP of students, faculty and employers.
2. Expand the content of information databases, increase the number of applied information and communication technologies and software.

The conclusions of the EEC on the criteria: 17 criteria are disclosed, of which 9 have a strong position, 8 - satisfactory.

6.3 Standard "Development and approval of the EP"

Evidence part

In accordance with GOSO RK dated 08.23.2012 No. 1080, the list of EPs within the specialties of the Institute of Space Engineering and Telecommunications is established by the AUPET Scientific Council and approved by the rector. The process of developing EPs is strictly regulated and consists of the following technological chain: graduating department - institute council - NMS (scientific and methodological council of the university) -AUPET Academic Council. The process of creating an EP, including the development, content, changes and pre-EP in it, is coordinated with the AES and the QMS of the AUPET administration.

EPs “5B071900-Radio Engineering, Electronics and Telecommunications”, “5B071600-Instrument Engineering”, “5B074600-Space Engineering and Technologies”, “6M071600 Instrument Engineering”, “6M071900 Radio Engineering, Electronics and Telecommunications”, “6D071900 Radio Engineering, Electronics and Telecommunications” were developed subject to changes in TUP and recommendations of employers and approved by the NMS.

The content of EPs is aimed at continuously improving the professional level of training for bachelors of engineering and technology, masters of engineering and technology, masters of technical sciences, Ph.D. in specialties of cluster 3 and includes requirements for the results of training graduates.

The graduate departments systematically monitor the state of science and practice, which allows timely changes to the EP. Monitoring is carried out by the teaching staff of the Institute of Space Engineering and Telecommunications and submit their proposals to the meetings of the departments, the council of the institute, which the EP determines the need to measure the content of the curriculum and disciplines, while taking into account the wishes of students and employers.

At the design stage, EP graduating departments of the EP are determined by the model of graduates. The graduate model EP of cluster 3 is a combination of knowledge, skills, and EPs for their practical application, integrated into professional and universal competencies that graduates should have at the time of graduation from the program. When developing the final competencies, the EP of the specialties of cluster 3 took into account the developed model of the graduate of the NAO AUPET and the opinions of employers.

Evaluation of the current EP is carried out at the end of each semester of study and the audit of the EP is carried out at the end of the calendar year: questioning of students according to the results of training for the year (semester); conducting an audit of the current EP The EP is described in the "Regulations on the audit of the EP".

When developing an EP, work is organized to provide advice on the development of an EP with foreign specialists and employers: for example, out-of-date disciplines are excluded from the curriculum on the recommendation of employers and the inclusion of relevant disciplines. Expertises of the EP project are organized by foreign experts and representatives of the industry of the Republic of Kazakhstan, as well as representatives of universities of the Republic of Kazakhstan.

Persons who have fully completed the planned volume of the EP of the specialties of cluster 3 are assigned an academic degree in the specialty corresponding to the established level of the National Qualification Framework of the Republic of Kazakhstan.

The passport of the EP fully provides the EP and the description of the competencies of the graduate in the EP and it reflects the influence of disciplines and professional practices on the formation of learning outcomes

In NAO AUPET, work is underway to organize professional certification of students for Cisco programs for the EP of cluster 3, corresponding to the EP in the specialties. Also in the

2008 academic year, an authorized training center D-Link named after Professor T.K. Bektybaeva, where continuing education courses are held on the topic “D-Link Switching Devices”, “VOIP Switching PD Networks”, “WI-FI PD Wireless Networks” as a result of the course, students and other students receive professional certificates under the DLink program.

Principle The EP for the determination of the labor intensity of academic disciplines The EP is reflected in accordance with the established standards in the Kazakhstan and the European EP Higher Education Systems, which are indicated in the module curriculum in credits of the Republic of Kazakhstan, in ECTS and hours, in the Passport EP, syllabuses and work programs of disciplines.

In the EDUCATION PROGRAM of the cluster, the content of academic disciplines and learning outcomes correspond to the level of training (undergraduate, graduate, doctoral), which is reflected in modular curricula, passports, QED, RUE, work programs and syllabuses, teaching materials.

The types of activities provided for in the educational process are given in modular curricula, in syllabuses and work programs of disciplines, in educational-methodical complexes of disciplines, in the plans of educational work.

Analytical part

The development plans of the EDUCATION PROGRAM of cluster 3 are fully developed, the development and audit procedure of the development of the EDUCATION PROGRAM and the audit of the existing EDUCATION PROGRAM are fully developed. Demonstrated internal and external examinations EP.

The qualification obtained at the end of the development of the EP, The EP is determined on the basis of professional standards, it complies with the State Compulsory Standard of Higher Education and Postgraduate, the National Qualifications Framework, and the Industry Qualifications Framework.

The model of the graduate EP is developed and the EP is clearly defined the complexity of the EDUCATION PROGRAM in Kazakhstan loans and ECTS.

EP, MUP and KED passports of undergraduate, graduate and doctoral programs clearly reflect the competencies of graduates.

1. ***Strengths / Best Practices***

   1. The development algorithm of the EP of the cluster is worked out clearly with all the procedures indicated.

   2. Employers participate in the analysis of existing and in the development of new EP.

   3. Expertise The EP of the cluster is conducted by foreign experts, representatives of the industry of the Republic of Kazakhstan and representatives of universities of the Republic of Kazakhstan.

EEC recommendations

1. Strengthen the participation of students and other interested parties in the development of the EDUCATION PROGRAM of the cluster.

2. Continue to develop the implementation of the joint EP cluster with leading Kazakhstani and foreign educational organisations.Выводы ВЭК по критериям: раскрыты 12 критериев, из которых 6 имеют сильную позицию, 6 – удовлетворительную.

6.4 Standard "Continuous monitoring and periodic evaluation of educational programmes"

Evidence part

Monitoring and Evaluation EP "5B071900 Radio Engineering, Electronics and Telecommunications", "5B071600-Instrument Making", "5B074600 Space Engineering and Technologies", "6M071600 Instrument Making", "6M071900 Radio Engineering, Electronics and Telecommunications", "6D071900 Radio Engineering, Electronics and Telecommunications" carried out by the issuing departments, the institute, where an annual report on the implementation of the EP is compiled, where self-assessment and analysis of the success of the development strategy of the EP is carried out on quantitative and qualitative indicators, the report is based on an analysis of the main problems identified as a result of monitoring the scientific and educational process and evaluating external and internal factors. The main criterion for success in implementation

EP is the percentage of graduates employed in this EP and the feedback of employers about university graduates, the admission of graduates to the magistracy and their academic performance

The university has implemented the following mechanisms for collecting, storing and analyzing information on the implementation of EPs: a system for monitoring the implementation of plans for the development of EPs; various forms of self-esteem; self-assessment of programs in preparation for state certification of the Ministry of Education and Science of the Republic of Kazakhstan; self-assessment of EPs in preparation for institutional and program accreditation; self-assessment of EPs for compliance with the criteria of rating agencies; annually considered programs participate in the rating of the Center of the Bologna Process and academic mobility of the Ministry of Education and Science of the Republic of Kazakhstan; annual self-assessment of processes that ensure the implementation of EPs; development, development and active use of information systems in the management of EPs.

An agreement has been concluded with Antiplagiarism Closed Joint-Stock Company (license agreement No. 259). Anti-plagiarism is provided by the EP monitoring capabilities: verification of undergraduate theses; verification of the master's thesis; verification of articles by young scientists, as well as teaching staff; verification of guidelines, manuals and textbooks.

AIS "Platonus" provides EP monitoring capabilities: contingent characteristics; criteria characterizing educational activities necessary for the management of EPs; the educational process: the formation of statements, fixing the results of the rating and intermediate control (certification, exams, term papers and term projects), as well as the final control of students (state exam and defense of diploma projects); formation of curricula and modular EP; various kinds of resources for the implementation of the EP; planning and implementation of classroom and extracurricular teaching load.

Access to the electronic journal is available to each teacher in his disciplines and students in all studied disciplines. Thereby, the principle of transparency and access to information on the results of control is achieved. The effectiveness of the student's assessment procedures is evidenced by a statistical analysis of student and graduate performance, recording in the form of reports in form No. 34 (automatically generated in AIS Platonus) and reports of the chairmen of the State Administrative Commission and the State Electoral Commission.

A stable set of students, analysis of the labor market indicate that EPs meet the requirements of applicants, and stable employment of graduates of the cluster specialties indicates that their competence meets the qualification requirements.

The content and form of the EP is reviewed annually taking into account the proposals and

recommendations of students, faculty, enterprises and organisations involved in the selection and formation of a list of elective disciplines for the EP and working closely with the leaders of the EP.

For an objective assessment of the results of the implementation of the EP and the EP, the directions of its development and the improvement of the department are supported by feedback from employers. Reviews are requested both directly from the place of work and from the structures with which the graduates collaborated in the framework of their professional activities. For the purpose of the EP for determining the satisfaction of employers with the quality of training of graduates, questioning and analysis of feedback received from them is carried out.

All changes made to the EP are approved at meetings: graduating department, institute council, NMS (scientific and methodological council of the university), AUPET Academic Council. The results are posted on the university website: MUP EP, QED, where all interested persons can familiarize themselves with the documents.

Analytical part

The university has organized constant monitoring and periodic evaluation of all the EP of the cluster. The data of the educational process of bachelors, undergraduates, doctoral students, learning results by semesters, academic years are collected and analyzed; the results of various practices; graduate achievement results. Questioning of students, faculty, and employers is carried out according to various EPs and criteria

Based on the results of monitoring and questionnaires, changes are made to the existing EP, and new ones are developed. All documents on EP are available on the university website.

To strengthen quality monitoring, the EP uses the Anti-plagiarism program, which provides the following opportunities: verification of undergraduate diploma theses; verification of master's theses; verification of articles by young scientists and faculty members; verification of guidelines, manuals and textbooks.

Strengths / Best Practices

1. The monitoring and periodic evaluation of the EP is developed to ensure the objectives of the EP, the tasks of the specialty, to meet the needs of students and employers, as well as to make changes to the EP.

2. The use of modern information databases and programs.

EEC recommendations

1. *1. Strengthen the questionnaire of teaching staff and students of all levels according to various EPs and criteria.*
2. *2. Expand the criteria for monitoring and periodic evaluation of the cluster EP.*

The conclusions of the EEC on the criteria: 10 criteria are disclosed, of which 6 have a strong position, 4 - satisfactory.

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

Evidence part

Ensuring the same conditions for all students is achieved by providing all the information in a convenient and accessible form, therefore all information is presented on the AUPET website https://AUPET.kz/ in three languages.

To meet the needs of different groups of students, equal conditions are provided: student scientific sections and circles; participation in various scientific and technical conferences and Olympiads of the institute, university and universities of the Republic of Kazakhstan; providing the opportunity to study abroad for all groups of students; orphaned students are granted the right to live in a dormitory for free; for the language adaptation of foreign students organized courses "Russian language", "Kazakh language"; etc.

The student-centered approach is the basis of the EDUCATION PROGRAM of cluster 3, which involves the use of categories such as an individual learning path, academic mobility, competencies, learning outcomes, ECTS, etc.

Modern teaching methods EP is mainly active teaching methods: problem-based learning, simulation games, business games, interactive teaching methods are also used: creative tasks, project method, simultaneously with the method of working in pairs, social projects, Zhigso method (one-for-two all together), presentation (project protection), Kazusov analysis (problem solving), learning through training (the lesson is conducted by a student), etc

In connection with the presence of distance learning students in the PPS EP, video tutorials are developed and online consultations are conducted to work with students (Materials are available in the MOODLE distance learning system at: online.AUPET.kz). Developed their own teaching aids, instructions for coursework and laboratory work.

In the departments, feedback on the use of various teaching methods and assessment of learning outcomes is manifested in: the results of academic performance and quality of knowledge; survey results (satisfaction with the educational process and teaching staff); HAC results; wishes of students; feedback from employers and practice base managers.

Students are given the opportunity to independently form an educational trajectory and make a choice of disciplines for the next academic year from several proposed ones. For this, before the EP, the definition of the narrow specialization of students, under the guidance of the advisers of the department, teaching staff meet with them to present presentation material on their disciplines. The individual characteristics and needs of students, of course, affect the implementation of the EP, since the EP determines the choice and development of elective courses, the choice of practice bases, independent EP, the definition of theses and projects.

The procedure for responding to students 'complaints was developed by the Department of Academic Education and Education and approved by the university's leadership in strict accordance with the Model Rules for the ongoing monitoring of academic performance, intermediate and final certification of students in higher education institutions, approved by order No. 125 of the Ministry of Education and Science of the Republic of Kazakhstan dated March 18, 2008.

The use of the Platonus automated information system in the educational process allows the student to view the results of the weekly intermediate control, midterm control, final assessment (pre-EP for the examination session), and exam results. The application for appeal is submitted to the director of the institute (bachelors) or the director of the office of graduate and doctoral programs (undergraduates, doctoral students) within the next working day after the exam. The mechanism for assessing knowledge in detail The EP is written in syllabuses of readable disciplines, which are posted on the AUPET website.

The objectivity of assessing knowledge and the degree of formation of students' professional competence is achieved through: familiarizing students with the applicable criteria for assessing knowledge and the requirements for studying the discipline in accordance with the syllabus (working curriculum) of the discipline in the first lesson; accessibility of assessment criteria to students (in syllabuses and teaching materials located in the electronic library); the functioning of the appeal commissions. The assessment of results adopted at the university is comprehensive and systemic in nature and allows for compliance with the principles of continuity, continuity, transparency and customer focus.

The mechanism for ensuring the development of learning outcomes by each graduate of the EP is described and regulated in the Rules for the organisation of the educational process on the credit technology of education. The criteria for the preparedness of graduates of the program

to meet the requirements of state educational standards are high rates of final exams, defense of diploma works, positive feedback from heads of practices, reviewers of diploma works, opinions of chairmen of state certification commissions

AUPET creates the conditions for improving teaching methods and increasing the professional potential of the faculty at the Institute for Advanced Studies and Double Degree Education, as well as the direction of teaching staff for advanced training in other universities of the Republic of Kazakhstan and abroad, to enterprises with a specialty profile.

Analytical part

At the university, the EP is based on a student-centered approach, various forms and methods of teaching and learning are applied, distance learning is developed, own development of educational disciplines is used EP.

The student is given the opportunity to get acquainted with: the results of the weekly intermediate control, midterm control, final grades (before the EP for the examination session), exam results. Also, students have access to all kinds of information developed by the teaching staff: MUP, KED, syllabuses, guidelines, manuals, lecture notes, etc.

Strengths / Best Practices

1. The EP manual provides various learning trajectories with flexible learning paths, allowing you to choose the most suitable direction for the EP.

EEC recommendations

Strengthen distance learning work.

2. Strengthen the work on academic mobility of faculty and students of mobility.

3. It is recommended that the 5B074600 Space Engineering and Technology EDUCATION PROGRAM introduce all stages of higher education: open a master's and doctoral program

The conclusions of the EEC on the criteria: 10 criteria are disclosed, of which 1 has a strong position, 9 is satisfactory. ”

6.6 Standard "Students"

Evidence part

The EP EP "Infocommunication technologies and systems (5V071900-Radio engineering, electronics and telecommunications" THE EP "5V071900 Radio engineering, electronics and telecommunications", "6M071900 Radio engineering, electronics and telecommunications" and "6D071900 Radio engineering, electronics and telecommunications" demonstrates the policy of forming the contingent of students from receipt to release and ensures the transparency of its procedures.

The procedures governing the life cycle of students are approved and the EP is published. The EP of the contingent formation and the results of admission are considered at meetings of departments, the educational and methodical commission of the institute, and the Academic Council of the university.

In its activities to form a contingent of students, the selection committee of NAO AUPET is guided by regulatory legal acts of the Republic of Kazakhstan.

In total, from the 2015-2019 academic year, in the cluster, specializing in 5V071900-Radio Engineering, Electronics and Telecommunications, 5V071600 Instrument-Making, 1,055 full-time undergraduate students study. A total of 862 students in this cluster are studying under a grant from the Ministry of Education and Science of the Republic of Kazakhstan, 193 students are on a paid basis. The contingent of students in full-time and part-time undergraduate EPs in the context of the specialties EP for 2015-2019 are presented in tables 6.1, 6.2

A comparative analysis of the increase in the contingent of bachelors by years is presented in table 6.3 of the self-report. Training of masters in the profile and scientific and pedagogical direction EP "6M071900 Radio Engineering, Electronics and Telecommunications", "6M071600 Instrument Engineering", in NAO AUPET since 2007 in the state and Russian languages of instruction with the academic degree "Master of Engineering and Technology" in EP "6M071900 Radio Engineering, Electronics and Telecommunications" (profile) or Master of Engineering in EDUCATION "6M071900 Radio engineering, electronics and telecommunications" (scientific and pedagogical direction). The contingent of graduate students in the EP of the specialty “6M071900 Radio Engineering, Electronics and Telecommunications”, “6M071600 Instrument Making” are shown in Table 6.4 of the self-report. Analyzing the data presented, we can note an increase in the contingent for the EP of the magistracy "6M071900 Radio Engineering, Electronics and Telecommunications", "6M071600 Instrument Making". On the part of the faculty of the university, focused work is being done to increase the contingent. However, it should be noted, that in the magistracy there are only groups with the Russian language of instruction.

To date, according to EP 5B071900 Radio engineering, electronics and telecommunications, foreign citizens study in the amount of 33 students from 2 countries of near and far abroad, which are indicated in the report and documented.

The university demonstrates the conformity of its actions to the Lisbon Recognition Convention. The Institute collaborates with other educational organisations and national centers and participates in EPs of the Bologna Process and Academic Mobility Center, which is the Kazakhstan center of the Euro EP Network of National Information Centers for Academic Recognition and Mobility, i.e. ENIC / NARIC National Academic Recognition Information Center with the goal of providing an EP of comparable recognition of qualifications. The geography of cooperation of the NAO AUPET with other universities of the near and far abroad on the recognition of diplomas / qualifications is confirmed by documents on the formation of a state standard (diploma).

AUPET continues to work on international cooperation within the framework of agreements with the Moscow Energy Institute (MPEI) since 1997, on the basis of which an agreement “On the joint organisation of the Distance Learning Program” was signed in 2008, respectively, students receive two diplomas simultaneously: a diploma in technical education AUPET and diploma of economist of the Moscow Power Engineering Institute, as well as after a meeting with the teaching staff of the EP confirmed information on the defense of theses, which are evaluated remotely by the association by the commission.

Academic exchanges are implemented in accordance with agreements between NAO AUPET and partner universities, agreements with international companies, foundations and other organisations, which are listed in the self-report EP.

In order to assist in the employment, AUPET holds a Job Fair twice a year.

The university provides graduates with documents confirming the qualifications, including the achieved learning outcomes, as well as the context, content and status of the education and evidence of completion.

The university makes maximum efforts to provide graduates with employment, systematically monitor the employment of graduates, develop their careers and increase the effectiveness of graduate associations.

The center for organizing and conducting work with youth is the trade union committee

of students. they carry out EPs, games, competitions and tournaments during non-academic hours. AUPET has organized various clubs, such as: Children Charity Club, Gibrat, Ulagat, guitar club, two debate leagues, StudiA315, etc. There is the Entel Youth Center, where KVN teams, the Brain Ring club, dance groups, and singers work and rehearse. For the same purposes, an assembly hall is used in the USK named after G. Daukeev. Debate leagues, volunteers, etc. engage in and conduct workshops in the classrooms of the university, at least 2-3 times a week.Students EP 3 clusters participate in student conferences at the regional and republican levels. The results and effectiveness of NIRS are demonstrated by diplomas.

The university's website has a page of the "Association of NAO AUPET Alumni", and there is also a page in contact https://www.vk.com., Which discusses the EP for raising the quality of education and future prospects for the development of the university. An electronic database of graduates has been developed, access to which is also organized from the website of the "Association of Alumni of the NAO AUPET". To maintain feedback, graduates can fill out an online application form on the association's website (https://AUPET.kz/). Based on the results of the alumni meeting, it was confirmed that the alumni meeting is held annually once a year in the month of May.

The university implements EPs to support students based on the provision of discounts to students on studies.

The university has the opportunity to support students with high academic performance and active research with the help of academic encouragement such as scholarships, grants of the rector, benefits provided by the social package for students, diplomas and letters of thanks. The departments pay attention to working with gifted students, undergraduates take into account and support their interests, wishes, ideas, projects. For this, students annually participate not only in intra-university olympiads, contests, but also in republican olympiads, contests.

Analytical part

During a visit to the practice bases of the DTOO "Institute of Space Engineering and Technology", DTOO "Institute of the Ionosphere", JSC "Kazakhshary Sapary", JSC "Republican Space Communication Center", we saw the real places of practical training and concluded agreements on the passage of professional practice of students. Based on this, we can say that they undergo a real production practice.

Monitoring employment of graduates is carried out through direct activity: graduate - department - enterprise. Alumni databases are being updated for constant monitoring and career growth, and the employment of graduates is monitored through SCVP JSC.

Strengths / Best Practices

1. The possibility of practical training in leading industrial and commercial enterprises, in government bodies and public organisations of the city, region and republic.

2. Activity EP on employment of graduates.

3. The management of the EP constantly monitors the employment and professional activities of graduates of the EP.

EEC recommendations

Intensify the activities of the formally existing association of graduates, strengthen the involvement of graduates in the work process EP.

The conclusions of the EEC on the criteria: 12 criteria are disclosed, of which 2 have a strong position, 10 - satisfactory.

6.7 Standard "Faculty"

Evidence part

EDUCATION PROGRAM for cluster 3 has an objective and transparent personnel policy, including hiring, professional growth and staff development, ensuring the professional competence of the entire staff. The teaching staff is the main resource for ensuring the mission of the university. In this regard, the university pays special attention to the EP for personnel selection and training.

The teaching staff of the EP for Cluster 3 is formed in accordance with the requirements of the Ministry of Education and Science of the Republic of Kazakhstan and with normative documents, including The rules for the competitive replacement of the posts of scientific and pedagogical (faculty, scientists) staff of higher educational institutions.

The requirements for the competency of the teaching staff of the EP are defined in the job descriptions developed on the basis of the “Typical Qualification Characteristics of the Positions of Teachers and Equated Persons”.

The university demonstrates the compliance of the staff potential of the teaching staff with the university development strategy, qualification requirements, the level and specificity of EPs and personnel selection.

The number of full-time faculty in the 2018-2019 academic year. In the year of conducting training in the specialty EP is 56 teachers, of which they have a 36 degree. According to the above EP, the required level of competence of the teaching staff of the EP is determined by the volume of scientific products, the number of publications, including in rating journals with a non-zero impact factor, in KKSON journals, publications in foreign and domestic publications, the participation of faculty in conferences of countries near and far abroad, issued by monographs, textbooks and educational ith benefits, etc. that have been demonstrated.

As well as a systematic assessment of the competence of teachers, assessing the effectiveness of the quality of teaching in the departments are implemented through internal evaluation (open classes, inter-EP of visits, control visits to the head of the department, speeches at the scientific-theoretical and scientific-methodical seminars).

The leadership of the university ensures the completeness and adequacy of the individual planning of the teaching staff for all types of activities, monitoring the effectiveness and efficiency of individual plans, demonstrates evidence of the fulfillment by teachers of all types of the planned workload.

The workload of teaching staff in the specialties includes academic, educational, methodological, scientific, organisational and methodological work, and professional competence. All the planned work of the teacher is included in his individual work plan, which is the main document regulating the work of the teacher in a full-time position.

The planning of the teaching work of the teaching staff of the department is carried out by the head of the department. The distribution of teaching load among teachers is carried out taking into account their qualifications. The classroom load in the total volume is approximately 60-80% of the total load for the year. The fulfillment of the Planned annual and seven-semester load of teachers is recorded by each teacher in the "Journal" section of the Platonus and Moodl portals, the form of which was adopted at AUPET.

In all the disciplines of the departments, educational and methodical complexes have been developed, which show syllabuses of educational disciplines, lectures, seminar plans, assignments for the CDS, types of control, EPs and tasks, rating tasks, exam materials. PPS EP "5B071900 Radio Engineering, Electronics and Telecommunications", "6M071900 Radio Engineering, Electronics and Telecommunications", "6D071900 Radio Engineering, Electronics and Telecommunications" actively participate in charity programs and many social projects.

The management of the EP provides social support to employees through the union of employees of AUPET. The trade union committee provides financial assistance to the teaching staff for the organisation of cultural measures for EPs.

According to the statistics, it can be concluded that the current teaching staff, leading to the EP "5B071900 Radio Engineering, Electronics and Telecommunications", "6M071900 Radio Engineering, Electronics and Telecommunications" and "6D071900 Radio Engineering, Electronics and Telecommunications" has sufficient scientific and creative potential for strategic development EP.

Research and consulting support is provided at the Center for Research and Technology

Development under the supervision of the Vice-Rector for Research and Innovation. This center considers applications of scientific groups for participation in research, provides information on popular topics of research, helps in filling out applications for participation in commercial research. EPs of research are considered at the Academic Council of the University. The connection between scientific research and training can be traced in the work of doctoral students, undergraduates and bachelors participating in research.

Further training of teaching staff occurs in areas related to innovations in the educational system of the university and with areas of knowledge in which these teachers conduct their research or taught disciplines. The departments of TCSS, R&D, and CTT are developing plans for continuing education of teaching staff for each academic year, which is fixed in the work plans of the departments. The training and advanced training of teaching staff is carried out through short-term seminars, courses and internships at leading universities and enterprises in Kazakhstan and abroad.

The management of the EP provides targeted actions for the development of young teachers. Young scientists from the Institute of Space Engineering and Telecommunications are working to improve their scientific potential and contribute to the development of the cluster EP, so masters, senior lecturers of the department entered the doctoral program of AUPE. In order to purposefully develop young teachers at the university, the Council of Young Scientists was created, which is a permanent collegial advisory body on a voluntary basis.

The university demonstrates the involvement of teaching staff in practical activities in the field of specialization on an ongoing basis.

The educational process at the University is carried out on the basis of innovative educational technologies, informatization and computerization of the entire learning process, the application of new concepts in the field of education and science, the improvement of traditional teaching methods, the creation and ongoing EP of the e-learning fund. To improve the quality of training, the best foreign and domestic teachers were involved.

In the framework of developing an English-language EP “Telecommunications - RET” for students of 4 years of study, undergraduates and doctoral students, in November 2017, lectures were given and seminars were held at AUPET

An important factor is the participation of teaching staff in society (the role of teaching staff in the education system, in the development of science, the region, the creation of a cultural environment, participation in exhibitions, creative contests, charity programs, etc.).

Analytical part

The EEC notes the sufficient work of the university in attracting and professional development of young teachers.

The Commission established the average level of IT competence of teaching staff, the use of innovative methods and forms of training. Also noted is the active use of information and communication technologies in the educational process (for example, on-line training, MEP, etc.). While attending lecture classes a single case of teaching was revealed when the teacher did not have a discussion of the lecture material. An important factor is the development of academic mobility in the framework of the EP, attracting the best foreign and domestic teachers from different countries.

Strengths / Best Practices

1. The university has an objective and transparent personnel policy, including hiring, professional growth and staff development, ensuring the professional competence of the entire staff.

2. The correspondence of the staff potential of the teaching staff with the development strategy of the university and the specifics of the EP has been demonstrated.

3. The contribution of the teaching staff of the EP in the implementation of the development strategy of the university, and other strategic documents is taken into account in the ranking of individual works of the teaching staff.

4. Possibilities of career growth and professional development of teaching staff are shown. EP.

5. Production employees of the respective industries were involved for teaching at the university part-time.

6. The management of the EP should provide targeted action for the development of young teachers

7. To integrate research and education, innovative teaching methods are applied.

EEC recommendations

To increase the level of IT competence of teaching staff, the application of innovative methods and forms of training in accordance with the objectives of the EP, in connection with the transition to student-centered learning.

The conclusions of the EEC on the criteria: 12 criteria are disclosed, of which 8 have a strong position, 3 - satisfactory.

6.8 Standard "Educational resources and student support systems"

Evidence part

During the assessment, the EP "5B071900 Radio engineering, electronics and telecommunications; "5V071600 Instrument Engineering", "5V074600 Space Engineering and Technology", "6M071600 Instrument Engineering", "6M071900 Radio Engineering, Electronics and Telecommunications", "6D071900 Radio Engineering, Electronics and Telecommunications", the leadership of EPs demonstrated the availability of sufficient material and technical base, resources and infrastructure departments to ensure the quality of training of students of various levels. At the EP "5B071900 Radio Engineering, Electronics and Telecommunications", there are 8 laboratories and 3 computer labs equipped with modern equipment and software, undergraduate level. So, in the laboratory B 409 there is Educational GPON programmatic access equipment, similar to that implemented on the networks of the Republic of Kazakhstan. During a visit to the laboratory, members of the commission were shown welding of EPmatic fiber. This program works on continuing education courses for AUPET students and third-party workers in the telecommunications industry, which is a good example of the interaction of the educational process and enterprises in the telecommunications industry.For the EP "6M071900 Radio Engineering, Electronics and Telecommunications", the master's level, there is equipment of a high-speed transmission system, SDH technology, which also reflects the availability of modern industry equipment. Laboratories have enough workplaces to carry out experimental work. At the EP "6D071900 Radio Engineering, Electronics and Telecommunications" there are 2 thematic research laboratories "Nanoelectronics" and "Internet of Things IoT / M2M", which is the basis for the research activities of doctoral students and undergraduates.

In addition, it should be noted that the leadership of the EP has the prospects of building a breadboard model of the full high-speed EPmatic network, on existing equipment.

It should be noted that in terms of material and technical equipment of the EP "Radio Engineering, Electronics and Telecommunications" there is a continuity between the disciplines of the EP of the undergraduate, graduate and doctoral levels.

Educational laboratories EP "5B071600 Instrument Making", "6M071600 Instrument Making", "5B074600 Space Engineering and Technologies" also have the necessary equipment for the implementation of EPs, which was demonstrated during visits to laboratories and departments of the cluster 3. It should be noted that material and technical resources EP of cluster 3 are the fundamental basis for ensuring the quality of training and is fully consistent with educational standards.

Evidence was presented that the management of the EP annually plans and allocates significant financial resources for the modernization and strengthening of the existing material and technical base of educational and scientific laboratories that comply with the EPs, sanitary

and epidemiological standards and requirements of the domestic and world markets of intellectual labor.

The presented information resources EP (computer classes with the ability to access the Internet, software, etc.) fully provide the opportunity for independent study and research work of students. The software products Eset, Matlab, Anti-plagiarism, Mathcad Education - University Edition, LavView and other specialised programs fully comply with the specifics of the EP of cluster 3.

When checking the EDUCATION PROGRAM of cluster 3, technological support of students and teaching staff was demonstrated. So, AUPET has a web-based distance learning web server from a unified university network and access via login and password from the Internet, the Platonus automated information system works, which allows complex automation of credit and distance learning system processes, as well as electronic document management system " Documentologist. " Thanks to these platforms, teaching staff fully provide the educational process online, which is important, first of all, for the distance learning form, and for all other forms of learning. In turn, students and all interested parties have complete information and can control the educational process.

AUPET operates a video surveillance system and telephone communications to ensure a non-EP for students and faculty.

The EDUCATION PROGRAM of cluster 3 has the necessary library resources, including a fund of educational, methodological and scientific literature on general education, basic and majors in paper and electronic media, periodicals, and access to scientific databases. A significant share of the EP for the library fund is made up of own editions of teaching staff, presented in paper and electronic form. The library has its own tab on the university website, which provides background information about the library and informing about new income and educational activities From the Library tab, access is made to the electronic catalog of the Web-KABIS library, to the full-text database of the teaching staff, to the Russian International Economic Library and international databases Scopus and ScienceDirect, Clarivate Analytics.

On the territory of the EDUCATION PROGRAM of cluster 3, the WI - FI wireless network operates, the network coverage is partial, only in places of EPs for students, inside educational buildings, in the foyer, and stairwells.

On the EPs of cluster 3, there is an examination of research reports on plagiarism, an examination of graduation theses, dissertations on plagiarism, which was demonstrated to the commission during the audit.

The leadership of the EP of cluster 3 demonstrated the existence of procedures to support various groups of students at all levels of EPs. There is a program for foreign students to adapt, monitor their condition and support throughout the entire period of study. Evidence of monitoring the psycho-emotional state of students, satisfaction with the educational process through questionnaires was demonstrated.

As a result of the verification, the EP of cluster 3 demonstrated the capabilities of various groups of students in the context of the EP. So, adults and working students are provided with distance learning, foreign students have the opportunity to study in Russian-speaking, Kazakh and English groups, with the possibility of adaptation. There are no students with disabilities on the data of the technical EP.

Analytical part

Experts note the sufficiency of the material and technical base, resources and infrastructure of the departments to ensure the quality of training of students of various levels and student support systems, including the competence of the personnel involved. The graduating departments of the considered EP have a sufficient number of classrooms equipped with modern technical teaching aids, including educational and scientific laboratories. The Commission notes the sufficiency of the created conditions of the learning environment, reflecting the specifics of EPs in terms of interactive resources with access to the AUPET website from remote computers.

At the EP of the Institute of Space Engineering and Telecommunications, the automated

educational process management information system - AIS "Platonus" is used, the student body is formed with the help of "Platonus" according to the EP, by forms of education, by groups and monthly reflected in the movement of students. Information on teaching materials, teaching aids, presentation material in the context of EP is presented in Moodle.

To conduct an examination of the results of research, final works and dissertations, a mandatory check for plagiarism is used.

The EP of the Institute of Space Engineering and Telecommunications created the necessary and comprehensive conditions for the non-EP of students and faculty in educational buildings and dormitories. However, it is worth noting the need to expand the various procedures for supporting students, the full satisfaction of students through counseling and informing about current and upcoming courses and events.

The EEC notes that the needs of foreign students are not sufficiently taken into account at the level of master's and doctoral studies. The EP has methodological and technical training opportunities in Kazakh and English, however, groups of students in these languages are not represented.The experts of the commission see the reason for this fact in saving financial resources of the leaders of the EP. However, work in this direction will improve the performance of the university, in general, among other universities of the Republic and at the global level.

Strengths / Best Practices

1. The sufficiency and high level of material and technical equipment of software that meets modern industry requirements;

2. Correspondence of information resources to the specifics of disciplines EP;

3. High level of technological support for students and teaching staff in accordance with EPs;

4. Examination of graduation works, dissertations on plagiarism;

5. Compliance with the requirements of the EP.

EEC recommendations

1. The management of the EP should strive to take into account the needs of various groups of students (foreign students, as well as students with disabilities).

2. The management of the EP should ensure the functioning of WI-FI in the organisation.

The conclusions of the EEC on the criteria: 12 criteria are disclosed, of which 4 have a strong position, 5 - satisfactory and 1 - suggests improvement.

6.9. Public Information Standard

Evidence part

AUPET has a system for collecting and monitoring information on the EP. The university timely publishes information on the implementation of EPs. The published information is reliable, clear, objective, relevant and accessible to all comers.

The universal information tool is the website of the institute (www. AUPET. Kz). The site contains the following sections: "Home", "About the University", About the Institute "," The educational process "," Graduates "; "The science"; "Applicants"; "News"; "Contacts"; "Rector's blog."

Employees and students of the department appear on television and publish in various news publications: "Bilimdi El", "Aiqyn", "Evening Almaty", "24.kz", etc. A complete list with links to publications is presented on the official website on the page "Media About Us" https://AUPET.kz/?page_id=8281.

Information is published on the website (https://AUPET.kz/) and on social networks telegram https://t.me/AUPET_university, in the contact https://vk.com/AUPET_university, youtube https://www.youtube. com / channel / UCUnDGC1ddotzf1fpn-hyXDA, instagram https://www.instagram.com/AUPET_university/.

The Institute’s website reflects the mission of the university, general information about the university, goals and objectives, the history of the university, licenses for educational activities,

and a list of specialties. At the top of the site is a block of useful links, which includes links to the Platonus automated information system, class schedules, websites of partner organisations, etc. According to the results of the survey, 84.7% of students were fully satisfied with the usefulness of the website, partially - 15.3%.

The university leadership uses various methods of disseminating information - these are booklets and advertising materials, the university's website, briefings by the leadership, open days, job fairs at the university, round tables with heads of enterprises and organisations, exhibitions of universities and EP, career guidance measuresEPs. Management, faculty and students speak in the media, publish materials in national newspapers and magazines, and participate in various radio and television broadcasts.

Information on the content of EPs is regularly discussed at meetings with representatives of employers. In addition, employers are included in key collegial bodies.

The university has various information services, student support and feedback, each of which has its own functions. According to the principle of openness and accessibility to the public, the university openly publishes information on the institute's activities, the rules for admission of applicants, EPs, terms and forms of study, international programs and partnerships of the university, the advantages of the university and each institute, information on the employment of graduates, feedback from graduates, and EPs and student success, contact information and other information useful to applicants and students on various information media.

Analytical part

The Institute has a sufficient number of sources to inform the public about its activities. At the same time, experts note that the information posted on the site is not an EP is regularly updated. Audited financial statements are not published.

Feedback on the site is implemented in the form of a rector's blog.

Strengths / Best Practices

1. The information published by the university in the framework of the EP is accurate, objective, relevant, indicating the expected learning outcomes.

2. A variety of information dissemination methods are used (including media, web resources, information networks, etc.) to inform the general public and interested parties.

3. The participation of the university and the implemented EP in a variety of external assessment procedures.

EEC recommendations

It is recommended to publish audited financial statements on the university's web resource.

The conclusions of the EEC on the criteria: 13 criteria are disclosed, of which 3 have a strong position, 10 - satisfactory.

6.10 Standard "Standards in the context of individual specialties"

In accordance with the standard, it has been proven that in all MUE "5V071900 Radio Engineering, Electronics and Telecommunications", "5V071600 Instrument Making", "5V074600 Space Engineering and Technologies", "6M071600 Instrument Engineering", "6M071900 Radio Engineering, Electronics and Telecommunications", "6D071900 Radio Engineering, electronics and telecommunications "there are disciplines and measuresEPs aimed at obtaining skills in the specialty as a whole.

As measures of the EP, it is shown that students of the specialty "5B071900 Radio Engineering, Electronics and Telecommunications" receive practical EPs and skills in the specialty as a whole and majors in particular by: visiting field trips to enterprises of the industry (1 course training practice of RTRK "Kazakhstan" (Kazteleradio), Elteks Alatau enterprise, DAIKT JSC Kazakhtelecom, conducting radio installation practice - 2 year in the audience B 121 of NAO AUPET, 3 year internship and undergraduate raktika 4 course for enterprises of the industry

(Annex 3.26) ,. (Annex 3.26 Annex 5.17, 6.14). (Appendix 6.20, 8.3, 8.4, 8.5)
Students EP 5B074601 Space Engineering (5B074600-Space Engineering and Technology); visit with excursions the enterprises: “NTSKIT”, DTOO “IKTT”, JSC “Kazgarysh Sapary” and DTOO “Astrophysical Institute named after V. G. Fesenkova ”, Almaty.
Students EP 5B071601 Instrumentation and systems in robotics (5B071600-Instrument making) undergo practical training at Saiman Corporation LLP.
Laboratory classes and practical classes for the EP "5B071900 Radio Engineering, Electronics and Telecommunications", "6M071900 Radio Engineering, Electronics and Telecommunications", "6D071900 Radio Engineering, Electronics and Telecommunications" for most basic and major disciplines of the specialty are held in the laboratories of the department on specialised production equipment purchased AUPET or donated to the department by telecommunications enterprises.
It is shown that in order to improve EPs and improve the quality of training, many disciplines are read directly at the enterprises “5B071900 Radio Engineering, Electronics and Telecommunications”, “55B074600 Space Engineering and Technology”, “5B071600-Instrument Making” with which agreements were concluded (Eltex-Alatau, Astrophysical Institute named after VG Fasenkov, Saiman Corporation LLP).
Practicing specialists (representative of Saiman Corporation LLP) -Zikirbay K. are involved in lecturing and conducting practical classes by the departments, in the field of wireless technology classes are led by Ph.D., senior lecturer A. Merkulov, head of communication at SIEMENS »professor, doctor of technical sciences Markosyan M.V. is the director of the Research Institute of Communications- (Contract of Markosyan’s work and reference from the place of work of Merkulov - Appendix 10.1).
It is shown that a number of teachers of all the EDUCATION PROGRAM of the cluster have a long EP at enterprises in the field of specialization
At the TCCS department, specialty (5B071901 Infocommunication technologies and systems (5B071900-Radio engineering, electronics and telecommunications), full-time teachers are employees who have a long EP working at telecommunication enterprises: senior lecturer Abirov Zh.A .; Associate Professor Kasimov A.O. , Associate Professor Zhunusov K.Kh .; senior lecturer Abishev T.A .; senior lecturer Shkrygunova E.A .; prof. Chezhimbaev K.S., prof. Baykenov A.S.
A number of teachers of the specialty (5B071600-Instrument-making) instrument-making industry have long-term EPs at enterprises in the field of specialization EP, for example, Baykenov BS, Zikirbay K., Nusibalieva A., etc.
Also, specialty 5B074601 Space Engineering (5B074600-Space equipment and technologies, long-term EPs Prof. Shimirbaev MK, Alipbaev K.A.
It is proved that to ensure a high level of theoretical training, almost all special disciplines of the EP have mathematics and physics in prerequisites, as in the learning process, it is necessary to carry out calculations of various communication schemes and structures and use the methods of mathematical statistics, mathematical and physical modeling of processes using simulation modeling. (Appendix 10.2).
In MUP-18 “6M071900 Radio Engineering, Electronics and Telecommunications” there are disciplines that are innovative in themselves and based on an innovative teaching methodology
The most modern technologies in the field of telecommunications are reflected. Instrument-making and satellite technology: 5G, IoT / M2M, “Machine Learning” and “Artificial Intelligence”, “Intelligent Control Systems” in the new disciplines of the MUP 2017, 2018.
When developing the curriculum and discussing it, to improve the EP and increase the competitiveness of graduates, employers also take part in meetings of the department and round table.
It is noted that about 84% of graduates of the specialty (5B071901 Infocommunication technologies and systems (5B071900-Radio engineering, electronics and telecommunications) immediately after graduation found a job in the specialty and achieved success in their careers.

Many graduates of this cluster occupy high positions in About 95% of graduates immediately after graduation find a job in their specialty and achieve success in their careers and in the EP "Instrument Making"
Feedback from employers and a qualitative and quantitative analysis of the final state certification for the last five years confirm the high level of training of specialists and the effectiveness of EPs.
Analytical part
EEC IAAR experts state that EPs fully comply with the standard. It is shown that the EP manual provides measures to strengthen practical training in the field of specialization.
The cluster departments provide measures to strengthen the practical training of students by purchasing modern equipment for laboratory work and the inclusion of materials from continuing education courses in the content of disciplines. SRO is provided in each discipline, which contributes to self-learning skills, for example: students simultaneously perform independently assignments of online courses with a certificate (5B071901 Infocommunication technologies and systems (5B071900-Radio engineering, electronics and telecommunications) and other EP.
In the field of information technology, it is shown that the literacy of graduates is fixed by the requirement of the fact of using information tools in graduation projects of bachelors and master's theses. There are also research works on information technology of undergraduates and doctoral students
Strengths / Best Practices
1. Disciplines and measures have been demonstrated EPs aimed at obtaining practical EPs and skills in the specialty as a whole and majors
2. The teaching staff has a sufficiently long production EP in the field of specialization of the EP in all areas of the cluster.
3. The content of all disciplines EP is based on the relationship with the fundamental natural sciences (mathematics, physics).
4. The practical orientation of EPs in the field of specialization of practical training of students is demonstrated.
5. IN THE EP of the entire cluster that there is the use of modern information technologies

EEC recommendations
To intensify the work on attracting production specialists to the process of implementing EPs.
The conclusions of the EEC on the criteria: 5 criteria are disclosed, of which 5 have a strong position.

VII REVIEW OF STRENGTHS / BEST PRACTICE BY EACH STANDARD

Standard "Management of the Educational programme "

- AUPET has an EP and a published policy in the field of quality assurance;
- The quality assurance policy reflects the link between research, teaching and learning;
- the leadership of the EP has demonstrated the functioning of the mechanisms for the formation and regular review of the development plan of the EP and monitoring its implementation, assessing the achievement of learning objectives, meeting the needs of students, employers and society, making decisions aimed at constantly improving the EP;
- The leadership of the EP should involve representatives of groups of interested parties, including employers, students and faculty members, to formulate the development plan for the EP;
- The leadership of the EP demonstrated the individuality and uniqueness of the development plan of the EP, its consistency with national development priorities and the development strategy of the educational organisation;
- the leadership of the EP ensured the participation of representatives of interested parties (employers, teaching staff, students) as part of the collegial management bodies of the EP, as well as their representativeness in deciding on the EP for managing the EP;
- The university should demonstrated innovation management as part of the EP, including the analysis and implementation of innovative proposals.

Standard "Information Management and Reporting"

- AUPET provides the functioning of a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software;
- AUPET demonstrated the EPmeasurement and securing of information, including the EPmeasurement of those responsible for the accuracy and timeliness of the analysis of information and the provision of data;
- AUPET evaluates the effectiveness and efficiency of activities, including the EP in the context;
- information collected and analyzed by the university, effectively takes into account: key performance indicators, the dynamics of the contingent of students in the context of forms and types, academic performance, student achievement and expulsion, the availability of educational resources and support systems for students, employment and career growth of graduates;
- The leadership of the EP actively contributes to the provision of all necessary information in relevant fields of science.

Standard "Development and approval of the Educational programme "

- AUPET clearly EP defined and documented the development of the EP and their approval at the institutional level;
- the leadership of the EP ensured that the developed EP is in compliance with the established goals, including the intended learning outcomes;
- The leadership of the EP ensured the availability of developed models of the graduate EP, the EP describing the learning outcomes and personal qualities;
- The leadership of the EP demonstrated the conduct of external examinations of the EP;
- the qualification obtained at the end of the EP, the EP is clearly defined, explained and consistent with the EP at a certain level of the NSC;
- leadership of the EP The EP determined the impact of disciplines and professional practices on the formation of learning outcomes.

Standard "Continuous monitoring and periodic evaluation of Educational programmes"

- AUPET regularly monitors and periodically evaluates the EP in order to achieve the goal and meet the needs of students and society;

- monitoring and periodic evaluation of the EP consider: the content of the programs in the light of the latest achievements of science in a particular discipline to ensure the relevance of the taught discipline; changes in the needs of society and the professional environment; load, academic performance and graduation of students; educational environment and support services and their compliance with the objectives of the EP;

- The management of the EP provides a review of the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social requ**est of society.**

Standard "Student-centered Learning, Teaching and Assessment"

- The leadership of the EP provides respect and attention to various groups of students and their needs, providing them with flexible learning paths.

Standard "Teaching Staff"

- AUPET has an objective and transparent personnel policy, including hiring, professional growth and staff development, ensuring

VIII OVERVIEW OF QUALITY IMPROVEMENT RECOMMENDATIONS BY EACH STANDARD

Standard "Management of the Educational programme"

To intensify work on the implementation of academic mobility, both internal and external, at all levels of education.

Ensure that the EP guide is trained in education management programs.

Specify and clearly divide the distribution of job responsibilities for business processes within the framework of the EP.

Develop mechanisms for monitoring the functioning of the internal quality assurance system.

Standard “Information Management and Reporting”

Conduct systematic monitoring of satisfaction with quality EP of students, faculty and employers.

To expand the content of information databases, increase the number of applied information and communication technologies and software.

Standard "Development and approval of the Educational programmes"

Strengthen the participation of students and other interested parties in the development of the education program of the cluster.

Continue to develop the implementation of the joint EP of the cluster with leading Kazakhstani and foreign educational organisations.

Standard “Continuous monitoring and periodic evaluation of Educational programmes”

Strengthen the questionnaire of teaching staff and students of all levels according to various EPs and criteria.

Expand the criteria for monitoring and periodically evaluating the education program of the cluster.

Standard "Student-centered Learning, Teaching and Assessment"

Strengthen distance learning work.

Strengthen the work on academic mobility of faculty and students of mobility.

According to the EP "5B074600 Space Engineering and Technology" it is recommended to introduce all stages of higher education: open a master's and doctoral program.

Standard "Teaching Staff"

To increase the level of IT competence of teaching staff, the application of innovative methods and forms of training in accordance with the objectives of the EP, in connection with the transition to student-centered learning.

Standard “Educational Resources and Student Support Systems”

The management of the EP should strive to take into account the needs of various groups of students (foreign students, as well as students with disabilities).

The management of the EP should ensure the functioning of WI-FI in the organisation.

Public Awareness Standard

It is recommended to publish audited financial statements on the university’s web resource.

Standard "Standards in the context of individual specialties"

To intensify the work on attracting production specialists to the process of implementing Educational programmes.

Annex 1. Evaluation table "SPECIALISED PROFILE PARAMETERS"

For evaluating of educational programmes "5B071600 Instrument", "6M071600 Instrument", "5B071900 Radio Engineering, Electronics and Telecommunications", "6M071900 Radio Engineering, Electronics and Telecommunications", "6B071900 Radio Engineering, Electronics and Telecommunications", "5B074600 Space technics and technology" of Non-commercial JSC "Almaty University of power Engineering and Telecommunications"

№	№	Criteria for evaluation	Education Organisation Position			
			Strong	satisfactory	Suggest improvementr	unsatisfactory
Standard "Management of the EP"						
1	1.	The university must have an EP published quality assurance policy.	+			
2	2.	Quality assurance policies should reflect the link between research, teaching and learning	+			
3	3.	The university should demonstrate the development of a culture of quality assurance, including in the context of the EP		+		
4	4.	A commitment to quality assurance should apply to any activity carried out by contractors and partners (outsourcing), including in the implementation of joint / double degree education and academic mobility.		+		
5	5.	The management of the EP ensures the transparency of the development of the development plan of the EP based on the analysis of its functioning, the real positioning of the university and the focus of its activities on meeting the needs of the state, employers, interested persons and students.		+		
6	6.	The educational programme manual demonstrates the functioning of the mechanisms for the formation and regular review of the education programme development plan and its implementation monitoring, assessing the achievement of learning goals, meeting the needs of students, employers and society, making decisions aimed at continuous improvement of the education programme.	+			
7	7.	The management of the EP should involve representatives of groups of interested parties, including employers, students and teaching staff in the formation of the development plan of the EP.	+			
8	8.	The management of the education programme should demonstrate the individuality and uniqueness of the development plan of the EP, its consistency with national development priorities and the development strategy of the organisation of education.	+			
9	9.	The university must demonstrate a clear EP, the definition of		+		

		those responsible for business processes in the framework of the EP, an unambiguous distribution of the duties of the staff, and delimitation of the functions of collegial bodies.				
10	10.	The management of the EP should provide evidence of the transparency of the EP management system.		+		
11	11.	The management of the EP should demonstrate the successful functioning of the internal quality assurance system of the EP, including its design, management and monitoring, their improvement, and decision-making based on facts.			+	
12	12.	EP management should manage risk.		+		
13	13.	The management of the EP should ensure the participation of representatives of interested parties (employers, teaching staff, students) in the collegial bodies of the EP, as well as their representativeness in making decisions on the EP of the EP management.	+			
14	14.	The university should demonstrate innovation management in the framework of the EP, including the analysis and implementation of innovative proposals	+			
15	15.	The management of the EP should demonstrate evidence of openness and accessibility for students, faculty, employers and other interested parties.		+		
16	16.	The management of the EP must be trained in educational management programs.		+		
17	17.	The management of the EP should strive to ensure that the progress made since the last external quality assurance procedure is taken into account in preparation for the next procedure.		+		
		Total standard	**7**	**9**	**1**	**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 management of the EP should demonstrate the systematic use of processed, adequate information to improve the internal quality assurance system.		+		
20	3.	As part of the EP, there should be a system of regular reporting, reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of the departments and departments, scientific research.		+		
21	4.	The university must establish the frequency, forms and methods of evaluating the management of the EP, the activities of collegial bodies and structural units, senior management, and the implementation of scientific projects.		+		
22	5.	The university must demonstrate the EP, the determination of the order and ensuring the protection of information, including the EP, the definition of responsible persons for the accuracy and timeliness of the analysis of information and the provision of data.	+			
23	6.	An important factor is the involvement of students, workers and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them.		+		

24	7.	The management of the EP should demonstrate the existence of a mechanism for communication with students, employees and other interested parties, including the existence of conflict resolution mechanisms.		+		
25	8.	The university should provide a measure of the degree of satisfaction of the needs of faculty, staff and students in the framework of the EP and demonstrate evidence of elimination of the identified deficiencies.		+		
26	9.	The university should evaluate the effectiveness and efficiency of activities, including in the context of the EP.	+			
		Information collected and analyzed by the university should take into account:				
27	10.	key performance indicators;	+			
28	11.	the dynamics of the contingent of students in the context of forms and types;	+			
29	12.	level of academic achievement, student achievement and expulsion;	+			
30	13.	satisfaction of students with the implementation of the EP and the quality of education at the university;		+		
31	14.	the availability of educational resources and support systems for students	+			
32	15.	employment and career growth of graduates.	+			
33	16.	Students, employees and faculty must document their consent to the processing of personal data.		+		
34	17.	The guidance of the EP should facilitate the provision of all necessary information in relevant fields of science.	+			
		Total standard	**9**	**8**	**0**	**0**
Standard "Development and approval of EPs"						
35	1.	The university should have an EP to define and document the development procedures of the EP and their approval at the institutional level.	+			
36	2.	The management of the EP should ensure that the developed EP is in compliance with the established goals, including the intended learning outcomes.	+			
37	3.	The management of the EP should ensure the availability of the developed models of the graduate EP, the EP describing the learning outcomes and personal qualities.	+			
38	4.	The management of the EP should demonstrate the conduct of external examinations of the EP.	+			
39	5.	The qualifications obtained at the end of the EP should be clearly the EP allocated, explained and consistent with the EP at a certain level of the NSC.	+			
40	6.	The management of the EP should The EP to determine the impact of disciplines and professional practices on the formation of learning outcomes.	+			
41	7.	An important factor is the ability to prepare students for professional certification.		+		

42	8.	The management of the EP should provide evidence of the participation of students, faculty and other stakeholders in the development of the EP, ensuring their quality.		+		
43	9.	The complexity of the EP should be clearly The EP is defined in Kazakhstan loans and ECTS.		+		
44	10.	The management of the EP should provide the content of academic disciplines and learning outcomes of the level of training (bachelor's, master's, doctoral).		+		
45	11.	The structure of the EP should provide for various types of activities corresponding to the learning outcomes.		+		
46	12.	An important factor is the availability of joint EP with foreign educational organisations.		+		
		Total standard	**6**	**6**	**0**	**0**
Standard "Continuous monitoring and periodic evaluation of EPs"						
47	1.	The university should monitor and periodically evaluate the EP in order to ensure the achievement of the goal and meet the needs of students and society. The results of these processes are aimed at continuous improvement of the EP.	+			
		Monitoring and Periodic Evaluation EP should consider:				
48	2.	the content of the programs in the light of the latest achievements of science in a particular discipline to ensure the relevance of the taught discipline;	+			
49	3.	changes in the needs of society and the professional environment;	+			
50	4.	load, academic performance and graduation;	+			
51	5.	the effectiveness of student assessment procedures;		+		
52	6.	expectations, needs and satisfaction of students with training in the EP;		+		
53	7.	educational environment and support services and their relevance to the objectives EP.	+			
54	8.	The university and the management of the education programme must provide evidence of the participation of students, employers and other stakeholders in the revision of the education programme.		+		
55	9.	All interested parties should be informed of any planned or taken actions in relation to the EP. All changes made to the EP must be published in the EP.		+		
56	10.	The management of the EP should provide a review of the content and structure of the EP taking into account changes in the labor market, the requirements of employers and the social request of the company.	+			
		Total standard	**6**	**4**	**0**	**0**
Standard "Student-centered Learning, Teaching and Assessment"						
57	1.	The management of the EP should ensure respect and attention to various groups of students and their needs, providing them with flexible learning paths.	+			
58	2.	The management of the EP 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 teaching methods of educational disciplines EP		+		
60	4.	The management of the EP should demonstrate the existence of a feedback system on the use of various teaching methods and assessment of learning outcomes.		+		
61	5.	The management of the EP should demonstrate support for the autonomy of students with simultaneous guidance and assistance from the teache		+		
62	6.	The management of the EP should demonstrate the existence of a procedure for responding to student complaints.		+		
63	7.	The university must ensure the consistency, transparency and objectivity of the mechanism for assessing learning outcomes for each EP, including the appeal.		+		
64	8.	The university must ensure that the procedures for evaluating student learning outcomes EP are planned learning outcomes and program objectives. Criteria and assessment methods in the framework of the EP should be published in advance.		+		
65	9.	The university should have an EP, defined mechanisms for ensuring that each graduate learns the EP of learning outcomes and ensures the completeness of their formation.		+		
66	10.	Evaluators must be proficient in modern methods of assessing learning outcomes and regularly improve their skills in this area.		+		
		Total standard	**1**	**9**	**0**	**0**
Standard "Students"						
67	1.	The university should demonstrate a policy for the formation of the contingent of students from admission to graduation and ensure the transparency of its procedures. The procedures governing the life cycle of students (from admission to completion) must be defined, approved, and the EP published		+		
68	2.	The management of the EP should demonstrate the implementation of special adaptation and support programs for newly arrived and foreign students.		+		
69	3.	The university must demonstrate the conformity of its actions to the Lisbon Recognition Convention.		+		
70	4.	The university should cooperate with other educational organisations and the national centers of the "EuroEP Network of National Information Centers for Academic Recognition and Mobility / National Academic Recognition Information Centers" ENIC / NARIC in order to ensure an EP of comparable recognition of qualifications.		+		
71	5.	The management of the EP should demonstrate the existence and application of a mechanism for recognizing the results of academic mobility of students, as well as the results of pre-EPs of comprehensive, formal and non-formal education.		+		
72	6.	The university should provide an opportunity for external and internal mobility of students EP, as well as assist them in obtaining external grants for training.		+		
73	7.	The management of the EP should make the maximum effort to provide students with places of practice, facilitate the employment of graduates, and maintain contact with them.		+		

74	8.	The university must provide graduates with an EDUCATION PROGRAM with documents confirming the qualifications obtained, including the results of studies, as well as the context, content and status of the education and evidence of completion.		+		
75	9.	An important factor is monitoring the employment and professional activities of graduates. EP.		+		
76	10.	The management of the EP 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 existing alumni / association.		+		
78	12.	An important factor is the availability of a support mechanism for gifted students.		+		
		Total standard	**0**	**12**	**0**	**0**
Standard "Teaching Staff"						
79	1.	The university should have an objective and transparent personnel policy, including hiring, professional growth and staff development, ensuring the professional competence of the entire staff.	+			
80	2.	The university should demonstrate the compliance of the staff potential of the teaching staff with the development strategy of the university and the specifics of the EP.	+			
81	3.	The management of the EP should demonstrate awareness of responsibility for its employees and ensure for them an EP and 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 have an EP to determine the contribution of the teaching staff of the EP in the implementation of the development strategy of the university, and other strategic documents.	+			
84	6.	The university should provide career opportunities and professional development of the teaching staff of the EP.	+			
85	7.	The management of the EP should involve practitioners in the relevant fields in teaching.	+			
86	8.	The management of the EP should provide targeted action for the development of young teachers.	+			
87	9.	The university should demonstrate the motivation of professional and personal development of teachers EP, including the promotion of the integration of scientific activity and education, as well as the use of innovative teaching methods.	+			
88	10.	An important factor is the active use of teaching staff of 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 in the framework of the EP, attracting the best foreign and domestic teachers.		+		
90	12.	An important factor is the involvement of teaching staff in the life of society (the role of teaching staff in the education system, in the development of science, the region, the creation of a cultural environment, participation in exhibitions, creative contests, charity programs, etc.).	+			
		Total standard	**9**	**3**		
Standard "Educational Resources and Student Support Systems"						
91	1.	The management of the EP should demonstrate the adequacy of material and technical resources and infrastructure.	+			
92	2.	The management of the EP should demonstrate the existence of procedures to support various groups of students, including information and counseling.		+		
		The management of the EP should demonstrate the conformity of information resources to the specificity of the EP, including the compliance of:				
93	3.	technological support for students and faculty in accordance with EPs (for example, online training, modeling, databases, data analysis programs);	+			
94	4.	library resources, including a fund of educational, methodological and scientific literature on general education, basic and majors in paper and electronic media, periodicals, access to scientific databases;		+		
95	5.	Access to educational Internet resources;		+		
96	6.	examination of the results of research, final works, dissertations on plagiarism		+		
97	7.	WI-FI functioning in the territory of the educational organisation.			+	
98	8.	The university should strive to ensure that the educational equipment and software used to master the EP are similar to those used in the relevant industries.	+			
99	9.	The university must ensure compliance with the requirements of the non-EP of the learning process.	+			
100	10.	The university should strive to take into account the needs of different groups of students in the context of the EP (adults, workers, foreign students, as well as students with disabilities).		+		
		Total standard	**4**	**5**	**1**	**0**
Public Awareness Standard						
		The information published by the university in the framework of the EP should be accurate, objective, relevant and should include:				
101	1.	ongoing programs indicating expected learning outcomes;	+			
102	2.	information on the possibility of qualification at the end of the EP;		+		
103	3.	information on teaching, training, assessment procedures;		+		
104	4.	information about passing grades and educational opportunities provided to students;		+		
105	5.	information on job opportunities for graduates.		+		
106	6.	EP management should use a variety of methods of disseminating information (including media, web resources, information networks, etc.) to inform the general public and interested parties.	+			

107	7.	Public awareness should include support and clarification of national development programs of the country and the system of higher and postgraduate education.		+		
108	8.	The university should publish audited financial statements on its own web resource.		+		
109	9.	The university should demonstrate the reflection on the web resource of information characterizing the university as a whole and in the context of the EP.		+		
110	10.	An important factor is the availability of adequate and objective information about the teaching staff of the EP, broken down by personalities.		+		
111	11.	An important factor is informing the public about cooperation and interaction with partners in the framework of the EP, including with scientific / consulting organisations, business partners, social partners and educational organisations.		+		
112	12.	The university should post information and links to external resources based on the results of external evaluation procedures.		+		
113	13.	An important factor is the participation of the university and the implemented EP in a variety of external assessment procedures	+			
		Total Standard	**3**	**10**	**0**	**0**
NATURAL SCIENCES, AGRICULTURAL SCIENCES, TECHNICAL SCIENCES, AND TECHNOLOGIES						
		EPs in the areas of "Natural Sciences", "Technical Sciences and Technologies", such as "Mathematics", "Physics", "Information Systems", etc., must meet the following requirements:				
114	1.	In order to familiarize students with the professional environment and relevant EPs in the field of specialization, as well as to acquire skills on the basis of theoretical training, the education program should include disciplines and EPs aimed at obtaining practical EPs and skills in the specialty in general and majors in particular , including: - field trips to enterprises in the field of specialization (factories, workshops, research institutes, laboratories, training programs, household farms, etc.), - conducting individual classes or entire disciplines at the enterprise of specialization, - holding seminars to solve practical problems relevant for enterprises in the field of specialization, etc.	+			
115	2.	The teaching staff involved in the education program should include full-time teachers who have a long EP and work as a full-time employee at enterprises in the field of specialization of the EP.	+			
116	3.	The content of all disciplines The EP should be based to one degree or another and include a clear relationship with the content of the fundamental natural sciences, such as mathematics, chemistry, physics.	+			
117	4.	The guidance of the EP should provide measures to strengthen practical training in the field of specialization.	+			
118	5.	The management of the EP should provide training for students in the application of modern information technologies.	+			
		Total standard	**5**			
		Total	**53**	**63**	**2**	**0**