REPORT
on the results of the work of the external expert evaluation committee for compliance with the requirements of the educational programmes standards of specialised accreditation "5B060200 Informatics", "5B100200 Information Security Systems", "5B070300 Information Systems", "6M070300 Information Systems", "5B070400 Computing Equipment and Software" and "6M070400 Computing Equipment and Software"
Non-profit JSC "Almaty University of Energy and Communications"
from "04" to "07" March 2019

INDEPENDENT AGENCY ACCREDITATION AND RATING
External expert committee

Addressed to the
Accreditation Council
of the IAAR

REPORT
on the results of the work of the external expert evaluation committee
for compliance with the requirements of the educational programmes standards of
specialised accreditation "5B060200 Informatics", "5B100200 Information Security
Systems", "5B070300 Information Systems", "6M070300 Information Systems",
"5B070400 Computing Equipment and Software" and "6M070400 Computing Equipment
and Software"
Non-profit JSC "Almaty University of Energy and Communications"
from "04" to "07" March 2019

Almaty city   **March 07, 2019**

2

CONTENT

I LIST OF SYMBOLS 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
VUZ - University of higher education
EEC - external expert commission
GOSO - state mandatory educational standards
GPRO - State Programme for the Development of Education
KATU - Kazakh Agrotechnical University named after S. Seifullin
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
OP - educational programme
Faculty - faculty
QMS - quality management system
OO - Educational Organization
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
IT –information technologies
IS - information systems
AIS - automated information system
IT - information technology
SWOT –Strengths Weakness Opportunities Threats
ISO, ISO - The International Orqanization for Standardization
LLP - limited liability partnership
NK - national company
ECTS - European Credit Transfer System
QS - Quacguarelli Symonds
EEC - Eurasian Economic Community
UNT - Unified National Testing
KTA - comprehensive testing of applicants
MPD - personnel management and document management
GK RK - Civil Code of the Republic of Kazakhstan
DAV - Academic Affairs Department
DVR - Department of Educational Work
BC and AIA - life safety and environmental protection
ITETT - Institute of Heat and Power Engineering
CIB - computer and infocommunication security
NAO AUPET - Non-Profit Joint-Stock Company Almaty University of Power Engineering and Telecommunications
PTE - industrial heat power engineering
TEU - thermal power plants
TNIL - thematic research laboratories
TUPl - typical curriculum
Center for Scientific Research and Technology Development
DIT - Department of Information Technology

(II) INTRODUCTION

In accordance with the order of the Director of NAU "NAAR" No. 20-19-OD from January 26, 2019, from March 4 to March 7, 2019, the EEC conducted an assessment of the compliance of educational programmes with the standards of specialised accreditation of the IAAR (approved February 24, 2017 No. 10- 17-OD, fifth edition).

The EEC report contains an assessment of the educational programmes submitted to the criteria of the IAAR, recommendations of the EEC for further improvement of educational programmes and parameters of the AUES educational programmes profile.

The composition of the EEC:

Chairman - Shunkeev Kuanyshbek Shunkeevich, Doctor of Physics and Mathematics, Professor, First Vice-Rector of Aktobe Regional State University. K.Zhubanova (Aktobe).

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

Foreign expert - Tayirov Mitalip Muratovich, Doctor of Physics and Mathematics, Professor of Batken State University (Kyzyl-Kiya, Kyrgyz Republic).

The foreign expert is Alexander Luschik, Doctor of Physics and Mathematics, Professor, Head of the Laboratory of Ion Crystal Physics, Institute of Physics, University of Tartu (Tartu, Estonia).

National expert - Movkebaeva Galiya Akhmetvalievna, Professor of the Department of International Relations and World Economy of the Kazakh National University. Al-Farabi (Almaty).

National expert - Kulzhumieva Aiman Amangeldinovna, Ph.D., associate professor of the Department of Mathematics, West Kazakhstan University. M. Utemisov (Uralsk).

National expert - Urmashev Baydaulet Amantayevich, Ph.D., associate professor, head of the department of informatics of the Kazakh National University. Al-Farabi (Almaty).

National expert - Alexander Baklanov, Ph.D., head of the department of instrument making and process automation, East Kazakhstan State Technical University. D. Serikbayev (Ust-Kamenogorsk).

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

The national expert is Alimgazin Altay Shurumbayevich, Doctor of Technical Sciences, Professor of the Department of Heat Power Engineering of the Eurasian National University named after LNGumilyov (Astana).

National expert - Serik Karataevich Zhumazhanov, Ph.D., teacher of the electrical equipment operation department of the Kazakh Agrotechnical University. S.Seifullin (Astana).

National expert - Markovsky Vadim Pavlovich, Ph.D., associate professor, head of the department of electric power industry of Pavlodar State University. S.Toraigyrov (Pavlodar).

The employer is Nurusheva Aliya Zinedenovna, expert of the 1st category of the human capital development department of the Chamber of Entrepreneurs of Almaty (Almaty).

Student - Imanғazy Ermұrat Sakhatuly, 4 courses of specialty 5B075200 - Engineering systems and networks of the Kazakh Leading Academy of Architecture and Construction, member of the Alliance of Students of Kazakhstan (Almaty).

The student is Kasymkhan Aizada Aydinқyza, who is studying for 3 courses of the specialty 5B070400 - Computing equipment and software of the Kazakh National University. Al-Farabi (Almaty).

Student - Kuyshybayeva Roza Maratkizi, undergraduate of the 1st course of the specialty 5B070200 - Automation and control of the Kazakh National Technical University. K.I. Satpayev (Almaty).

Observer - Niyazova Guliyash Balkenovna, Project Manager for the institutional and specialised accreditation of universities of the IAAR.

III SUBMISSION OF EDUCATION ORGANISATION

In 1960, for the first time in Kazakhstan, training of power engineers for the power industry of Kazakhstan was started on the basis of KazPTI. To this end, in 1961, an energy department was opened at KazPTI, which in 1975 was transformed into an independent educational institution, the Almaty Energy Institute, in accordance with the decisions of the Central Committee of the CPSU and the Council of Ministers of the USSR and the Central Committee of the Communist Party of Kazakhstan and the Council of Ministers of the Kazakh SSR.

In 1996, by a resolution of the Government of the Republic of Kazakhstan, the Almaty Energy Institute was attached to the Kazakh National Technical University as an Educational and Scientific Complex of Energy and Telecommunications. But already in May 1997, according to the Decree of the Government of the Republic of Kazakhstan, the university again gained independence as a non-state one and was renamed taking into account the training of specialists in power engineering and telecommunications as "Almaty Institute of Energy and Communications".

From July 1, 2010, the Almaty Institute of Energy and Telecommunications received the status of a university - NAO Almaty University of Energy and Communications with the right to prepare masters and doctors of PhD in accordance with the new Law on Education.

Training in AUES is carried out in accordance with the perpetual State license to engage in educational activities.

The contingent of students on 01.02.2019: students - 3838 (full-time studies), 212 (correspondence courses); undergraduates - 273; doctoral students - 61.

The staff of the faculty is 436, including 34 doctors of science, 185 candidates of science, 26 PhD.

IV DESCRIPTION OF PREVIOUS ACCREDITATION PROCEDURE

Previous accreditation conducted by IEQAA in 2014.

(V) DESCRIPTION OF EEC VISIT

The work of the EEC was carried out on the basis of the programme of the visit of the expert committee on specialised accreditation of the EP to AUES from 4 to 7 March 2019.

To obtain objective information about the quality of the EP and the entire infrastructure of the university, clarifying the content of the self-assessment reports, meetings were held with the rector, vice-rectors for the areas of activity, directors of institutes, heads of structural divisions (administrative department, human resources department, finance and accounting department, marketing department and Economic Planning, Department of Academic Affairs, Department of International Cooperation and Academic Mobility, etc.), blowing of departments, teachers, trainees, graduates and employers. A total of 146 people took part in the meetings (Table 1).

Table 1. Information about employees and students who participated in meetings with the EEC of the IAAR.

Category of participants	Amount
Rector	1
Vice-Rectors	3
Heads of structural units	22
Directors of institutions	4
Heads of Chairs	12
Teachers	25
Undergraduates	30
Graduates	29
Employers	20
Total	**146**

During the excursion, the EEC members familiarized themselves with the state of the material and technical base, visited the departments of "ISS" and "IT engineering", laboratories "Oracle", "Wireless networks security", "LabView software and hardware systems and ERP systems", "Inspector", Security of Network Technologies, Cisco Academy, Security of Mobile Systems and Networks, Computer and Information and Communication Security, Kaspersky Lab, sports halls and university library.

During the visit, the EEC was conducted survey of faculty and students.

A visit to the bases of practices of Almaty Power Plants JSC, Directorate Academy of Infocommunication Technologies, Eltex Alatau LLP, Avrora Service LLP, Saiman Corporation LLP, a subsidiary of the People's Bank Kazteleport and the Astrophysical Institute named after them were organized. V.G. Fesenko. "Almaty Electric Power Plants" JSC is the base of dual training for AUES students who not only get access to work, get acquainted with safety techniques, but also master working professions. On the organization of dual training was described in detail during a visit to the practice base.

The branches of the IT Engineering and ISS departments are operating in Greetgo! LLP

and the Information and Computing Technologies Institute REU at the MES RK Scientific Practical Institute, where practical training is held and students undergo professional practice.

During the observation of the educational process, teachers' classes were attended, the information is given in table 2.

Table 2. Attendance.

Date, time, audience	Discipline, view, topic	Full name of the teacher	Specialty, course, number of students
05.03.19, 9.20, ауд. 214	"Basics of Information Security", lecture, the topic "The main elements of security policy. The main components of security "	Art. teacher Manankova O.A.	B100200 - ISS, 1 year, 17 students
05.03.19, 10.40, 310	"Operating Systems. Linex ", laboratory lesson, theme" Downloaders "	Art teacher Absatarova B.R.	5B070300 - IS, 2nd year, 11 students

After attending classes by members of the EEC, the course of the classes, students' notes, compliance with the syllabus topic, quality and methods of teaching were analyzed.

Open lecture lesson "Basic elements of security policy. The main components of security "in the discipline" Basics of Information Security "for the 1st year students of the specialty" 5B100200 Information Security Systems "did not pass at the proper methodological level. Senior teacher Manankova O.A. Department "ISS" did not use interactive teaching methods using technical means.

Laboratory lesson "Loaders" in the discipline "Operating Systems. Linex "for the 2nd year students of the specialty" 5B070300 Information Systems "corresponds to the syllabus, the content and organization of work are well prepared. Senior teacher Absatarova B.R. The IT Engineering department has demonstrated a high scientific and methodological potential, used methods of securing the material with explanations, a gradual transition from tasks under the supervision of a teacher to independent implementation.

The events planned during the visit of the WECA contributed to a detailed familiarization of experts with the university's educational infrastructure, material and technical resources, teaching staff, representatives of employers' organizations, students and graduates. This allowed the members of the EEC of the IAAR to carry out an independent assessment of the conformity of the data set out in the reports on self-assessment of the university EP to the criteria of the specialised accreditation standards of the IAAR.

As part of the planned programme, recommendations for improving the university's activities, developed by the EEC following the results of the examination, were presented at a meeting with the management on March 7, 2019.

(VI) CONFORMITY TO SPECIALISED ACCREDITATION STANDARDS

6.1. Standard "Management of the educational programme"
The evidence part

Academic activities of AUES are based on the main regulatory educational documents of the MES RK.

SS "5B060200 Informatics", "5B100200 Information Security Systems", "5B070300 Information Systems", "6M070300 Information Systems", "5B070400 Computing Equipment and Software" and "6M070400 Computing Equipment and Software" are implemented in accordance with state license AB 0137445 dated 08/04/2010 and appendix to license No. 0137445 dated 08/04/2010.

The implementation and development of accredited programmes is determined by the mission, development strategy of the university, as well as the development plans of the EP.

The mission of the university is the formation of the best intellectual resources of the national economy of knowledge and the most advanced technologies for the industrial-innovative development of the country, adapted to the conditions of world integration and globalization.

The mission corresponds to the current management system, the Policy in the field of ensuring the quality of education. The mission, goals and objectives for the development of the university were based on the mission, goals and objectives of the national education system set forth in the Laws of the Republic of Kazakhstan "On Education" and "On Science", "Strategies for Industrial-Innovative Development of the Republic of Kazakhstan", "Strategic Plan of the MES RK ".

The university's leadership sets a very high and ambitious goal - to transform AUES by 2025 into an advanced research university in Central Asia in the fields of energy, telecommunications, information and aerospace technologies.

The development and management of accredited EPs is carried out in accordance with:

The State Programme for the Development of Education of the Republic of Kazakhstan for 2011-2020;

State educational standards of higher and postgraduate education (Resolution of the Government of the Republic of Kazakhstan dated August 23, 2012 No. 1080);

Dublin handles consistent with the European qualifications framework;

By the messages of the Head of State N.A. Nazarbayev to the people of Kazakhstan "Strategy Kazakhstan - 2050".

The necessary information, personnel, financial and material-technical resources, as well as regulatory and legal documentation, ensuring the implementation of the EP, are available to manage the EP.

The administration of EP attracts representatives of employers, teaching staff and students to determine the directions of development of EP and their management.

To assess the success of the EP implementation plan, external and internal experts are audited, the objects of which are educational and methodical documentation of specialties and disciplines, the compliance of their content with regulatory requirements. If a discrepancy is found, measures are taken, action plans are developed to eliminate them.

AUES has a published Quality Policy, in which the key role is played by the interaction between teaching, research and training, as well as between the business community and the university.

As part of the implementation of the Message of the President of the Republic of Kazakhstan N.A. Nazarbayeva, "The Third Modernization of Kazakhstan: Global Competitiveness", the Cybersecurity Concept of Kazakhstan (Kazakhstan's Cyber Security) and

given the importance of the EP "5V100200 Information Security Systems" in ensuring the national security of the state, a separate department "Information Security Systems" was created.

An accessible educational resource environment has been created for training in all accredited EPs, including computer equipment, licensed software, educational and scientific laboratories, computer classes, reading rooms, a book fund, a fund of digital learning materials, etc. Determining the need for equipment, literature and software is carried out by the head of the department, on the basis of whose applications the corresponding resources are procured. Documents regulating the management of educational activities at the department are formed in accordance with the nomenclature of cases.

Analytical part

The EEC NAAR conducted meetings, conversations and interviews with the rector, vice-rectors, directors of institutes, heads of departments, heads of departments, students, teaching staff, representatives of employers' organizations and graduates, as well as carrying out questioning of teaching staff and students, detailed knowledge of the university's educational infrastructure, materially -technical and information-methodical resources and the necessary documents notes the following.

1. The university has a published Quality Policy, in which the key role is played by the interaction between teaching, research and training, as well as between the business community and the university. This is evidenced by the fact that the approved copies of the Mission and the Quality Policy are posted on the University website (http://info.aues.kz/info/documents/8.pdf), in the stands of departments and institutes, in the library, i.e. in accessible places to ensure familiarity with the documents of all teaching staff, employees and students, as well as employers and other interested persons.

2. The EP's management ensures the transparency and collegiality of the development of the EP's development plan and its focus on meeting the needs of the state, employers, stakeholders and students. This is evidenced by the activities of the Academic Council, the EMC and the SMS of the departments and institutes, the Academic Council of the departments providing management of the main processes of the university.

3. The administration of EP attracts employers, students and teaching staff to formulate a plan for the development of EP. At the departments there are Academic Councils on EP, in which employers, students and teaching staff participate on an ongoing basis. The composition was reviewed at a meeting of the departments and approved by Protocol No. 6 of January 24, 2018.

4. Despite the fact that the EP management has demonstrated the functioning of the internal quality assurance system of the EP, however, the commission concluded that the management and monitoring of the functioning of the internal quality assurance system of the EP should be improved.

5. Consideration should be given to the possibility of undergoing training by the management of the EP of educational management programmes.

6. A survey of faculty members conducted during the visit of the EEC IAAR showed that

    - a reflection of the mission and strategy of the university in innovative programmes: very good and good - 98.3%, relatively poor - 1.7%;

    - involvement of teaching staff in the process of making managerial and strategic decisions: very good and good - 89%, relatively bad - 8.5%, bad and very bad - 2.5%;

    - satisfaction of the needs of the faculty with the content of the EP is 99.2%.

Strengths / Best Practices

Published Quality Policy, in which the key role is played by the interaction between teaching, research and training, as well as between the business community and the university.

Transparency and collegiality of the development plan for the EP and its focus on meeting the needs of the state, employers, stakeholders and students.

Involvement of employers, students and teaching staff in the formation of a plan for

the development of EP.

EEC recommendations

Improve the management and monitoring of the functioning of the internal quality assurance system of the EP.

Consider the possibility of passing training by the leadership of the EP educational management programmes.

The conclusions of the EEC according to the standard "Management of the educational programme" have strong - 7, satisfactory - 10, suggesting improvement - 0.

6.2. Standard "Management and Reporting Standard"
The evidence part

The university has implemented information management processes, including data collection and analysis to ensure the quality of EP implementation, to assess the performance of activities, determine the degree of fulfillment of the mission, goals and objectives, and opportunities for continuous improvement of the services provided.

In order to manage the information of the university departments, the official website of the university http://www.aues.kz is used, where the university's regulatory documents are freely available and access to information on management, planning and implementation of EP (curricula, teaching materials, timetable classes, etc.). The operational management of the exchange of information between departments is carried out through an electronic document management system (https://aues.documentolog.kz/).

The heads of the EP conduct monitoring, the results of which are reviewed at the meetings of the departments and the EMC of the institute. According to the results of the monitoring, the departments develop plans for the improvement of activities aimed at ensuring the quality of the implementation of EP.

The Department of Information Technologies of AUES has created an effective information protection system. The university has an information security and information management policy. Data provision and responsible persons are governed by internal procedures and corporate regulations.

University management and faculty are involved in the planning, implementation and monitoring of all processes carried out at the university. The participation of managers at all levels in achieving the goals is carried out through participation in the work of the Scientist, Scientific and Methodological and Scientific and Technical Councils, Councils of institutes, meetings of the administration, meetings and methodological seminars, working groups, internal university commissions, audit teams created by the Rector's decree. Responsibilities of managers at various levels, including those related to ensuring the quality of specialist training, are laid down in regulations and documented procedures on activities and job responsibilities (http://info.aues.kz/smk.html).

The form of participation of teaching staff in making management decisions is also their participation in the work of the Commissions on monitoring the educational process, meetings of the Academic Council, university administration, directorates, departments where decisions on educational, educational, scientific activities, as well as personnel issues, etc. are discussed and made. Students participate in the process of planning, implementing, monitoring the activities of

the university through university and institute youth organizations - the trade union committee of students, student clubs, for example, "Gibrat", "Ulagat ".

In order to ensure the possibility of prompt and effective access of various levels of users to educational information, the official website of the university (http://aues.kz), the educational portal (http://edu.aues.kz/), the distance learning portal (http : //online.aues.kz), which serve as a link between all participants of the educational process and are tools for collecting and providing students with current knowledge in real time.

To assess the quality, conditions and resources for the provision of educational services, as well as to identify the degree of satisfaction of faculty, staff, students conducted a survey and questioning. Questionnaire "Teacher through the eyes of students" is carried out online after completing the study of the discipline 2 times a year. The survey is conducted by anonymous filling of electronic questionnaires and is not controlled by the teacher.

Information on employers' satisfaction with the quality of graduates is collected by issuing departments on the basis of direct contacts and interviewing of employers.

The university systematically collects, accumulates and analyzes information about its activities, assesses its strengths, weaknesses, market opportunities and threats.

Analytical part

The analysis of accredited EPs according to this standard allows us to draw the following conclusions.

1. The university has a system for collecting, analyzing and managing information based on the use of ICT and monitoring student recruitment, progress, contingent movement, staff, academic mobility of faculty, students, etc., which is presented in regular reports at a meeting of departments. University Administration and Academic Council of the University.

2. The administration of the EP demonstrated the provision of information security, including the identification of those responsible for the accuracy and timeliness of information analysis and data provision. Experts note that the information technology department has created an effective information protection system, and responsible persons are governed by internal procedures and corporate regulations.

3. Information collected and analyzed by the university at the EP takes into account the availability of educational resources and support systems for students. This is evidenced by the creation of the official website of the university (http://aues.kz), the educational portal (http://edu.aues.kz/), the distance learning portal (http://online.aues.kz), which serve as a binder link between all participants in the educational process and is a tool for collecting and providing students with relevant knowledge in real time.

4. The EP's management demonstrated the growth dynamics of the contingent of students in all the accredited EP. Witness lists of students enrolled in 1 year.

5. Members of the EEC note that it is necessary to intensify work on involving all categories of stakeholders: students, employers, teaching staff and staff in the process of collecting and analyzing information, as well as making decisions based on them.

6. A survey of students, conducted during the visit of the EEC of the IAAR, showed that satisfaction:
- the usefulness of the web site of the organization of education in general and of faculties in particular: fully satisfied and partially satisfied - 93.4%;
- informing students about courses, educational programmes and academic degrees: fully satisfied and partially satisfied - 93.4%;
- informing the requirements in order to successfully complete this specialty: fully satisfied and partially satisfied - 97.8%.

Strengths / Best Practices

Information collected and analyzed in the framework of the EP, takes into account the dynamics of the contingent of students in the context of forms and types.

Ensuring the protection of information, the definition of responsible persons for the accuracy and timeliness of information analysis and provision of data.

The growth rate of the contingent of students in all accredited EP.

Availability of educational resources and support systems for students.

EEC recommendations

To intensify work on the involvement of all categories of stakeholders: students, employers, teaching staff and personnel in the process of collecting and analyzing information, as well as making decisions based on them.

The findings of the EEC in the standard "Information Management and Reporting" have strong - 8, satisfactory - 9, suggesting improvement – 0.

6.3 Standard "Development and approval of the educational programme"

The evidence part

Accredited EPs are focused on training highly qualified specialists in the field of modern IT-technologies. The graduating departments prepare bachelors and masters with all the necessary teaching staff and material support for the implementation of the EP of higher and postgraduate education.

The structure of the EP is formed by various types of educational work depending on the level of education (BA, MSc). The university has developed a manual for the development of MEP higher and postgraduate education. In the process of EP formation, first of all, the goals, objectives and learning outcomes of the EP are determined.

EPs are developed by faculty members, employers, students, representatives of IT companies, are reviewed and discussed at department meetings, agreed with leading IT companies, associations, then at a meeting of the NMS of the Institute. The final approval of the OP is held at the NMS and the University Academic Council.

At the stage of implementation of EP, the university conducts systematic monitoring, assessment of the quality of EP with the participation of students, staff and other stakeholders.

At the departments there are Academic Councils on EP, in which employers, students, teaching staff and interested persons take part.

Thus, Saiman LLP (Aliyev A.), Kaspersky Lab (Pitolin E.), Zicom (Dzholdasbayeva Z.), DIT Asfendiyarov KazNMU (Kalenova B.S.), KazATK them. M. Tynyshpayev (Eskendirova D.M.), AzimutSolutions LLP (K. Demin), AbiTech LLP (Rakhmatullaev R.), SP of Information Security Systems, Security Monitoring Center, Egida, Three A, Cyber Attack Analysis and Investigation Center, Sberbank, Center Credit Bank.

The following disciplines are included in the MEP at the request of potential employers.:

- for EP "5B060200 Informatics", "5B070300 Information Systems" - Informatics: "IT-management" and "Project Management".

- for EP "5B070400 Computer Engineering and Software": "Server databases", "Business application development technologies";

- for EP "6M070300 Information Systems": "Multi-criteria decision-making tasks", "Methods of artificial intelligence in information systems";

- for EP 66M070400 Computing equipment and software ":" Technologies for developing software for real-time systems "," Managing the information security of corporate information systems ";

- for EP "5V100200 Information Security Systems": "Internet banking security", "Protection against unauthorized access and channels of leakage in infocommunication networks".

Ensuring transparency of the EP contributes to credit technology, which allows students to build an individual learning path; choose disciplines; independently master the training courses using EMCD, electronic library resources; receive teacher consultations during IWST; track your academic ranking, etc.

Guided by the requirements of the MC, the content of CED and the academic calendar, students determine the individual trajectory for each academic year. Methodological assistance they provide advisors.

The passports of the EP include a list of qualifications and qualification characteristics of the graduate, the goals of the EP, the goals of the general modules, the EP modules and additional modules, the model of the graduate, as well as the correspondence of the results of the EP to its goals and MEP elements. The graduate model reflects the characteristics and scope of the graduate's professional activities, tasks and competencies in which the teaching staff, employers take part, taking into account assessments of student and graduate student satisfaction.

The Department of Academic Affairs verifies the compliance of the content of the EP of higher and postgraduate education with the requirements of the SES and the MC. To improve the quality of training at the university, the direction of the EP for external examination and peer review to partner universities and partner enterprises is practiced. After the compilation of the OP received her reviews from representatives of enterprises of the Republic of Kazakhstan.

Analytical part

The analysis of accredited EPs according to this standard allows us to draw the following conclusions.

1. The university documents the procedures for the development of EPs and their approval at the institutional level. This is evidenced by the fact that the study programmes are reviewed and discussed at the meetings of departments, are coordinated with leading IT companies, associations, then at a meeting of the NMS of the Institute. The final approval of the EP is held at the NMS and the University Academic Council.

2. The members of the EEC note that the accredited EPs provide components for preparing students for future professional activities, developing key competences, intellectual and academic skills.

3. EP management provided evidence of the participation of students, faculty and other stakeholders in the development of EP. Employers, students and teaching staff who are members of Academic Councils on EP (approved at the meeting of the department) take part in the development of EP.

4. Experts note that it is necessary to provide for an analysis of efficiency in the development plans of the EP, and to specify cooperation with foreign educational organizations.

5. A survey of students, conducted during the visit of the EEC of the IAAR, showed that:
- the level of availability and responsiveness of the university management: fully satisfied and partially satisfied - 92.6%;
- availability for academic counseling: fully satisfied and partially satisfied - 94.8%.

Strengths / Best Practices

Documenting the procedure for the development of EP and their approval at the institutional level.

Participation of employers, students and teaching staff in the development of EP.

Periodic update OP.

The effectiveness of the organization and conduct of professional practices.

The complexity of the OP clearly defined in Kazakhstan loans and ECTS.

EEC recommendations

To envisage in the development plans of the EP an analysis of the effectiveness and specifying cooperation with foreign educational organizations.

Conclusions of the EEC according to the standard "Development and approval of the educational programme" have strong - 5, satisfactory - 7, suggesting improvement - 0.

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

The evidence part

Constant monitoring and periodic evaluation of the accredited EPs is carried out taking into account the proposals of potential employers, managers of production practices, chairmen of the State Attestation Committee, students participating in the process of selecting and forming MEP, CED, a programme of professional practice and development of graduation projects. Also takes into account the demand for graduates in various fields with the use of information technology.

According to the development plan, the accredited EPs prepare bachelors and masters taking into account the generalization of modern domestic and international experience in training in this area, copyright and collective scientific achievements, employers' demands, labor market demands and the development of state programmes of the Republic of Kazakhstan.

So for the EP "6M070300 Information Systems", "5B070400 Computing Equipment and Software", "5B060200 Informatics" for the discipline "Information Security and Information Security" the theoretical material of the grant project implemented at the IT Engineering department, No. AP05132723 "Development of adaptive expert systems in the field of cybersecurity of critical information objects ".

The content of the EP objectives is reviewed annually, taking into account the development of science, technology, culture, economics, technology, and the social sphere, and is carried out according to the results of external and internal monitoring of the results and conditions for the implementation of the EP, including during the audit of quality management. Adjustment of the objectives of the EP provides competitiveness and relevance in the market of educational services. To study the needs and opinions on the quality of training graduates conducted a survey of enterprises-employers.

Changes in the EP are carried out at the stages of adjusting the content of the objectives, the structure of the programmes, the design of curricula and the correction of the work programmes of educational disciplines, are discussed at the EMS and the meetings of the departments. If the objectives of the programme are not achieved, the learning outcomes, ways of achieving results are revised and new goals are formulated. Heads of graduating departments prepare motivated conclusions on the need to modernize the EP.

In order to obtain information on meeting the needs of students, a survey is conducted "The teacher through the eyes of students."

The university has an automated information system "Platonus" (http://edu.aues.kz), which provides accounting and registration of students' achievements. Regularly at meetings of departments, students' achievements are discussed on the basis of information provided by advisors.

The load of students, the level of academic performance and graduation of students correspond with regulatory requirements and SES of EP.

AUES regularly informs the public and key stakeholders on all aspects of its activities, conditions and features of the implementation of the accredited EP. In its information activities, the institute relies on the principles of timeliness, objectivity and openness. Informing interested

parties about planned or taken actions with regard to EPs are notified through all available channels and technologies, including e-mail distribution, media, scientific journals, specialised events, publications and portals of university partners, design of information boards, posters, banners, information booklets on EP, posting information on the university portal, holding meetings of the advisory board of the institute, meetings of departments, etc. The official website https://aues.kz/ hosts information Ia about the development of teaching quality, trainings and training courses. All changes made to the EP, MOS, and CED are published in the Moodle system (http://online.aues.kz), the automated information system Platonus (http://edu.aues.kz), on the AUES information site (http : //info.aues.kz/).

Analytical part

The analysis of accredited EPs according to this standard allows us to draw the following conclusions.

1. The university monitors and periodically evaluates the EP in order to achieve the goal and meet the needs of students and society. This is evidenced by the fact that the MEP is regularly updated not only structurally, but also meaningfully, while the requirements of the labor market, employers, students, teaching staff and chairmen of the SJC are taken into account when developing elective courses, developing the content of a programme of professional practice and choosing graduation topics.

2. According to the development plan, the accredited EPs prepare bachelors and masters taking into account the generalization of modern national and international experience in this area, author's and collective scientific and educational achievements, employers' demands, labor market demands and the development of state programmes of the Republic of Kazakhstan. Experts note that the revision of the content of the MEP and CED occurs annually, taking into account the requirements of the market and the wishes of students, employers.

3. EP management informs interested parties about all changes made to the EP. All changes made to the EP, MOS, and CED are published in the Moodle system (http://online.aues.kz), the automated information system Platonus (http://edu.aues.kz), on the AUES information site (http : //info.aues.kz/).

4. The university has an automated information system "Platonus" (http://edu.aues.kz), which provides accounting and registration of students' achievements. However, experts note that it is necessary to regularly enter information about the students' progress in the Platonus system.

5. A survey of students, conducted during the visit of the EEC IAAR, showed that students assess the overall quality of the curriculum as fully satisfied and partially satisfied - 91.2%.

Strengths / Best Practices

Conduct monitoring and periodic evaluation of EPs to ensure that the goal is met that meets the needs of students and society;

Load, academic performance and graduation of students;

Participation of students, employers, students and teaching staff in the revision of the OP.

The content of the programmes in the light of the latest achievements of science, the preparation of bachelors and masters taking into account the generalization of modern domestic and international experience of training in this area, author and collective scientific achievements.

Satisfaction of students with the quality of training in the accredited EP.

EEC recommendations

Regularly enter information about student performance in the Platonus system.

Conclusions of the EEC according to the standard "Continuous monitoring and periodic evaluation of educational programmes" have strong - 6, satisfactory - 4, suggesting improvement - 0.

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

The evidence part

Academic policy of AUES is aimed at providing comprehensive support for students in higher and postgraduate education programmes on credit technology, the main task of which is to develop the ability of students to self-organize and self-educate on the basis of the educational trajectory selectivity as part of the regulation of the educational process type of loans.

The university's policy in relation to the diversity of students allows to get a decent education for various categories of students, including those who have not only materially limited opportunities, but also physical ones. There is a system of social support for the period of education for orphans and children left without parental care and under guardianship (guardianship), the visually impaired and the hearing impaired.

AUES has developed a provision on integrated (inclusive) education - a form of organization of the educational process in which students with disabilities are taught in a single stream with normally developing peers.

The university has a distance learning technology for full-time workers. The university provides the opportunity to receive a second higher education in a reduced programme.

The university has introduced the practice of teaching disciplines using the learning management system - learning management systems where faculty members place information on the discipline in full: lectures, practical exercises, syllabuses, a glossary, current tasks, test and examination questions, control tasks, tasks for independent work and additional information at the discretion of the "Moodle" teacher (http://online.aues.kz/). Thanks to this system, the student has access to the materials of the studied discipline in full.

In the bachelor degree, more typical are such teaching methods as: discussions, moderation, case methods. For the magistracy more characteristic methods aimed at the development of scientific activity - research formulation and solution of experimental hypotheses, comparative analysis, etc.

An electronic database on the academic achievements of each student, which allows systematically collecting data, monitoring and managing information about the progress of students, is formed by the office-recorder.

To assess students' educational achievements, various forms of control and certification are provided - current monitoring of progress, intermediate and final certification of students, the frequency and duration of which is carried out in accordance with the curriculum, academic calendar and professional curricula developed on the basis of SES higher education and approved by the Academic Council university.

Assessment of knowledge, skills and professional competencies, students of the credit technology of training, is carried out on a 100-point scale with the conversion of the final result into alphabetic and digital equivalent.

The appeal on the results of the intermediate and final certification is held no later than 3 working days after the day of filing the appeal. The decision on the appeal is made by a majority vote of the total number of members of the commission. The decision of the Appeals Panel on the assessment is final. Appeal results are documented by minutes.

Analytical part

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

1. During the visit, the EEC noted that there is an impetus for the introduction of modern technologies and techniques, however, faculty members are encouraged to conduct their own research in the field of teaching special (technical) disciplines within the framework of the EP.

2. An important factor is the presence of double-diploma education, therefore it is necessary to find a university partner and implement double-diploma education.

3. The leadership of the EP should organize regular training of teaching staff on higher education pedagogy and methods of teaching technical disciplines.

4. In AUES there is a magistracy only in Russian. The leadership of the EP should consider the possibility of opening a magistracy in the Kazakh language, especially since the number of graduates of the undergraduate department of the Kazakh department exceeds the number of graduates of the Russian department.

5. A survey of students, conducted during the visit of the EEC of the IAAR, showed that students evaluate

- the fairness of examinations and certification as fully satisfied and partially satisfied - 97.8%;
- tests and examinations conducted as completely satisfied and partially satisfied - 98.5%.

Strengths / Best Practices

AUES provides consistency, transparency and objectivity of the mechanism for assessing learning outcomes for each EP.

Support for student autonomy with simultaneous guidance and assistance from the teacher.

Getting a decent education to various categories of students, including those who have not only materially limited opportunities, but also physical ones.

EEC recommendations

Consider the possibility of implementing a two-diploma education.

Conduct their own research in the field of teaching special (technical) disciplines within the EP.

Organize regular advanced training in higher education pedagogy and methods of teaching technical disciplines.

Consider the possibility of opening a magistracy in the Kazakh language.

Conclusions of the EEC on the standard "Student-centered learning, teaching and assessment of performance" have strong - 0, satisfactory - 9, suggesting improvement - 1.

6.6 Standard "Students"

The evidence part

The conditions that ensure the stability of the recruitment of students and undergraduates for training in an accredited EP are:

- availability of state order for training specialists in EP;
- carrying out the department of systematic career guidance;
- the presence of a department of stable highly qualified faculty;
- high ranking positions of the university;
- modern material base;
- having long-term cooperation with partners, main and potential employers.

Acceptance of persons entering AUES is carried out by placing the state educational order, as well as paying tuition at the expense of citizens' own funds and other sources.

During the accredited period, you can see the dynamics of growth of the contingent of students, information is given in table 3.

Table 3. The contingent of students on the accredited EP

Name and code of EP	Контингент обучающихся (Грант/платное)			
	2015-2016	2016-2017	2017-2018	2018-2019
5B070400 Computing and Software	193/61	171/40	161/43	212/45
5B070300 Information Systems	76/31	62/31	72/38	129/36
5B060200 Computer Science	70/29	71/21	93/13	71/38
5V100200 Information Security Systems	42/94	38/107	54/116	84/112
6M070400 Computing and Software	9/17	5/14	6/8	12/4
6M070300 Information Systems	3/2	1/4	14/4	25/6

Enrolled in the 1st year of students, the university provides a reference guide, which reflects: the Internal Regulations, the mode of operation of all services, full name. administration, heads of institutions, the procedure for paying for studies, criteria for evaluating learning outcomes, information about educational courses, a telephone directory, etc.

Training foreign students is an important indicator of the effectiveness of internationalization of education. As part of the adaptation, foreign students will be accommodated in the university dormitories on a fee basis. The range of services provided to foreign students, in addition to educational services and paperwork, also includes assistance and support in adapting to a new educational and socio-cultural environment.

The issuance of a diploma supplement of the European sample is one of the main parameters of the Bologna process. The application is recognized by all foreign universities with continuing studies and foreign companies in employment.

Academic mobility in high school is governed by the Regulations on Academic Mobility. Students, who have passed competitive selection for participation in the academic mobility programme, together with advisors and coordinators of academic mobility programmes, develop IEP training at a partner university. After completion of training at the host university, students submit to the office of the registrar a transcript of the training, which includes information about the training programme, the grade for the training in the discipline, the number of ETCS awarded, a description of the university grading system. Based on the transcript, the student transfers credits.

Outgoing external mobility prevails in AUES, with a few exceptions on inbound mobility.

Indicators of employment of graduates under the accredited EP are given in table 4.

Table 4. Graduate Employment Indicators.

Name and code of EP	Alumni contingent (total / employed)

	2015	2016	2017	2018
B070400 Computing and Software	108/69	80/79	64/64	56/47
5B070300 Information Systems	43/35	39/36	26/26	26/24
5B060200 Computer Science	21/21	29/29	10/10	27/27
5V100200 Information Security Systems	32/32	35/35	18/17	25/20
6M070400 Computing and Software	9/9	11/11	12/12	6/6
5B070400 Computing and Software	1/1	3/3	3/3	2/2

Analytical part

The analysis of accredited EPs according to this standard allows us to draw the following conclusions.

1. The university demonstrated the policy of forming a contingent of students in the context of EP. This is evidenced by the fact that the model of forming a contingent of students at the university complies with the legislation of the Republic of Kazakhstan. To increase the number of applications for admission from applicants, the university conducts active professional orientation work with school leavers.

2. EP management has demonstrated the implementation of special adaptation and support programmes for new-comers and foreign students. Experts note that admission and enrollment at the EP are accompanied by an introductory course containing information about the university and the specifics of the EP. Students of the 1st course are given a guidebook, in which there is all the necessary information. Foreign students, in addition to educational services and paperwork, are assisted and supported in adapting to the new educational and socio-cultural environment.

3. The university provides trainee students with an opportunity for external and internal mobility. However, it should be noted that outbound external mobility prevails, with a few exceptions to inbound mobility. In this regard, it is necessary to consider the possibility of improving the external and internal mobility of students in the context of EP.

4. The leadership of the EP should pay attention to strengthening the interaction of graduates with the alumni association.

Strengths / Best Practices

The policy of formation of a contingent of students of EP from receipt to release provides transparency of its procedures.

Procedures governing the life cycle of students approved and published.

Admission and enrollment at the EP are accompanied by an introductory course containing information about the organization of education and the specifics of the EP.

The possibility of professional practice in public and private organizations of the city, region and republic.

EEC recommendations

Consider the possibility of improving the external and internal mobility of students in the context of EP.

Strengthen the interaction of graduates with the alumni association.

Conclusions WEC under the standard "students" have strong - 0, satisfactory - 12, suggesting improvement - 0.

6.7 Standard "Teaching Staff"

The evidence part

Personnel policy is carried out in accordance with the main priorities of the university strategy. The staff of the teaching staff of the EP is staffed in accordance with the legislation of the Republic of Kazakhstan and the Rules of competitive replacement of posts of the scientific and pedagogical staff of higher educational institutions.

Recruitment is carried out on the basis of the analysis of the needs of the EP, according to the results of which a competition is announced for the filling of vacant posts. Appointment and promotion is carried out on the basis of the order of the rector of AUES taking into account the professional competence of the staff and teaching staff. The personnel potential of the teaching staff is generally consistent with the AUES strategy and the specifics of the accredited EPs.

The department "IT-engineering" employs 40 teachers, 35 of which are full-time, including:

- Doctors of Science - 4;
- Doctors PhD - 6;
- Candidates of Science - 10.

The share of full-time faculty members with academic degrees and titles is 54%.

At the department of IT-engineering work:

- 7 full members of the IAIN (Kartbayev T.S, Kaziev G.Z., Doszhanova A.A., Kalizhanova A.U., Tusupova B.B., Nabiyeva G.S., Malikova F.U.);
- 3 corresponding members of the International Academy of Informatization (Zh.S. Aytkulov, A.Kh. Kozbakov, K. Mukapil);
- 3 holders of the title "The best teacher of the university" (Kartbayev T.S, Doszhanova A.A, Malikova FU, 2018);
- 1 Gold Medal Winner Academician Z.S. Yerzhanova (баralbaev Z.Қ.);
- 1 Honored Worker of Science and Technology RAE (T.S Kartbayev);
- 1 winner of the medal of the Ministry of Education and Science of the Republic of Kazakhstan "Ybyray Altynsarin" (Zalbayev Z.Қ.);
- 1 winner of the gold medal and diploma of quality of the European Union "Diploma di Merito" (TS Kartbayev);
- 1 winner of the gold medal of the Moscow International Salon "Archimedes-2015" for the development of a reversible helio-thermal system (Alimseitova Zh.K.).

The department "Information Security Systems" employs 24 teachers, 20 of them are full-time, including:

- Doctor of Technical Sciences, professors - 2;
- PhDs, associate professors - 10.

The share of full-time faculty members with academic degrees and titles is 51%.

At the "ISS" department, foreign specialists also work in full-time positions:

- Markosyan M. - Doctor of Technical Sciences Professor, Director of the Yerevan Research Institute of Communication Facilities (the Research Institute organizes the implementation of joint projects with leading CEaS companies for the manufacture of special telecommunications equipment);
- Margarov G.I. - Ph.D., professor, head. Department of Information Security and Software, National Polytechnic University of Armenia;

- Alaverdyan E. - Ph.D., Associate Professor, Department of Information Security and Software, National Polytechnic University of Armenia.

The following teachers with practical experience are brought to production from teaching:

- Umurzakov B.N. - Director of IT-department of the Financial company "Alliance Business Credit", a subsidiary of Alliance Bank;
- Ibrayev M.S. - programmemer of AG Plus LLP;
- Tolybaev S. - Head of the Department of "GIS-technologies" LLP "Institute of Geological Sciences. K.I. Saptaeva ";
- Ramazanova A.M. - Chief Specialist of the Department of Information Technology KazNMU them. Asfendiyarov;
- Mukapil K. - Head of the Information Technology Department of the Information Technology Department of KazNMU named after Asfendiyarov.

According to EP 5B060200 - Informatics, 5B070300 - IS, 5B070400 -CEaS the following teachers have certificates of international standard:

- certificate of JSC Kaspersky Lab (Kartbayev TS, Alimseitova Zh.K., Mukapil K., Absatarova B.R., Doszhanova A.A., Rakhimzhanova Z.M., Tusupova B.B., Tolybayev Sh .D.);
- CISCO certificate (Rakhimzhanova Z.M., Musatayeva G.T., Musapirova G.D., Toygozhinova A.Zh., Konuspaeva A.T., Bayzhanova D., Tergeusizova A., Amanzholova .I.);
- 1C certificate (M.S. Ibrayev, T.S. Kartbayev, K. Mukapil, M.A. Vorogushin).

The leadership of the EP attracts foreign lecturers to read lectures, and also supports the departure of faculty members to foreign universities for scientific internships and lectures (Kartbaev T.S., Doszhanova A.A. undertook scientific internships as part of scientific research and read guest lectures in Lublin Technical University (Lublin, Poland), B. Tusupova at the Educational and Research Center of the Yerevan Research Institute of Communication Facilities).

The results of research and teaching staff are presented in a significant number of publications. For example, during the reporting period, faculty members undergoing accreditation were published articles in journals included in the Scopus database and Web of Science.

13 teachers of the department have the Hirsch index: Bimurzaev S.B, professor, doctor of physical sciences; Kuralbayev Z.K., Doctor of Physics and Mathematics, Professor; Kartbayev T.S., PhD; Malikova F. U., doctor PhD, associate professor; Kalijanova A.U., Ph.D., associate professor; Doszhanova A.A., Doctor PhD, Associate Professor; Kozbakova A.Kh., doctor PhD, senior teacher; Alimseitova Zh.K., senior teacher; Nabiyeva G.S., Ph.D., associate professor, Mukapil K., master, senior lecturer; Kashaganova GB, doctor PhD, associate professor; Toigozhinova A., PhD, Senior Lecturer; Mamyrbaev O.Zh., doctor PhD, associate professor.

Teachers of the department "IT-engineering" for 2018 prepared and published monographs - 3, of which 1 in English; textbooks - 2; methodical instructions - 3; lecture notes - 2.

In AUES there is a motivation system for teaching staff, which provides for the annual calculation of the rating of each teacher according to different coefficients in the form of points. The method itself is presented on the university website at the following link http://info.aues.kz/info/documents/15.pdf.

The Commission notes the active work of the teaching staff on advanced training in Kazakhstan and abroad.

The teaching staff participates in the development of the test base; conducting an external evaluation of educational activities of universities; preparation of expert opinions on the quality of dissertation research, textbooks, scientific monographs; subject Olympiads for students in the field, as well as actively participate in NIRS. In addition, teachers are actively engaged in social

activities, as evidenced by the large number of awards, letters of appreciation, diplomas, prizes, etc.

Analytical part

The analysis of accredited EPs according to this standard allows us to draw the following conclusions.

1. The university has an objective and transparent personnel policy. Experts note that the staff of the teaching staff of the EP is staffed in accordance with the legislation of the Republic of Kazakhstan and the Rules of competitive replacement of posts of scientific and teaching staff of higher educational institutions.

2. EP management demonstrates awareness of responsibility for its employees. For example, in the course of conversations with EEC members, teachers gave specific examples of their leadership's concern for their well-being: awarding prizes, awarding letters, letters of thanks, and others for achievements in teaching and research activities or for an anniversary, providing material assistance in case of death and etc.

3. The administration of EP attracts practitioners of relevant industries to teaching. The Commission notes the annual involvement of practitioners in conducting classes.

4. The university demonstrated the motivation of professional and personal development of teachers of EP. This is evidenced by the presence in the university of each teacher's rating on various factors in the form of points.

5. EEC notes. This is evidenced by the fact that 13 PPS have the Hirsch index.

6. The EEC notes that work should continue on the academic mobility of faculty (external and internal) in the framework of the EP.

7. According to the results of the survey of teaching staff accredited by the EP, the promotion of innovative activity of teaching staff was rated as very good and good - 96.6%.

Strengths / Best Practices

- The university has an objective and transparent personnel policy, including recruitment, professional growth and staff development, ensuring the professional competence of the entire state;
- The management of the EP is aware of the responsibility for its employees and provides them with favorable working conditions;
- The active participation of faculty in various public, scientific, methodological and research, mass cultural and other events in the region and the Republic of Kazakhstan;
- high research and publication activity of faculty;
- 3 teachers of the department "IT-engineering" won the grants "The best teacher of the university - 2018" (Kartbayev T.S, Doszhanova A.A, Malikova F.U);
- involvement in teaching faculty with practical experience in the production.

EEC recommendations

- to continue work on academic mobility of faculty (external and internal) in the framework of EP.

Conclusions of the EEC according to the standard "Teaching staff" have strong - 9, satisfactory - 3, suggesting improvement - 0.

6.8 Standard "Educational resources and student support systems"

The evidence part

AUES has a material and technical base that provides for carrying out all types of practical training and R & D of students, provided by the EP of the university and corresponding to the current sanitary-epidemiological and fire safety rules and regulations.

The university has the necessary classroom fund, computer classes, gyms, a rich book fund. EP are equipped with the necessary classroom fund, educational and scientific laboratories, computer classes, teaching materials and specialised classrooms. In the 2018-2019 school year, the Kaspersky Lab Center was opened.

The university has the following educational and research laboratories, on the basis of which disciplines and research are conducted:
- "Security of network technologies" (413B);
- "Security of mobile systems and networks" (127B);
- "Technical means of information protection" (420B);
- "Computer and infocommunication security" (414B);
- Cisco Academy (321B);
- "Microprocessor systems" (419B);
- Center Kaspesky (317B);
- Laboratory of Information Security Programmeming (407B).

These laboratories are equipped with equipment and software products of well-known companies that meet modern requirements for information security.

Only at the end of 2018 and at the beginning of 2019:
- on the basis of a cooperation agreement, SPA Echelon (Moscow, Russian Federation) donated its well-known developments, three software systems KomRad, VS Scanner, AppCheker;
- ITMO University on the basis of the contract transferred the hardware and software complex "Modeling and analysis of attacks on computer networks";
- Russian company "Ideco" donated licenses for 300 users of the software "Security Gateway Ideco UTM Enterprise Edition -30 concurrent Users".

Over the past three years, the modernization of the material and technical support of the laboratory and technical base in readable disciplines related to cybersecurity has been made to a total of 92.5 million tenge.

In general, the material, technical, informational and library resources used to organize the process of training and education are sufficient to fulfill the stated mission, goals and objectives and meet the requirements of the educational programmes being implemented.

One of the most important units that provide information and methodological support of the educational process is the library:
- the electronic catalog "RABIS-CATALOGIZER", "RABIS-SEARCH and ORDER" and "RABIS-REGISTRATION OF READERS" and "RABIS-VISITING READERS" is kept;
- access to electronic resources through NCSTI is open: SpringerLink Web of Science; Science Direct, Scopus, and other resources: "Polpred.com", the electronic library "IPRbooks", the electronic library "The publishing house" Lan ", the RSL of the theses, the electronic library" Urayt ", the" RBEB ".

Students can get access to the Internet and electronic information resources in the electronic reading room "Media Library", there is also a full-text database of educational and educational literature "Altyn Bet" (2242 electronic documents), which works only on the territory of the "Media Library" and full-text base of works of teaching staff http://libr.aues.kz/alphabet/.

Trainee support systems are available Moodle, Platonus, https://aues.kz.

In the process of studying for students of EP, additional certified courses are offered:
- on the network technologies of the Cisco Academy;
- JSC "Kaspersky Lab";
- switching devices D-Link and IP telephony;
- wireless networks WiFi and information protection in telecommunication systems.

Each year, students of the EP participate in the World Programmeming Championships, in specialised competitions. For example, in April 2018, students of the 3rd course of the EP 5B070400 - CEaS (M. Bakiev, O. Bolatov, A. Isabekov, A. Usrbaev) participated in the contest for the development of the Bastau information system and were awarded Grand Prix diplomas. For participation in the Republican student subject Olympiad in EP 5B070400 - CEaS in the team championship at Pavlodar State University. S.Toraigyrov awarded third degree diplomas students: E. Abishev, B. Shanaev, A. Kirkits

The center for organizing and conducting work with young people is the trade union of students. Each month there are about 20 events, games, competitions and tournaments. Under the auspices of the trade union there are a number of student clubs - "Children Charity Club", "Gibrat", "Ulagat", a guitar club, two debate leagues, StudiA315 - only 16 clubs.

Analytical part

As a result of the visual inspection by the members of the WEC of the facilities, the following were noted:

1. EP management has demonstrated the adequacy of material and technical resources and infrastructure. This is evidenced by the fact that the buildings and facilities of the university comply with the current sanitary standards and fire safety requirements, classroom and laboratory facilities, classrooms and other facilities, sports facilities comply with the established norms and rules. The university sports base includes 5 indoor halls. The university has an open sports ground with a football, volleyball, basketball fields, a jogging track around the sports ground.

2. The EP management has demonstrated the compliance of information resources with the specifics of the EP. Experts note the presence of laboratories equipped with equipment and software products of well-known companies that meet modern requirements for information security and IT technologies.

3. The EP's management enables students to additionally complete online courses in accordance with the specifics of the EP. EEC notes that in the process of teaching students take certified courses.

4. Experts note that it is necessary to ensure the functioning of Wi-Fi.

5. A survey of students, conducted during the visit of the EEC of the IAAR, showed that satisfaction:
- availability of library resources is 99.3%;
- the existing educational resources of the university 93.4%;
- availability and availability of computer classes and Internet resources 92.6%;
- study rooms, classrooms for large groups 95.6%;
- recreation rooms for students 68.4%;
- existing scientific laboratories 90.5%;
- providing students with a hostel 80.8%.

Strengths / Best Practices

The active work of the university management to ensure the material and technical base and the auditorium fund of the accredited EP.

Compliance of information resources and software products with the specificity of the accredited EP

Additional training for students on certified online courses.

EEC recommendations
- to ensure the functioning of Wi-Fi.

Conclusions of the EEC according to the standard "Educational resources and student support systems" have strong - 5, satisfactory - 5, suggesting improvement - 1.

6.9 Standard "Public Information"

The evidence part

Information on the activities of the university and the implementation of the EP is available on the official website www.aues.kz, which operates in the Kazakh, Russian and English languages. The site is hosted by the university, maintained and modernized by employees of the Department of Information Technology AUES.

On the main page of the university website in the "Education" section there is a list of institutes, information on available EPs, descriptions of EPs, lists of compulsory and elective disciplines, teaching methods, material and technical base, and expected learning outcomes.

The university has a variety of ways to disseminate information to inform the public and interested parties. Information is available on the following information media and materials:
- the official website of AUES;
- quarterly issue of the journal "Bulletin of AUES";
- the annual holding of the "Open Day", job fairs at the university;
- design of information stands on which information about university specialties is placed, excerpts from the rules of admission to AUES in Russian and Kazakh languages;
- publication and distribution of an advertising information booklet, preparation of a video about the university, about the departments;
- production of image products with the AUES logo.

The faculty and students of the university systematically inform the general public about the AUES activity through publication in the media.

Information about the discipline, its goals, the composition of the subject, evaluation procedures, passing points and training opportunities provided by students are given in the disciplines that are available to students in Platonus and Moodle on the university's official website in the "Learning" section, as well as documentation on University's internal website http://info.aues.kz/documents.html.

The university's audited financial statements are published on the university's website: https://aues.kz/wp-content/uploads/2018/12/Report-AUES.jpg.

The results of the external evaluation of the university are published on the official website in the section "About Us", where certificates of accredited EPs are presented.

Analytical part

The analysis of accredited EPs according to this standard allows us to draw the following conclusions.

1. The information published by the university within the framework of the EP is accurate, objective and relevant. The Commission notes the systematic work on placing information on the site, which allows for transparency of activities. The EEC notes the availability of complete information on teachers involved in the implementation of the accredited EPs on the Institute's website.

2. EP management uses a variety of information dissemination methods to inform the general public and interested parties. The Commission notes that the information is available on the official website of AUES, in the journal "Vestnik AUES", on information stands, in videos about the university, on the departments, etc.

3. Public awareness provides support and clarification of national development programmes of the country and the system of higher and postgraduate education. In fact, the university provides an active media presence in the region, participates in the clarification of the President's Messages and government programmes, and ensures the dissemination of relevant information within the EP.

4. An important factor is the participation of the university and implemented EP in a variety of external evaluation procedures. The proof is that the university performs in full within the framework of the accredited EP procedures of external evaluation and takes an active part in

the National Rating of the EP among the universities of the Republic of Kazakhstan, invariably entering the top twenty of the republican universities participating in the rating.

5. The Commission notes that it is necessary to consider the direction of informing the public on cooperation and collaboration with partners, including on updating the EP.

Strengths / Best Practices

Publication in the framework of the EP objective and relevant information.

Using a variety of ways to disseminate information (including the media, web resources, information networks, etc.) to inform the general public and stakeholders.

Extensive public involvement in university events.

The implementation of the university in the framework of the accredited EP of a variety of external assessment procedures.

EEC recommendations

Consider the direction of public information on cooperation and collaboration with partners, including on updating the EP.

The conclusions of the EEC according to the "Public Information" standard are strong - 3, satisfactory - 10, suggesting an improvement - 0.

6.10 Standard "Standards in the context of individual specialties"

The evidence part

According to the requirements of SES, the content of disciplines of accredited undergraduate undergraduate and graduate programmes is aimed at obtaining knowledge in the field of ICT, as well as scientific and professional skills and competencies. Therefore, theoretical training in the field of various areas of ICT is OK for the preparation of bachelors and masters of education. The specified professional competences and requirements for students' knowledge are reflected in the MEP and in the graduate model for each EP.

EP management demonstrated knowledge of the main trends of ICT renewal and, in accordance with these trends, concentrated its activities on the following main directions of the development of education:

- ensuring the literacy of graduates of EP in the field of information technology;
- the formation of practical skills in the field of ICT;
- ensuring the readiness of graduates to work in large and medium-sized companies;
- development of inclusive culture and professional competencies, etc.

The EP reflects the regulatory requirements for the professional practice of students. The main modules are developed on the basis of an analysis of market needs, trends in the development of world science, and experience in the implementation of similar study programmes at leading foreign universities. EP is updated annually with the current trends in the development of science, society, economic, political and social processes. The content of the disciplines is updated, new modules and courses are included to help preserve the relevance of the knowledge and skills gained.

Departments conduct regular assessment and revision of programmes with the participation of students, teaching staff, partners and employers based on the systematic collection, analysis and management of information, as a result of which the programme is adapted to ensure their relevance.

The departments maintain feedback with consumers of educational services to improve the EP - the graduates' employment is monitored, students and graduates are surveyed about the level of satisfaction with the education they receive, employers are surveyed about the quality of training of graduates of EP. Taking into account the requests of employers, the department

organized research laboratories, regular seminars and courses for teaching staff and students of the programme are held.

To improve and adjust the EP of the department, they conduct joint scientific and educational conferences and seminars with the aim of sharing experience with foreign scientists.

Practical teachers are involved in the implementation of EP. EPs are implemented by full-time teachers who, along with their pedagogical experience, have significant practical experience in various IT sectors of the economy.

Analytical part

Based on the results of the analysis, members of the EEC came to the following conclusions.

1. Teaching in accredited EP is conducted on the basis of the achievements of science and practice in the field of specialization.

2. The Commission is presented with factually confirmed information on the availability of a practice-oriented nature of training, which allows the formation of the necessary professional competencies of graduates.

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

Strengths / Best Practices

The faculty has practical experience in the field of ICT.

The presence of databases practices and branches of departments.

The site has statistics that allows analyzing the employment of graduates accredited by the EP.

Conclusions of the EEC according to the standard "Standards in the context of individual specialties" have strong - 5, satisfactory - 0, suggesting improvement - 0.

VII REVIEW OF STRONG PARTIES / BEST PRACTICES FOR EACH STANDARD

Standard "Management of the educational programme"

The published Quality Policy, in which the key role is played by the interaction between teaching, research and training, as well as between the business community and the university;

Transparency and collegiality of the development plan for the EP and its focus on meeting the needs of the state, employers, stakeholders and students;

Attracting employers, students and teaching staff to the formation of a plan for the development of EP.

Standard "Information Management and Reporting»

Information collected and analyzed in the framework of the EP, takes into account the dynamics of the contingent of students in the context of forms and types.

Ensuring the protection of information, the definition of responsible persons for the accuracy and timeliness of information analysis and provision of data.

The growth rate of the contingent of students in all accredited EP.

Availability of educational resources and support systems for students.

Standard "Development and approval of the educational programme"

Documenting the procedure for the development of EP and their approval at the institutional level.

Participation of employers, students and teaching staff in the development of EP.

Periodic update EP.

Efficiency of organizing and conducting professional practices;

The complexity of the EP clearly defined in Kazakhstan loans and ECTS.

Standard "Continuous monitoring and periodic evaluation of educational programmes"

Conduct monitoring and periodic evaluation of EPs to ensure that the goal is met that meets the needs of students and society.

Load, performance and graduation of students.

Participation of students, employers, students and teaching staff in the revision of the OP.

The content of the programmes in the light of the latest achievements of science, the preparation of bachelors and masters taking into account the generalization of modern domestic and international experience of training in this area, author and collective scientific achievements;

Satisfaction of students with the quality of training in the accredited EP.

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

AUES provides consistency, transparency and objectivity of the mechanism for assessing learning outcomes for each EP.

Support for student autonomy with simultaneous guidance and assistance from the teacher.

Getting a decent education to various categories of students, including those who have not only materially limited opportunities, but also physical.

Standard "Students"

The policy of formation of a contingent of students of EP from receipt to release provides transparency of its procedures.

Procedures governing the life cycle of students approved and published.

Admission and enrollment at the EP are accompanied by an introductory course containing information about the organization of education and the specifics of the EP.

The possibility of professional practice in public and private organizations of the city, region and republic.

Standard "Faculty"

AUES has an objective and transparent personnel policy, including recruitment, professional growth and staff development, ensuring the professional competence of the entire state.

The management of the EP is aware of the responsibility for their employees and provides them with favorable working conditions.

The active participation of faculty in various public, scientific and methodological and research, cultural and mass, and other events in the region and the Republic of Kazakhstan.

High research and publication activity of faculty.

3 teachers of the department "IT-engineering" became the owners of grants "The best teacher of the university - 2018" (Kartbaev T.S, Doszhanova A.A, Malikova F.U).

Involvement in teaching faculty with practical experience in production.

Standard "Educational resources and student support systems"

The active work of the university management on the provision of material and technical base and classroom fund accredited by the EP.

Compliance of information resources and software products with the specificity of the accredited EP

Additional training for students on certified online courses.

Standard "Public Information"

Publication in the framework of the OP objective and relevant information;

Using a variety of ways to disseminate information (including the media, web resources, information networks, etc.) to inform the general public and stakeholders;

Broad public involvement in university events;

The implementation of the university in the framework of the accredited EP various external assessment procedures.

Standard "Standards in the context of individual specialties"

FMs have practical experience in ICT;

Presence of bases of practices and branches of departments;

The site has statistics that allows analyzing the employment of graduates accredited by the EP.

VIII REVIEW OF THE RECOMMENDATION ON IMPROVEMENT OF QUALITY

Standard "Management of the educational programme"

Improve the management and monitoring of the functioning of the internal quality assurance system of the EP;

Consider the possibility of passing training by the leadership of the EP educational management programmes

Information Management and Reporting Standard

To intensify work on the involvement of all categories of stakeholders: students, employers, teaching staff and personnel in the process of collecting and analyzing information, as well as making decisions based on them.

Standard "Development and approval of the educational programme"

To envisage in the development plans of the EP an analysis of the effectiveness and specifying cooperation with foreign educational organizations.

Standard "Continuous monitoring and periodic evaluation of educational programmes"

Regularly enter information about student performance in the Platonus system.

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

It is necessary to find a university partner and implement a two-diploma education.

Faculty members are recommended to conduct their own research in the field of teaching special (technical) disciplines in the framework of EP.

Organize regular advanced training in higher education pedagogy and methods of teaching technical disciplines.

Consider the possibility of opening a magistracy in the Kazakh language.

Standard "Students"

Consider the possibility of improving the external and internal mobility of students in the context of EP.

Strengthen the interaction of graduates with the alumni association.

Standard "Faculty"

Continue work on academic mobility of faculty (external and internal) in the framework of the EP.

Standard "Educational resources and student support systems"

Ensure the functioning of Wi-Fi.

Standard "Public Information"

Consider the direction of public awareness about cooperation and collaboration with partners, including the update of the EP.

Application 1. Evaluating table "SPECIALISED PROFILE PARAMETERS"
for educational programmes
"5B060200 Informatics", "5B070300 Information systems",
"6M070300 Information Systems", "5B100200 Information Security Systems",
"5B070400 Computers and Software",
"6M070400 Computers and Software"
Non-profit JSC "Almaty University of Energy and Communications"

№ п\п	№ п\п	Criteria for evaluation	Position of the organization of education			
			Strong	Satisfactory	Suggests improvement	Unsatisfactory
Standard "Management of the educational programme"						
1	1.	The university must have a published quality assurance policy.	+			
2	2.	The quality assurance policy should reflect the link between research, teaching and learning.	+			
3	3.	The university should demonstrate the development of a culture of quality assurance, including in the context of the EP.		+		
4	4.	Commitment to quality assurance should relate to any activity performed by contractors and partners (outsourcing), including in the implementation of joint / two-diploma education and academic mobility.		+		
5	5.	The EP's management ensures the transparency 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, stakeholders and students.	+			
6	6.	The EP's management demonstrates the functioning of the formation mechanisms and regular review of the EP development plan and monitoring its implementation, assessing the achievement of learning objectives, meeting the needs of students, employers and society, making decisions aimed at continuous improvement of EP.		+		
7	7.	EP management should involve representatives of groups of stakeholders, including employers, students and teaching staff in the development of EP development plans.	+			
8	8.	The EP management must demonstrate the individuality and uniqueness of the EP development plan, its consistency with the national development priorities and	+			

34

		the development strategy of the educational organization.				
9	9.	The university must demonstrate a clear definition of those responsible for the business processes within the EP, the unambiguous distribution of staff duties, and the delineation of the functions of collegial bodies.		+		
10	10.	The EP's management must provide evidence of the transparency of the educational programme management system.		+		
11	11.	The EP management must demonstrate the successful functioning of the internal quality assurance system of the EP, including its design, management and monitoring, their improvement, making decisions based on facts.		+		
12	12.	EP management should implement risk management.		+		
13	13.	EP management should ensure the participation of representatives of interested parties (employers, teaching staff, students) in the collegial bodies of the educational programme management, as well as their representativeness in making decisions on the management of the educational programme.		+		
14	14.	The university should demonstrate the management of innovations in the framework of the EP, including the analysis and implementation of innovative proposals.	+			
15	15.	EP management must demonstrate evidence of openness and accessibility for students, teaching staff, employers and other interested parties.	+			
16	16.	EP management must be trained in educational management programmes.		+		
17	17.	The EP management must strive to ensure that the progress made since the last external quality assurance procedure was taken into account in preparing for the next procedure.		+		
		Total standard	**7**	**10**	**0**	**0**
Standard "Information Management and Reporting"						
18	1.	The university should ensure the functioning of the system for collecting, analyzing and managing information through the use of modern information and communication technologies and software.	+			
19	2.	The EP management must demonstrate the systematic use of the processed, adequate information to improve the internal quality assurance system.		+		
20	3.	Within 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 activities of departments and departments, and research.		+		
21	4.	The university should establish the frequency, forms and methods of evaluating the management of EP, the activities of collegial bodies and structural divisions,		+		

		senior management, the implementation of research projects.				
22	5.	The university must demonstrate how to determine the order and ensure the protection of information, including determining those responsible for the accuracy and timeliness of information analysis and data provision.	+			
23	6.	An important factor is the involvement of students, employees and teaching staff in the process of collecting and analyzing information, as well as making decisions based on them.		+		
24	7.	EP management must demonstrate the presence of a communication mechanism with students, employees and other stakeholders, including the availability 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 to eliminate the detected deficiencies.		+		
26	9.	The university should evaluate the effectiveness and efficiency of activities, including in the context of the OP.	+			
		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 performance, student achievement and expulsion;	+			
30	13.	students' satisfaction with the implementation of the EP and the quality of education at the university;		+		
31	14.	availability of educational resources and support systems for students;	+			
32	15.	Employment and career growth of graduates.		+		
33	16.	Trainees, employees and teaching staff must document their consent to the processing of personal data.		+		
34	17.	EP management should contribute to the provision of all necessary information in relevant fields of science.	+			
		Total standard	**8**	**9**	**0**	**0**
Standard "Development and approval of educational programmes"						
35	1.	The university should determine and document the procedures for the development of EP and their approval at the institutional level.	+			

36	2.	EP management must ensure that the developed EPs comply with the established goals, including the expected learning outcomes.	+			
37	3.	The management of EP must ensure the availability of developed models of graduate EP, describing learning outcomes and personal qualities.	+			
38	4.	The management of the EP must demonstrate an external examination of the EP.	+			
39	5.	Qualifications obtained at the end of the EP should be clearly defined, explained and correspond to a certain level of the NSC.	+			
40	6.	The management of EP should determine the influence of disciplines and professional practices on the formation of learning outcomes.		+		
41	7.	An important factor is the possibility of preparing students for professional certification.		+		
42	8.	EP management must provide evidence of the participation of students, faculty and other stakeholders in the development of EP, ensuring their quality.		+		
43	9.	The complexity of the EP should be clearly defined in Kazakhstan loans and ECTS.		+		
44	10.	The management of EP must provide the content of academic disciplines and learning outcomes to the level of education (bachelor, master, 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 presence of joint EPs with foreign educational organizations.		+		
		Total standard	**5**	**7**	**0**	**0**
Standard "Continuous monitoring and periodic evaluation of educational programmes"						
47	1.	The university should monitor and periodically evaluate the EP in order to achieve the goal and meet the needs of students and society. The results of these processes are aimed at continuous improvement of the EP.	+			
		Monitoring and periodic evaluation of the EP should consider:				
48	2.	the content of the programmes in the light of the latest achievements of science in a particular discipline to ensure the relevance of the discipline being taught;	+			
49	3.	changes in the needs of society and the professional environment;	+			
50	4.	workload, performance and graduation of students;	+			
51	5.	the effectiveness of student assessment procedures;		+		

52	6.	expectations, needs and satisfaction of students with EP training;		+		
53	7.	educational environment and support services and their compliance with the objectives of the EP.	+			
54	8.	The university and the administration of the EP must provide evidence of the participation of students, employers and other stakeholders in the revision of the EP.		+		
55	9.	All interested parties should be informed of any actions planned or taken in relation to the EP. All changes made to the OP should be published.		+		
56	10.	EP management must ensure a review of the content and structure of the EP, taking into account changes in the labor market, employers' requirements and social demands of the society	+			
		Total standard	**6**	**4**	**0**	**0**
Standard "Student-centered learning, teaching and assessment of progress"						
57	1.	EP management must ensure respect and attention to different groups of students and their needs, providing them with flexible learning paths.		+		
58	2.	EP management must ensure the use of various forms and methods of teaching and learning.		+		
59	3.	An important factor is the availability of own research in the field of teaching methods of academic disciplines OP.			+	
60	4.	EP management must demonstrate the presence of a feedback system on the use of various teaching methods and evaluation 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 teacher.		+		
62	6.	The EP's management must demonstrate the availability of a procedure for responding to students' complaints.		+		
63	7.	The university should ensure consistency, transparency and objectivity of the mechanism for assessing the results of training for each EP, including the appeal.		+		
64	8.	The university must ensure that the procedures for evaluating the results of the training of students in EP correspond to the planned learning outcomes and the objectives of the programme. Criteria and assessment methods in the framework of the EP should be published in advance.		+		
65	9.	In a higher education institution, mechanisms should be defined to ensure that each graduate from the EP study results and ensure the completeness of their formation.		+		
66	10.	Assessors should possess modern methods of assessing learning outcomes and regularly improve their skills in this area.		+		

			Total standard	0	9	1	0
Standard "Students"							
67	1.	The university should demonstrate the policy of forming a 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, published.			+		
68	2.	The EP's management should demonstrate the implementation of special adaptation and support programmes for new-comers and foreign students.			+		
69	3.	The university must demonstrate the compliance of its actions with the Lisbon Recognition Convention.			+		
70	4.	The university should cooperate with other educational organizations and national centers of the European Network of National Information Centers for Academic Recognition and Mobility / National Academic Information Recognition Centers ENIC / NARIC in order to ensure comparable recognition of qualifications.			+		
71	5.	EP management must demonstrate the presence and application of a mechanism to recognize the results of academic mobility of students, as well as the results of additional, formal and non-formal education.			+		
72	6.	The university should provide an opportunity for external and internal mobility of students of EP, as well as assist them in obtaining external grants for training.			+		
73	7.	The management of EP should make the maximum amount of effort to provide students with places of practice, to facilitate the employment of graduates, to maintain communication with them.			+		
74	8.	The university must provide graduates of EP with documents confirming their qualifications, including the achieved learning outcomes, as well as the context, content and status of the education received and evidence of its completion.			+		
75	9.	An important factor is the monitoring of employment and professional activities of graduates of EP.			+		
76	10.	EP management should actively encourage students to self-education and development outside the main programme (extracurricular activities).			+		
77	11.	An important factor is the existence of a valid alumni association.			+		
78	12.	An important factor is the availability of a support mechanism for gifted students.			+		
			Total standard	0	12	0	0
Standard "Faculty"							
79	1.	The university should have an objective and transparent personnel policy, including recruitment, professional	+				

		growth and staff development, ensuring the professional competence of the entire state.				
80	2.	The university should demonstrate the compliance of the staff potential of faculty with the development strategy of the university and the specifics of the EP.	+			
81	3.	EP management must demonstrate an awareness of responsibility for its employees and ensuring favorable working conditions for them.		+		
82	4.	The management of EP should demonstrate a change in the role of the teacher in connection with the transition to student-centered learning.		+		
83	5.	The university should determine the contribution of teaching staff to the implementation of the university's development strategy, and other strategic documents.	+			
84	6.	The university should provide opportunities for career growth and professional development of teaching staff of the OP.	+			
85	7.	The management of EP should involve practitioners from relevant fields in the teaching.	+			
86	8.	The management of EP should provide targeted actions for the development of young teachers.	+			
87	9.	The university should demonstrate the motivation of professional and personal development of teachers of EP, including the promotion of both the integration of scientific activities and education, and the use of innovative teaching methods.	+			
88	10.	An important factor is the active use 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 community (the role of teaching staff in the education system, in the development of science, the region, creating a cultural environment, participation in exhibitions, creative competitions, charity programmes, etc.).	+			
		Total standard	9	3	0	0
Standard "Educational resources and student support systems"						
91	1.	EP management must demonstrate the adequacy of material and technical resources and infrastructure.	+			
92	2.	EP management must demonstrate the availability of support procedures for various groups of students, including information and counseling.		+		
		EP management must demonstrate the compliance of information resources with the specifics of the EP, including compliance with:				

93	3.	technological support for students and teaching staff in accordance with educational programmes (for example, online training, modeling, databases, data analysis programmes);	+			
94	4.	library resources, including the fund of educational, methodical and scientific literature on general educational, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases;		+		
95	5.	Access to educational online resources		+		
96	6.	examination of the results of research, final works, dissertations on plagiarism;		+		
97	7.	WI-FI functioning on the territory of the organization of education.			+	
98	8.	The university should strive to ensure that the training equipment and software used for the development of EP, were similar to those used in their respective industries.	+			
99	9.	The university must ensure compliance with safety requirements in the learning process.	+			
100	10	The university should strive to take into account the needs of various groups of students in the context of EP (adults, workers, foreign students, and students with disabilities).		+		
		Total standard	**4**	**5**	**1**	**0**

Standard "Public Information"

The information published by the university in the framework of the EP should be accurate, objective, relevant and should include:

101	1	implemented programmes, indicating the expected learning outcomes;	+			
102	2	information about the possibility of assigning qualifications at the end of the EP;		+		
103	3	information about teaching, learning, assessment procedures;		+		
104	4	information about the scores and training opportunities provided by students;		+		
105	5	information about graduate employment opportunities.		+		
106	6	EP management should use a variety of ways to disseminate information (including the media, web resources, other information networks) to inform the general public and stakeholders.	+			
107	7	Public awareness should include support and clarification of national development programmes 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 information on the		+		

		web resource describing 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, in the context of personalities.		+		
111	11	An important factor is informing the public about cooperation and interaction with partners in the framework of EP, including with scientific / consulting organizations, business partners, social partners and educational organizations.		+		
112	12	The university should post information and links to external resources on the results of external assessment procedures.		+		
113	13	An important factor is the participation of the university and the EP implemented in a variety of external assessment procedures.	+			
		Total standard	**3**	**10**	**0**	**0**
Standards in the context of individual specialties						
NATURAL SCIENCES, AGRICULTURAL SCIENCES, TECHNICAL SCIENCES, AND TECHNOLOGIES						
		Educational programmes in the areas of "Natural Sciences", "Engineering Sciences and Technology", such as "Mathematics", "Physics", "Information Systems", etc., must meet the following requirements:				
114	1.	In order to familiarize students with the professional environment and current issues in the field of specialization, as well as to acquire skills based on theoretical training, the education programme should include disciplines and activities aimed at gaining practical experience and skills in the specialty in general and the major disciplines in particular.	+			
115	2.	- excursions to enterprises in the field of specialization (factories, workshops, research institutes, laboratories, educational and experimental farms, etc.),	+			
116	3.	- carrying out separate occupations or the whole disciplines at the enterprise of specialization,	+			
117	4.	- holding seminars to solve practical problems that are relevant to enterprises in the field of specialization, etc.	+			
118	5.	The faculty involved in the education programme should include full-time teachers with long-term experience as a staff member in enterprises in the field of specialization of the education programme.	+			
		Total standard	**5**	**0**	**0**	**0**
		TOTAL	**47**	**69**	**2**	**0**