



«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ
ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО
АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR
ACCREDITATION AND RATING

REPORT

on the results of the work of the external expert commission for the evaluation for compliance with the requirements of the standards of primary specialized accreditation (Ex-ante) of educational programs

6B11310-DIGITAL LOGISTICS
6B04103-BUSINESS ENGINEERING
6B04104-STARTUP UNDERGRADUATE

NON-COMMERCIAL JOINT-STOCK COMPANY "KAZAKH
NATIONAL RESEARCH TECHNICAL UNIVERSITY NAMED
AFTER K.I. SATPAEV"

Date of EEC visit: from April 19 to April 21, 2023

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING
External expert commission

*Addressed to
Accreditation
Council of the IAAR*



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Almaty April 21, 2023

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(I) LIST OF SYMBOLS AND ABBREVIATIONS

IAAR - Independent Accreditation and Rating Agency

EEC - External Expert Commission

OP - Educational program

LLP - Limited Liability Partnership

PPP - Faculty

DP - Documented procedure

Media - Media

SDO - Distance Learning System

SAC - State Attestation Commission

SU – Satbayev University

NQS - National Qualifications System

EHEA - European Higher Education Area

RSE PKhV - Republican State Enterprise on the right of economic management

UMKD - Educational and methodological complex of the discipline

SRS - Student Independent Work

SRSP - Independent work of a student with a teacher

NAO - Non-commercial Joint Stock Company

IEP - Individual Curriculum

OO - Organization of Education

ALE SPM RK - Organization of legal entities Union of project managers of the Republic of Kazakhstan

MAIN - International Informatization Academy

KTZ - Kazakhstan Temir Zholy

IRN - Individual registration number

HR-Human resource

R & D - Research work

(II) INTRODUCTION

In accordance with the order No. 37-23-OD dated February 23, 2023 of the Independent Agency for Accreditation and Rating, from April 19 to April 21, 2023, an external expert commission assessed the compliance of educational programs 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup bachelor's degree of the Non-profit joint-stock company "Kazakh National Research Technical University named after K.I. Satpaev" standards of primary specialized accreditation of the educational program of higher and (or) postgraduate education (Ex-ante) (approved and put into effect by order No. 68-18 / 1-OD of May 25, 2018, first edition).

The report of the external expert commission (EEC) contains an assessment of the submitted educational programs according to the IAAR standards, recommendations of the EEC for further improvement of educational programs and the conclusion of the expert commission according to the parameters of the specialized profile (Ex-ante), the EEC visit program, as well as the results of a survey of teachers and students of educational programs .

The composition of the WEC:

Chairman of the WEC -Belykh Yuri Eduardovich, Candidate of Physical and Mathematical Sciences, Associate Professor, IAAR Category I expert.

EEC Coordinator -Niyazova Guliyash Balkenovna, Head of the Project for Institutional and Specialized Accreditation of IAAR Universities (Astana, Republic of Kazakhstan).

Cluster 1. Specialized accreditation

6B07306 *Engineering systems and networks* IAAR Expert -Eremeeva Yuliya Nikolaevna, candidate of technical sciences, senior lecturer of the East Kazakhstan Technical University.
and 7M007304 *Engineering systems and networks* D. Serikbaeva (Ust-Kamenogorsk, Republic of Kazakhstan).

7M06301 *Integrated information security* IAAR Expert -Daribaev Beimbet Serikovich, PhD, Head of the Department of Information Security of the Kazakh National University named after. al-Farabi (Almaty, Republic of Kazakhstan).
Expert IAAR II category, employer -Kopishev Ilyas Ertaevich, Director of EL-IT LLP (Almaty, Republic of Kazakhstan).
IAAR expert, student –Yerlanov Bauyrzhan Yerlanuly, student of the educational program 7M06106 Information systems of the Almaty University of Energy and Communications named after. Gumarbek Daukeev (Almaty, Republic of Kazakhstan).

Cluster 2. Specialized accreditation

6B04102 *Mathematical economics and data analysis* Expert IAAR Category I –Pogrebetskaya Marina Vladimirovna, candidate of pedagogical sciences, associate professor of the North Kazakhstan University named after M. Kozybaev, member of the Expert Commission on Higher Education IAAR (Petrovsk, Republic of Kazakhstan).

IAAR expert, student –Sarabek Nazerke Yerikkyzy, a 3rd year student of the educational program, a teacher of primary classes of a humanitarian college (Aktobe, Republic of Kazakhstan).

6B07304 *Geospatial digital engineering* IAAR Expert -Rustamov Eldar Jahangir oglu, professor of the Azerbaijan University of Architecture and Civil Engineering (Baku, Republic of Azerbaijan).

Cluster 3. Primary specialized accreditation

6B11201 Occupational health and safety at work
6B07502 Standardization, certification and metrology (by industry)

Expert IAAR Category I –Chidunchi Irina Yurievna, PhD, Associate Professor of Toraigyrov University (Pavlodar, Republic of Kazakhstan).

IAAR expert, student –Fayzullina Dinara Nurbaevna, student of the educational program 6B07502 Standardization, certification and metrology (by industry) of the West Kazakhstan Engineering and Technical University (Uralsk, Republic of Kazakhstan).

Cluster 4. Primary specialized accreditation

6B11310 Digital logistics

Expert IAAR Category I –Pak Yuriy Nikolaevich, Doctor of Technical Sciences, Professor of the Karaganda Technological University (Karaganda, Republic of Kazakhstan).

IAAR expert, student –Koshetaev Dias Sansyzbayuly 1st year student of the educational program 7M11301 Logistics (by industry) (Astana, Republic of Kazakhstan).

6B04103 Business engineering

Expert IAAR Category I –Zakirova Dilnara Ikramkhanova, PhD, professor at Turan University (Almaty, Republic of Kazakhstan).

6B04104 Startup bachelor's degree

Expert IAAR Category I, employer –Pilipenko Yury Alexandrovich, Chairman of the International Association of Producers of Goods and Services "Expobest" (Almaty, Republic of Kazakhstan).



(III) REPRESENTATION OF EDUCATIONAL ORGANIZATION

Non-commercial joint stock company “Kazakh National Research Technical University named after K.I. Satpaev” was founded in 1934 as the Kazakh Mining and Metallurgical Institute; in 1960 it was renamed into the Kazakh Polytechnic Institute; in 1994 - to the Kazakh National Technical University. In 1999, the university was named after Academician K.I. Satpaev. In 2001, by the Decree of the President of the Republic of Kazakhstan N.A. Nazarbayev University was given a special status, and in 2014 - the category "National Research Technical University". In 2017 KazNITU named after K.I. Satpayev was renamed Satbayev University.

Educational activities KazNITU named after. K.I. Satpaev is carried out on the basis of a license (No. KZ56LAA00005304) issued by the Committee for Quality Assurance in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan on 11.07.2015. The training of specialists is carried out in 62 bachelor's programs, 47 master's programs and 37 doctoral programs.

nanotechnologies and engineering physics; Department of Chemical Processes and Industrial Ecology; Department of Electronics, Telecommunications and Space Technologies; Department of Software Engineering; Automation and control; Department of Cybersecurity, Information Processing and Storage; Department of Robotics and Technical Means of Automation; Department of Higher Mathematics and Modeling; mechanical engineering; Standardization, certification and metrology; Department of Technological Machines and Transport; Department of Energy; Department of Engineering Mechanics; Department of General Physics; Department of Architecture; Department of Engineering Systems and Networks; Department of Construction and Building Materials; Department of Social Disciplines; Department of Foreign Languages; Department of Kazakh and Russian languages; Department of Physical Culture; Management and mathematical economics; department of logistics),

KazNITU them. K.I. Satpayeva has a certificate of international institutional accreditation from the Independent Agency for Quality Assurance in Education (IA-A No. 0121, 12/28/2020 - 12/27/2027).

OP6B11310-Digital logistics entered in the Register of educational programs on 07/25/2022, OP 6B04103-Business engineering, 6B04104-Startup bachelor's degree - 08/08/2022 as new.

Training of personnel in EP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree has been conducted since 2022 in full-time education in Kazakh and Russian. The educational process is provided by the Department of Management and Mathematical Economics. The implementation of EP 6B11310-Digital Logistics is provided by the Department of Logistics in Kazakh, Russian and English.

In the 2022-2023 academic year, the first enrollment for OP 6B11310-Digital Logistics was made - 20 students; OP 6B04103-Business engineering - 24 students; EP 6B04104-Startup Bachelor's degree - 7 students.

The Department of Logistics employs 16 people, of which 9 are full-time, 7 part-time; degree is 67%. The Department of Management and Mathematical Economics employs 19 people, of which 15 are full-time, 4 part-time; degree is 80%.

(IV) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE

Educational programs 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's degree programs undergo primary accreditation for compliance with the standards of primary specialized accreditation of the educational program of higher and (or) postgraduate education (Ex-ante).

(V) DESCRIPTION OF THE EEC VISIT

The work of the EEC was carried out on the basis of the Program of the visit, agreed by the rector of the Non-profit Joint Stock Company “Kazakh National Research Technical University named after K.I. Satpayev” and approved by the Director General of IAAR on April 4, 2023 using a hybrid model for conducting specialized and primary specialized accreditation of educational programs of the Non-Profit Joint Stock Company “Kazakh National Research Technical University named after K.I. Satpaev”.

In order to coordinate the work of the EEC, on April 17, 2023, a kick-off meeting was held, during which powers were distributed among the members of the commission, the schedule of the visit was specified, and agreement was reached on the choice of examination methods.

To obtain objective information about the quality of educational programs and the entire infrastructure of the university, to clarify the content of self-assessment reports, meetings were held with vice-rectors of the university in areas of activity, heads of structural divisions, directors of institutes, heads of departments, representatives of teaching staff, and students. A total of 55 representatives took part in the meetings (Table 1).

Table 1 - Information about the participants of the meetings with the EEC IAAR:

Participant category	Quantity
Vice-rectors	3
Heads of structural divisions	14
Institute directors	5
Heads of departments	6
teachers	10
students	15
Total	55

At the meeting of the EEC IAAR with the target groups, the mechanisms for implementing the policy of the university and the concretization of individual data presented in the self-assessment report were carried out.

During the visual inspection, the members of the EEC got acquainted with the state of the material and technical base of the university, which ensures the organization of the educational process in EP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

During the accreditation period the following classes were attended:

-according to OP 6B04104-Startup bachelor's degree - occupation by Sultanbekova Zh.Zh. in the discipline “Theory and practice of project management;

-according to OP 6V11310-Digital Logistics - occupation by Orazymbetova A.Sh. in the discipline "Cargo science".

In accordance with the accreditation procedure, 41 teachers and 349 students were surveyed.

In order to confirm the information presented in the Self-Assessment Report, external experts analyzed the documentation of the university. Along with this, the experts studied the Internet positioning of the university through the official website of the university <https://satbayev.university>.

As part of the planned program, recommendations for improving the accredited educational programs of the university, developed by the EEC based on the results of the examination, were presented at a meeting with the management on 04/21/2023.

(VI) COMPLIANCE WITH SPECIALIZED ACCREDITATION STANDARDS

6.1. Standard "Management of the educational program"

- *The organization of higher and (or) postgraduate education must have a published quality assurance policy. The quality assurance policy should reflect the relationship between research, teaching and learning.*
- *The organization of higher and (or) postgraduate education must demonstrate the development of a culture of quality assurance, including in the context of EP.*
 - *Commitment to quality assurance should apply to any activity performed by contractors and partners (outsourcing), including the implementation of joint/double-degree education and academic mobility.*
 - *The management of the EP demonstrates its readiness to ensure transparency in the development of the EP development plan based on an analysis of its functioning, the actual positioning of the EP and the focus of its activities on meeting the needs of the state, employers, students and other stakeholders. The plan should contain the dates for the start of the implementation of the educational program.*
 - *The EP management demonstrates the functioning of the mechanisms for the formation and regular review of the EP development plan and monitoring its implementation, assessing the achievement of learning goals, meeting the needs of students, employers and society, making decisions aimed at continuous improvement of the EP.*
 - *The EP management should involve representatives of stakeholder groups, including employers, students and teaching staff, in the formation of the EP development plan.*
 - *The management of the EP must demonstrate the individuality and uniqueness of the EP development plan, its consistency with national priorities and the development strategy of the organization of higher and (or) postgraduate education.*
 - *The organization of higher and (or) postgraduate education must demonstrate a clear definition of those responsible for business processes within the EP, an unambiguous distribution of staff duties, and delimitation of the functions of collegial bodies.*
 - *The management of the EP must provide evidence of the transparency of the educational program management system.*
 - *The management of the EP must demonstrate the existence of an internal quality assurance system for the EP, including its design, management and monitoring, their improvement, decision-making based on facts.*
 - *The management of the EP must carry out risk management, including within the framework of the EP undergoing primary accreditation, and also demonstrate a system of measures aimed at reducing the degree of risk.*
 - *The management of the EP should ensure the participation of representatives of employers, teaching staff, students and other interested parties in the collegiate management bodies of the educational program, as well as their representativeness in making decisions on the management of the educational program.*
 - *The OO must demonstrate innovation management within the EP, including the analysis and implementation of innovative proposals.*
 - *The management of the EP must demonstrate evidence of readiness for openness and accessibility for students, teaching staff, employers and other interested parties.*
 - *The management of the EP should be trained in education management programs.*

Evidence

The university's vision is to be in the top 200 universities in the world by 2026 according to the QS ranking. The mission of the university is "Science and education for the benefit of man." Based on this, the University Development Strategy for 2022-2026 (approved by the Board of Directors, protocol No. 8 of November 25, 2022) formulates the main strategic directions for development: training new generation leaders; fame and recognition at the international level; quality education through research; innovation, transfer and commercialization of new technologies; effective management. To achieve the goal, it is proposed to ensure the continuity and continuity of education, professional training in accordance with the needs of the economy and regional characteristics; ensuring the intellectual, spiritual, moral and physical development of students, accessibility and inclusiveness of higher education and the introduction of the best world practices into academic processes; formation of a modern academic, research infrastructure digital ecosystem; strengthening the intellectual potential of education and science; increasing the effectiveness of scientific developments and ensuring integration into the world scientific space; diversification by various sources of income and investments, formation of own stable financial base; expanding public-private partnerships and attracting private investment in education; collaboration of mutually beneficial local and international partnerships with organizations and companies in order to be recognized on the world stage of education and research.

The internal regulatory documents at the university are divided into several levels and posted on the official website (<https://official.satbayev.university/ru/docs>), along with corporate documents (<https://official.satbayev.university/ru/korporativnoe-upravlenie/korporativnye-dokumenty>).

The university formalized the current procedures within the framework of the internal quality assurance system, which includes the Policy and Quality Objectives for 2022-2025. (Minutes of the Academic Council No. 4 dated November 25, 2021), Quality Manual (decision of the Board dated October 15, 2020, minutes No. 35) and a description of the processes in a series of internal university documents (<https://official.satbayev.university/ru/2-uroven-dp-kaznitu>). The traditional management mechanisms that regulate the relationship of employees across the entire management vertical are the Anti-Corruption Policy adopted at the University, the Corporate Governance Code, the Code of Corporate Ethics and the Internal Regulations, which reflect the requirements of corporate culture, official subordination, work schedule, tolerance, academic honesty.

To manage the EP in the context of the further development of a culture of quality assurance, there are documents regulating the main processes: management of the educational process, management of research activities, management of financial activities, management of information support, management of the quality management system, management of educational work, etc., ensuring quality and high performance of the team.

At the university level, the collegiate bodies that consider the development of educational programs are the Board of Directors (Regulations on the Board of Directors approved by order of the Minister of Education and Science of the Republic of Kazakhstan dated October 11, 2017 No. 515), the Academic Council of the University (Regulations on the Academic Council, approved by the decision of the Board September 20, 2021, protocol No. 25), Academic Council of the Institute (Regulations on the Academic Council of the Institute, approved by the decision of the Board on February 21, 2019, protocol No. 3), Educational and Methodological Council (Regulations on the Educational and Methodological Council, approved by the Rector of the University dated February 17, 2020), Scientific and Technical Council (Regulations on the Scientific and Technical Council, approved by the decision of the Board No. 24 dated September 10, 2021), Academic Planning Committee (Regulations on the Academic Planning Committee, approved by the decision of the Board No. 6 dated 03.02 .2020), the Academic Committee (Regulations on the Academic Committee for Educational Programs, approved by the Academic Council of the University on June 16, 2022, protocol No. 19), department meetings, etc., in which the participation of representatives of employers, teaching staff, students and others is ensured interested persons.

The management of the EP involves representatives of employers in determining the directions for the development of educational programs and their management. The composition of the Academic Committee in the direction of "Business and Management" is represented by the head of the department "Management and mathematical economics" Turegeldinova A.Zh., teachers of the department, doctoral candidate Seitenov M.E., master student Kumatov R.K., student Kalykova A.S., executive Director of the Union of Project Managers of the Republic of Kazakhstan Nekrasova N.A., Head of the Department of the National Chamber of Entrepreneurs "Atameken" Eraliyeva A.E. Representatives of practice and students are also members of the Academic Council of the University (approved by the order of the rector of 05.10.2021 No. 378-p with additions made by order of 01.21.2022 No. 13-p).

The necessary information, personnel, financial and material and technical resources, as well as regulatory and legal documentation that ensure the implementation of educational programs, are available to manage the EP. The university develops the EP in accordance with the regulatory requirements. EPs were included in the Register of Educational Programs in 2022. The university develops plans for the development of the EP (for 2022-2026), which are approved by the directors of the institutes (08.27.2022). The basis for the development of EP development plans is the University Development Strategy for 2022-2026. The effectiveness of the development plan of the

EP is ensured by the responsibility of the teaching staff for the final results, the delegation and delimitation of powers, and the placement of information on the website of the university. To develop and regularly update the EP, expert councils are created with the involvement of specialists from both the internal and external environment, including students, teaching staff and employers. The representativeness of employers involved in the design and implementation of each educational program is demonstrated.

At the university, risk management is regulated by the documented procedure DP KazNITU 613 "Risk Management" (approved by the decision of the Board of Directors No. 3 dated April 14, 2022). The departments have developed risk prevention action plans for the 2022-2023 academic year (dated August 15, 2022).

The management of the EP operates on the principles of openness and accessibility for students, teaching staff and employers. The rector of the university has his own blog on the university website (<https://satbayev.university.ru/greeting>), where all interested persons can apply with questions. The university website contains information about institutes (<https://satbayev.university.ru/institutes/project-management>) and departments (<https://official.satbayev.university.ru/project-management/nauchno-obrazovatelnyy-tsentr-matematicheskoy-ekonomiki>, <https://official.satbayev.university.ru/project-management/kafedra-logistiki>), contact details of the leadership of institutes and departments. Heads of departments have reception hours for visitors.

Director of the Institute of Project Management Amralinova B.B., Head of the Department of Logistics Mukhanova G.S. and head of the department "Management and Mathematical Economics" Turegeldinova A.Zh. passed advanced training under the program "Management in Education".

Analytical part

The EEC notes the orientation of the mission and vision to meet the needs of the state, society, sectors of the real economy, and potential stakeholders. Experts confirm that the mission, vision, development directions of the university, and the quality assurance policy are posted on the university website.

The WEC confirms that the university has a published quality assurance policy that reflects the relationship between research, teaching and learning. Experts note that the university demonstrates the development of a culture of quality. Measures to develop a culture of quality in the educational, research and educational process were reflected in the Strategic Development Plan of the University and included in the work plans of structural divisions.

The EEC notes that the university demonstrates the management of educational programs in the context of the implementation of strategic documents. It also notes the focus of the mission and vision on meeting the needs of the state, society, sectors of the real economy, and potential stakeholders.

All documents on the management of educational programs developed at the university are based on the Strategic Development Plan, mission, quality policy. On the basis of the adopted mission, goals and objectives of the university, all structural divisions of the university annually develop private goals and objectives at the beginning of the academic year.

The management of the EP has demonstrated its openness and accessibility for students, teaching staff, employers and other interested parties. The WEC was convinced of this in the course of discussions with focus groups.

The university develops plans for the development of the EP, however, the presented plans have a number of shortcomings. In view of the lack of supporting facts, the EEC considers it necessary to involve employers, students and teaching staff in drawing up a plan for the development of the EP, their discussion and approval at different levels of management of the EP and an indication of the persons involved in this process, by analogy with the EP. The content of the development plans for EP 6V04103-Business Engineering, 6V04104-Startup Bachelor's does not confirm their development based on the analysis of the EP functioning. According to the cluster

EP, as well as other EEC clusters, EP development plans were presented that differ significantly from each other in form and content. This fact indicates the absence in the university of a unified mechanism for developing plans for the development of EP, the mechanism for regular review and monitoring of their implementation was also not presented. The developed plans for the development of the EP correspond to the strategic directions of the development of the university, reflect the target indicators and expected results stated in the University Development Strategy, however, according to EP 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree and other EP implemented by the Department of Management and Mathematical Economics, their content is absolutely identical, i.e. the individuality and uniqueness of the development plan of a separate EP cannot be traced. The transparency of the processes of formation of the EP development plan is confirmed by the participation of interested parties in their discussion.

The university has identified risks that affect the development of the university, but they are not reflected in the development plans of the EP. Analysis of the presented action plan for risk prevention showed that risk management at the university is carried out at a formal level. So, according to EP 6B04103-Business engineering, 6B04104-Startup bachelor's degree, three risks are identified, the causes and consequences of which are not fully determined, measures to reduce their impact do not guarantee the achievement of the goal. According to OP 6B11310-Digital Logistics, there is also a formal approach to risk assessment (risk identification, determination of measures to prevent them). Thus, the EEC considers it necessary to conduct a risk analysis and detailed development of measures in the context of each EP, indicating target indicators, deadlines, responsible persons, etc.

As part of the introduction of online learning, the university carries out certain work on the formation and development of new roles and competencies of teachers. However, in the course of organizing interviews with teaching staff and employees, the EEC was convinced of the insufficient formation of the innovative component. It is important to pay attention to innovation management, including in the educational process, which was not reflected in the EP development plans. The EEC notes the need to revise approaches to innovation management, including the analysis and implementation of innovative proposals, and also considers it necessary to develop a plan to improve the innovation management mechanism, which provides for the introduction of various types of educational and extracurricular activities for the formation of competencies that allow flexible and dynamic response to all innovative processes ,

In the course of the survey, the question "How does the management of the educational institution pay attention to the content of the educational program?" 58.5% of the teaching staff answered "very good", 39% - "good", 2.4% - "relatively bad".

To the question "How is the innovative activity of teaching staff encouraged?" 58.5% gave the answer "very good", 36.6% - "good", 4.9% - "relatively bad".

The results of the survey of students showed high student satisfaction with the clarification of the rules and strategy of the educational program (fully satisfied - 56%, partially satisfied - 28.3%, partially dissatisfied - 5.1%, dissatisfied - 3.1%, 7.4% - hesitated to answer).

57.7% of students are fully satisfied with the level of accessibility and responsiveness of the management, 32.9% are partially satisfied, 5.4% are partially dissatisfied.

Strengths in OP 6B11310-Digital Logistics:

- The availability of the EP manual for students and teaching staff for timely response to the proposals of stakeholders, confirmed during conversations with focus groups and the results of a survey of students and teaching staff.

There are no strengths in EP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree.

VEK recommendations for EP 6V11310-Digital Logistics, 6V04103-Business Engineering, 6V04104-Startup Bachelor's Degree:

-In the 2023-2024 academic year, the university management should create an internal regulatory document (or make appropriate additions to the Regulations on the development of educational programs) that describes the uniform requirements for the development of plans for the development of university educational programs, taking into account:

- analysis of the functioning of the educational program, its real positioning and demand in the market of educational services;
- specific indicative indicators, indicating the timing of implementation for the main activities of a particular EP;
- involvement of employers, students and teaching staff in the preparation of the EP development plan;
- determining the individuality and uniqueness of the EP development plan within the real positioning of the university;
- a mechanism for monitoring the implementation of the EP development plan and regular revision of the EP development plan.

Additional recommendations of the EEC for OP 6B11310-Digital Logistics:

- By the beginning of the 2023-2024 academic year, the management of the EP should revise the development plan for the EP, taking into account:
 - analysis of proposals from employers, students and teaching staff;
 - internal quality assurance system of the EP, including monitoring, decision-making based on facts;
 - specification of possible risks and ways to minimize them.

Additional recommendations of the VEK for EP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree:

- In the 2023-2024 academic year, revise the development plans of the EP, bring them in line with the established requirements; EP development plans should be posted on the university website.
- At the beginning of the 2023-2024 academic year, conduct training on risk management for the heads of the EP and persons involved in the management of the EP.
- By the end of the 2023-2024 academic year, conduct a detailed risk analysis in the context of each individual EP (taking into account the specifics of the EP), specify measures to reduce the impact of risks, indicating measurable performance indicators, responsible persons and implementation deadlines.
- By the beginning of the 2023-2024 academic year, develop an action plan to introduce new innovative teaching and assessment methods, including our own, into the educational process, as well as provide feedback on the effectiveness of their use.

Conclusions of the EEC according to the criteria:

According to the standard "Educational Program Management" OP 6B11310-Digital Logistics has 1 strong, 11 satisfactory positions, 3 criteria require improvement.

According to the standard "Management of the educational program" OP 6V04103-Business engineering has 8 satisfactory positions, 7 criteria require improvement.

According to the standard "Management of the educational program" EP 6B04104-Startup, the bachelor's degree has 7 satisfactory positions, 8 criteria require improvement.

6.2. Information Management and Reporting Standard

- *The OO must demonstrate the existence of a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software tools and that it uses a variety of methods to collect and analyze information in the context of the EP.*
- *The management of the EP must demonstrate the existence of a mechanism for the systematic use of processed, adequate information to improve the internal quality assurance system.*

- *The management of the EP must demonstrate fact-based decision making.*
- *Within the framework of the EP, a system of regular reporting should be provided, reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of the activities of departments and departments, scientific research.*
 - *The PA must establish the frequency, forms and methods for assessing the management of the EP, the activities of collegial bodies and structural divisions, top management, and the implementation of scientific projects.*
 - *The TOE must demonstrate the determination of the procedure for and ensuring the protection of information, including the identification of persons responsible for the reliability and timeliness of the analysis of information and the provision of data.*
 - *An important factor is the availability of mechanisms for involving students, employees and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them.*
 - *The management of the EP must demonstrate the existence of a mechanism for communication with students, employees and other interested parties, as well as mechanisms for resolving conflicts.*
 - *The PA must demonstrate the existence of mechanisms for measuring the degree of satisfaction with the needs of teaching staff, staff and students within the framework of the EP.*
 - *The PA should provide for an assessment of the effectiveness and efficiency of activities, including in the context of the EP.*
- *The information expected to be collected and analyzed within the framework of the EP should take into account:*
 - *key performance indicators;*
 - *the dynamics of the contingent of students in the context of forms and types;*
 - *academic performance, student achievement and dropouts;*
 - *satisfaction of students with the implementation of the EP and the quality of education at the university;*
 - *availability of educational resources and support systems for students;*
 - *The PA must confirm the implementation of the procedures for processing personal data of students, employees and teaching staff on the basis of their documented consent.*

Evidence

The University implements information management processes, including the collection and analysis of information: the Department of Information Systems operates, which is responsible for information support of the activities of the University and its divisions; formation through the media of a positive public opinion about the activities of the University; assistance to journalists in their work to cover the activities of the university and its departments.

The functioning of the system for collecting, analyzing and managing information at the university is based on the use of modern information and communication technologies and software. So, for automation, the following systems for collecting, analyzing and managing information have been introduced and are operating: information management within the framework of the official website of the university (<https://satbayev.university>); management of educational and methodological information within the educational portals HeRo Study Space (<https://satbayev.hero.study/>) and LMS Polytechonline (<https://polytechonline.kz/>); electronic hostel automation system "Dormitory" (<https://dormitory.satbayev.university/>); electronic document management Salem Office (<https://salemoffice.kz/>); Microsoft Office 365 software product.

The information collection, analysis and management system is used to ensure the quality of the EP implementation. For example, the formation of consolidated examination sheets, a list of debtors, an electronic archive of session reports are used to analyze the results of sessions and make decisions about improving the educational process.

The information and feedback system is focused on students and employees and includes information stands at the departments, the functioning of the official website of the university. The official website also contains information about the contact details of the heads of the EP (<https://official.satbayev.university/ru/project-management/nauchno-obrazovatelnyy-tsentr-matematicheskoy-ekonomiki>, <https://official.satbayev.university/ru/project-management/kafedra-logistiki>). University activities and news are systematically covered on the website of the university.

The protection of information, the responsibility of persons, the procedures for analyzing and granting access are regulated by the approved internal information security policy. The safety of information is ensured by an unambiguous distribution of roles and functions in the information

systems used, the presence of anti-virus programs, system administration of servers, a backup system on servers, restricting access of individuals to the room with servers, technical equipment of rooms with servers to ensure the safety of work.

At the university, information about its activities, including the results of its analysis, is reflected in the annual reports of structural divisions, reports on areas of activity (educational, methodological, research, educational, financial, administrative and economic, international activities and academic mobility, etc.). Individual reports of teaching staff are the basis for the formation of departmental reports. Reports are considered at meetings of the collegiate governing bodies of the university - meetings of the department, the Academic Council of the Institute, the Educational and Methodological Council, the Academic Council of the University and management decisions are made.

The University has a Disciplinary Commission (Regulations on the Disciplinary Commission, approved by the decision of the Board No. 11 dated March 25, 2021), whose main task is to strengthen labor, educational and executive discipline.

Evaluation of the activities of the management of the departments is carried out in accordance with the documented procedure of DP KazNITU 801 "Internal Audit" twice a year. The documented procedure DP KazNITU 502 "Management Analysis" establishes the procedure and criteria for conducting an analysis of activities.

The external evaluation of the EP is represented by the following procedures: state certification of students; specialized accreditation; the rating of the EP and the university as a whole; survey of employers; external review of graduation papers and teaching materials. By interviewing students, teaching staff and employers, an internal evaluation of the EP is carried out. The representativeness of all stakeholders is carried out by analyzing the results of the survey, monitoring interaction with all participants in the implementation of the EP. All interested parties have the opportunity to influence the content of the EP through participation in decision-making; development of new, author's courses; taking into account the proposals of experts and chairmen of the SAC, reviews of enterprises-practice bases; participation of potential employers in the discussion of the EP, the management of practices and the review of theses.

Students have the opportunity to address all questions to the leadership in oral and written forms or through the Rector's Blog (<https://satbayev.university/ru/greeting>). Also in the SU Solutions application, all employees, teaching staff and students can write a problem and suggestions for solving this problem.

Questioning of teaching staff and employees about satisfaction with working conditions - an annual study of the level of satisfaction of teaching staff and employees with working conditions, prospects for professional development and the administrative management of the university. Questioning of students about satisfaction with the conditions of study is carried out annually in order to study their opinions regarding the quality of educational and administrative services of the university. A documented procedure for DP KazNITU 714 "Questionnaire survey. Customer Satisfaction Assessment", which reflects the rules, forms of measures to monitor customer satisfaction.

The University has established a Council for Academic Quality (Regulations on the Council for Academic Quality, approved by the decision of the Board No. 7 dated May 31, 2022). This is a permanent collegiate and advisory body created to ensure the quality of education and teaching, aimed in its activities at maintaining and promoting the key values of the educational process: academic openness, transparency, honesty and competitiveness.

The university collects, processes and protects personal data in accordance with the legislation of the Republic of Kazakhstan "On personal data and their protection". Students document their consent to the processing of personal data when applying for enrollment in the first year. When applying for a job, along with personal documents, the teaching staff provides Form F KazNITU 601-22 "Consent to data processing".

Analytical part

The Commission notes that the university has a multi-level information management and reporting system. Information management includes the management of traditional flows and digital information flows. All documents developed at the university are distributed to all structural divisions using electronic document management and in paper form.

The EEC notes that the information collected as part of the activities of the university, including through statistical processing of information, reporting, allows you to generate analytical reports and make decisions based on facts. At the same time, the EEC notes the poor development of the issue related to the mechanism for measuring the degree of satisfaction with the needs of teaching staff, staff and students in the framework of EP 6B11310 "Digital Logistics".

During the online survey of teaching staff, the level of feedback between teaching staff and management was rated by 58.5% of teaching staff as "very good", 39% - "good", 2.4% - "relatively bad".

78% of teaching staff are fully satisfied with their participation in making managerial decisions, and 22% are partially satisfied.

The accessibility of the university management to teachers was rated "very good" by 63.4% of the teaching staff, and "good" by 36.6%.

At the same time, to the question "How does the management and administration of the university perceive criticism in their address?" 36.6% of the teaching staff answered "very good", 61% - "good", 2.4% - "relatively bad".

Online survey of students showed:

- 49.4% of students are completely satisfied with the content and information content of the website of the organization of education in general and faculties in particular, 25.4% are partially satisfied, 9.7% are partially dissatisfied, 12.9% are dissatisfied;

- 56% of students are completely satisfied with the speed of response to feedback from teachers regarding the educational process, 33.1% are partially satisfied, partially dissatisfied - 5.7%, dissatisfied - 3.1;

- 56.9% of students are completely satisfied with informing students about courses, educational programs and the academic degree received, 28% are partially satisfied, 7.4% are partially dissatisfied, and 5.7% are dissatisfied.

Strengths in EP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree:

- The university uses modern information and communication technologies and software HeRo Study Space and LMS Polytechnonline, through which the collection, analysis and management of information in all areas of activity of interest to stakeholders is carried out.

VEK recommendations for OP 6V11310-Digital Logistics:

- By the beginning of the 2023-2024 academic year, the leadership of the PA should update the provision for assessing the degree of satisfaction with the needs of the teaching staff, staff and students, in which it is clear to state the need for feedback on the evaluation results.

There are no recommendations of the EEC for OP 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

Conclusions of the EEC according to the criteria:

According to the standard "Information Management and Reporting" OP 6B11310-Digital Logistics has 1 strong, 14 satisfactory positions, 1 criterion needs improvement.

According to the standard "Information Management and Reporting" OP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree have 1 strong and 15 satisfactory

positions.

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

- *The TOE shall define and document the procedures for the development of EPs and their approval at the institutional level.*
- *The management of the EP should ensure that the developed EP complies with the established goals, including the intended learning outcomes.*
- *The management of the EP must demonstrate the existence of mechanisms for reviewing the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social demand of society.*
- *The management of the EP should ensure the availability of developed models of the EP graduate that describe the learning outcomes and personal qualities.*
- *The management of the EP must demonstrate the conduct of external reviews of the content of the EP and the planned results of its implementation.*
- *The qualification awarded upon completion of the EP must be clearly defined and correspond to a certain level of the NSC and QF-EHEA.*
- *The management of the EP should determine the influence of disciplines and professional practices on the formation of learning outcomes.*
- *An important factor is the possibility of preparing students for professional certification.*
- *The management of the EP must provide evidence of the participation of students, teaching staff and other stakeholders in the development of the EP, ensuring their quality.*
- *The management of the EP should ensure the content of academic disciplines and learning outcomes for the level of education (bachelor's, master's, doctoral studies).*
- *The structure of the EP should provide for various types of activities that ensure the achievement of the planned learning outcomes by students.*
- *An important factor is the correspondence between the content of the EP and the learning outcomes of the EP implemented by organizations of higher and (or) postgraduate education in the EHEA.*

Evidence

The development and approval of educational programs at the university is carried out in accordance with the provisions of regulatory legal acts in the field of higher and postgraduate education, the University Development Strategy, as well as internal regulations. At the university, the development and approval of the EP is regulated by the Regulations on the development of educational programs (approved by the decision of the board No. 6 of 04/27/2022).

The goals of the EP are consistent with the mission of the university. When developing the EP, the degree of labor intensity of the teaching load of students for all types of educational activities provided for in the curriculum is taken into account, credits are clearly defined. The content of academic disciplines and the learning outcomes of accredited EPs correspond to the level of education.

Accredited EPs are developed by Academic Committees, which include teaching staff, employers, and students. The working group on OP 6B11310-Digital Logistics includes representatives of the teaching staff, the director of TransAI LLP Korolev V.V., the director of ZhebeLogistics LLP Tulebaev M., the director of Turkestan-INVEST LLP Medetbekov S.M., students Kozhataeva S., Maylybaev A., Narynbay R. OP 6B11310-Digital Logistics reviewed and recommended by the Educational and Methodological Council on April 26, 2022, protocol No. 7, approved by the Academic Council of the University on April 28, 2022, protocol No. 13. According to OP 6B04103-Business engineering, 6B04104-Startup bachelor, the developers were the head of the department, teaching staff, deputy chairman of the National Chamber of Entrepreneurs "Atameken" Eralieva A.E., student Kalykova A. OP 6B04103-Business engineering,

Accredited EPs are posted on the university website (<https://official.satbayev.university/en/educational-programmy>).

EPs undergo internal and external examination and review. According to OP 6V11310-Digital Logistics, the review was received from the Deputy Director of the RSE REM "Institute of Computer Science and Informatics" Mamyrbayev O.Zh. According to OP 6V04103-Business

engineering, there is a conclusion from the employer, executive director of ANTAL LLP Amankulov M.B.

Models of EP graduates were formed at the university, and teaching staff of the department, graduates and students, as well as representatives of employers took part in the development of the graduate model. Since 2019, the Satbayev University Graduate Framework Model has been in force (approved by the decision of the Board No. 40 of December 27, 2019).

The quality assessment of educational programs is carried out on the basis of the analysis of modular educational programs, a catalog of elective disciplines, schedules, individual plans of students, internal regulations governing the implementation of educational programs, questioning of students and employers. Changes to educational programs are carried out at the stages of adjusting the content of goals, the structure of the program, designing curricula and correcting the work programs of academic disciplines. The management of the EP guarantees the representativeness of the stakeholders involved in the formation and revision of the EP development plan.

An online survey of teaching staff conducted during the IAAR EEC visit showed that the content of the educational program “very well” satisfies the needs of 73.2% of the interviewed teaching staff, “good” - 26.8%.

58.5% of the teaching staff believe that the management of the educational institution pays attention to the content of the educational program “very well”, 39% - “good”, 2.4% - “relatively bad”.

63.4% of the teaching staff rated the support of the university and its management for the development of new educational programs as “very good”, 36.6% - “good”.

Questioning of students showed that 57.7% of students are completely satisfied with the quality of educational programs in general, 30% of students are partially satisfied, 4% are not satisfied, and 3.1% are partially dissatisfied.

60.9% of students are fully satisfied with the overall quality of the curricula, 27.7% of students are partially satisfied, 4% are dissatisfied, and 5.7% are partially dissatisfied.

On the issue of support with educational materials in the learning process: “fully satisfied” - 57.7%, “partially satisfied” - 28.9%, “partially dissatisfied” - 6.9, “not satisfied” - 4.3%.

Analytical part

During the visit, the experts analyzed educational programs, educational and methodological support for their implementation. The documentation was developed in accordance with the intra-university methodological recommendations and regulatory requirements of the Republic of Kazakhstan.

During the EEC visit, it turned out that the university does not develop traditional catalogs of elective disciplines, which was an obstacle to a full analysis of the content of the EP and to determine the compliance of the content of the EP 6B04104-Startup Bachelor's degree with the established goals, including the expected learning outcomes. The presented syllabuses for the OP "Computer Science", "Automation and Robotization", "Transport Engineering", "Electronic and Electrical Engineering", "Robotics and Mechatronics", "Information Security Systems", etc., which are supposed to be used in the implementation of OP 6B04104- Startup bachelor's programs also did not contribute to determining the compliance of the content of the EP with the established goals.

The University has demonstrated participation in the working groups for the development of EP teaching staff, students and employers. The composition of the working group is indicated in the structure of each OP. At the same time, the EEC notes that according to OP 6B11310-Digital Logistics, it was not possible to fully verify the level of participation of various stakeholders in the development of the EP, its content. At the same time, the learning outcomes at the level of training modules generally correlate with the learning outcomes at the EP level.

During the analysis of expert opinions on the EP in the Department of Management and Mathematical Economics, it was revealed that they were given by persons who are the developers

of the EP. Moreover, the Regulations on the development of the EP do not reflect the requirements for organizing and conducting an external examination of the content of the EP, do not describe the requirements for experts, reviewers.

The presented model of a bachelor's program EP 6B04104-Startup graduate does not reflect the specifics of educational trajectories (Computer science, Biomedical Engineering, Electronic and Electrical Engineering) provided for by the EP structure. Thus, the learning outcomes formed at the level of individual academic disciplines do not correlate with the learning outcomes at the EP level. This means that the EP management has not determined the influence of disciplines on the formation of learning outcomes. In this regard, it is necessary to ensure the revision of the graduate model.

The analysis of the EP and the formed learning outcomes showed that the main content of the program, including the disciplines of the compulsory component, to a greater extent form soft skills, while hard skills are formed by elective components. Considering that hard skills form the basis of any profession, the disciplines and modules that form them should be mandatory. The management of the EP needs to clearly define the ratio of hard and soft skills formed as a result of training, and bring it into line with the requirements established by practice.

The EEC notes the need to provide opportunities for training students in EP 6B11310-Digital Logistics for professional certification.

Strengths / best practice in OP 6B11310-Digital Logistics:

- The developed EP corresponds to the established goals, including the expected learning outcomes.

There are no strengths in EP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree.

VEK recommendations for EP 6V11310-Digital Logistics, 6V04103-Business Engineering, 6V04104-Startup Bachelor's Degree:

-By the end of the 2023-2024 academic year, the university management should update the Regulations on the development of educational programs, including the requirements for organizing and conducting an external examination of the EP, as well as for assessors.

Additional recommendations of the EEC for OP 6B11310-Digital Logistics:

- The management of the EP annually revise the content of the EP, taking into account changes in the labor market, the requirements of employers and professional standards and the social demand of society.

- By the beginning of the 2024-2025 academic year, develop training materials aimed at preparing students for professional certification.

Additional recommendations of the VEK for EP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree:

-In the 2023-2024 academic year, develop Catalogs of elective disciplines / modules with a description of the content of the discipline, expected learning outcomes, pre- and post-requisites; post catalogs on the university website.

Additional recommendations for EP 6B04104-Startup bachelor's degree:

-In the 2023-2024 academic year, review the graduate model, ensure its discussion by the collegiate management bodies of the EP with the involvement of stakeholders and specialized specialists; publish the results on the university website.

-In the 2023-2024 academic year, clearly define the ratio of hard and soft skills, formed as a result of mastering the EP.

Conclusions of the EEC according to the criteria:

According to the standard "Development and approval of the educational program" OP 6B11310-Digital Logistics has 1 strong, 10 satisfactory positions, 1 criterion needs to be improved.

According to the standard "Development and approval of the educational program" OP 6V04103-Business engineering has 11 satisfactory positions, 1 criterion needs to be improved.

According to the standard "Development and approval of the educational program" EP 6B04104-Startup, the bachelor's degree has 8 satisfactory positions, 4 criteria require improvement.

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

• *The PA should determine the mechanisms for monitoring and periodically evaluating the EP to ensure the achievement of the goal and meeting the needs of students, society, and show the focus of the mechanisms on the continuous improvement of the EP.*

- *Monitoring and periodic evaluation of the EP should include:*
 - *the content of the programs in the light of the latest achievements of science in a particular discipline to ensure the relevance of the discipline taught;*
 - *changes in the needs of society and the professional environment;*
 - *workload, performance and graduation of students;*
 - *the effectiveness of student assessment procedures;*
 - *expectations, needs and satisfaction of students with EP training;*
 - *educational environment and support services and their compliance with the objectives of the EP.*
- *The management of the EP must demonstrate a systematic approach in monitoring and periodically assessing the quality of the EP.*
- *The OO, the management of the EP should determine a mechanism for informing all interested parties about any planned or taken actions in relation to the EP.*
- *All changes made to the OP must be published.*

Evidence

The procedure for monitoring the periodic evaluation and revision of the content of educational programs at the university is supervised by the Department of Corporate Development and the Department of Planning and Organization of the Educational Process. The university has defined the procedure for monitoring, analysis and revision of the EP. This process is initiated by: the need for regular updating of the EP; changes in the requirements of consumers and other interested parties; organizational and administrative documents.

The procedure for monitoring the quality of education at the university is regulated by internal regulations and is part of the tasks of the Council for Academic Quality (Regulations on the Council for Academic Quality, approved by the decision of the Board No. 7 of May 31, 2022). The frequency of revision of curricula and programs of academic disciplines is once a year, after discussing the changes made.

To determine the level of satisfaction of internal needs, a survey of students, teachers and university staff is carried out. The departments carry out systematic monitoring of the workload of the teaching staff, the progress of students and the employment of graduates. Monitoring is carried out through educational portals by responsible departments and the management of the EP. Monitoring results are available to all internal and external users through the University's websites and internal networks.

The departments systematically monitor the state of science and practice, which allows timely changes to the EP. Monitoring is carried out by the teaching staff of the departments and submits their proposals to the specialty council, which determines the need to change the content of the curriculum and disciplines. Teachers and students have the opportunity to influence the content and form of the EP.

The university has a mechanism for updating the EP, which provides for changes in the structure and content of the EP in connection with a change in the state compulsory standards of

higher education, the introduction of new areas and elective courses. The EP is updated in accordance with the requests of employers, which is reflected in the catalog of elective disciplines for the corresponding academic year and approved by the Academic Council of the university.

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

Evaluation of the achievement of learning goals and results, compliance with the needs of students and employers is carried out by evaluating the results of the current, intermediate and final certification, evaluating the results of questioning all stakeholders with conclusions based on the analysis of the report on the work of the department, etc.

Assessment mechanisms at the department are control visits to classes, as well as analysis of performance indicators. Monitoring includes tracking: student visits to classes; performance by students of assignments and independent work; delivery by students of assignments for current, midterm and final control; fulfillment by students of the individual plan of the student.

Informing all interested parties about any actions in relation to the EP takes place using the portal, electronic means of communication and mailing.

Analytical part

An analysis of the submitted documents showed that all activities carried out based on the monitoring results are reflected in the documentation in the form of decisions of the Academic Committees, the Academic Council, etc.; decisions made in departments; measures based on the results of internal audits; activities based on the results of external audits; corrective actions based on the results of identified and potential nonconformities.

At the same time, the EEC notes that in the course of visits to departments and conversations with the leaders of the EP, specific data were not presented, indicating a systematic approach to monitoring and periodically assessing the quality of the EP.

When studying the official website of the university, it was revealed that there was a lack of information related to the revision and updating of the EP, the results of surveys, decisions of collegial bodies on the implementation of the EP, etc., which makes it difficult to inform the main stakeholders, but is an important element in monitoring the implemented EP. The management of the EP should develop, implement and further keep up to date the procedure for informing stakeholders about the changes accredited by the EP, including determining the most effective mechanisms for informing.

According to the results of the survey of teaching staff, 48.8% believe that the knowledge of students obtained at this university "very well" corresponds to the realities of the requirements of the modern labor market, 51.2% evaluate it "good".

For 36.6% of the teaching staff, the workload "very well" corresponds to their expectations and capabilities, for 51.2% - "good", 12.2% - "relatively bad".

61% of teaching staff believe that the educational program in terms of content and quality of implementation "very well" meets the expectations of the labor market and employers, 39% - "good".

59.4% of students are completely satisfied with the academic load and requirements for the student, 31.4% are partially satisfied, 2.9% are not satisfied, 4.3% are partially dissatisfied.

56.6% are fully satisfied with the objective assessment of knowledge, skills and other educational achievements, 30.9% are partially satisfied, 5.1% are dissatisfied and partially dissatisfied.

50.3% of students expressed full agreement that the material proposed by the teacher is relevant and reflects the latest achievements of science and practice, 26.6% agree, 17.4% partially agree, 5.7% disagree.

49.4% fully agree that the evaluation criteria used by the teacher are understandable, 28.6% agree, 17.1% partially agree, and 4.8% disagree.

There are no strengths in OP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

VEC recommendations for EP 6V11310-Digital Logistics, 6V04103-Business Engineering, 6V04104-Startup Bachelor's Degree:

-Update the Regulations on the development of educational programs by the end of the 2022-2023 academic year, including requirements for monitoring and evaluating the quality of the EP.

-In 2023, determine and implement a mechanism for timely informing stakeholders about organizational decisions taken in relation to the EP.

Conclusions of the EEC according to the criteria:

According to the standard "Continuous monitoring and periodic evaluation of educational programs" OP 6B11310-Digital Logistics has 9 satisfactory positions, 1 criterion needs to be improved.

According to the standard "Continuous monitoring and periodic evaluation of educational programs" EP 6B04103-Business engineering, 6B04104-Startup bachelor's degree have 8 satisfactory positions, 2 criteria require improvement.

6.5. Student-Centered Learning, Teaching and Assessment Standard

- *The management of the EP should ensure respect and attention to the various groups of students and their needs, providing them with flexible learning paths.*
- *The management of the EP should ensure the use of various forms and methods of teaching and learning.*
- *An important factor is the presence of own research in the field of teaching methods of academic disciplines of the EP.*
- *The EP management must demonstrate the existence of a feedback system on the use of various teaching methods and the assessment of learning outcomes.*
- *The management of the EP must demonstrate support for the autonomy of learners, while being guided and assisted by the teacher.*
- *The management of the EP must demonstrate the existence of a procedure for responding to complaints from students.*
- *The OO must ensure the consistency, transparency and objectivity of the mechanism for evaluating learning outcomes for each SP, including appeal.*
- *The PA must ensure that the procedures for assessing the learning outcomes of students of the EP correspond to the planned results and goals of the program, publishing the criteria and assessment methods in advance.*
- *The PA should define the mechanisms for ensuring the achievement of learning outcomes by each EP graduate and ensure the completeness of their formation.*
- *Assessors should be proficient in modern methods of evaluating learning outcomes and regularly improve their skills in this area.*

Evidence

The management of the EP, in accordance with the Academic Policy (approved by the rector on September 26, 2022, protocol No. 12), provides equal opportunities for students, regardless of the language of instruction, to form an individual educational program aimed at developing professional competence. Regardless of the language of instruction, syllabuses, EMCD, scientific and educational literature, SIW, SIWT, consultations and information resources are evenly available to students. Graduating departments ensure the harmonious development of students, taking into account intellectual development and individual characteristics. The needs of students are identified by questioning and filling out special forms on the educational portal.

The management of the EP strives to ensure attention to different groups of students and their needs, providing them with flexible learning paths and using various forms and methods of teaching and learning. Before the start of the EP, the data of the questionnaire and electronic databases of students are processed and, based on these data, appropriate adjustments are made.

The university has developed the Code of Academic Integrity of NAO KazNITU named after K.I. Satpaev and the Code of Corporate Ethics for employees of KazNITU.

The choice of elective basic disciplines is carried out taking into account the professional orientation of the student with his free choice. The student has the right to vary the IEP in the composition of disciplines within the curriculum of the EP during the period of early annual registration and make changes to the IEP during the Add/Drop period in accordance with the Rules for the credit technology of education at NJSC KazNRTU named after K.I. Satpaeva (bachelor's degree).

The university practices the use of interactive teaching methods in order to achieve a deeper mastering of the studied educational material. In particular, individual and group work is carried out to solve urgent scientific and practical problems, where students must show a creative approach and comprehensively use the acquired knowledge.

Methodological seminars are regularly held at the University, where teachers share their best ideas and achievements in improving the teaching methods of the disciplines taught. There is also a discussion of the world's best practices in the application of effective teaching methods in higher education institutions and the possibility of introducing such innovative approaches in the learning process is considered.

At the departments, Journals of accounting for PSA classes (F KazNITU 705-13) and Schedules for office hours (F KazNITU 705-14) are compiled, during which teachers consult on lecture materials and independent work of students, accept students' work.

Responding to complaints from students is carried out in accordance with the DP KazNITU 721 "Consideration of appeals from citizens and legal entities." Complaints and claims of students are registered without fail, and the information obtained in this way is analyzed and processed at the appropriate level of the university: institute - vice-rector - rector. Also, students can verbally bring their statements to the adviser or head of the department. In the SU SOLUTIONS application, all records are presented in clear text.

Assessment of students' knowledge is carried out in accordance with the Regulations on the organization and conduct of the examination session, DP KazNITU 706 "Evaluation of knowledge and liquidation of debt (bachelor's degree)", Regulations on the final certification. The final certification of students is carried out strictly according to the schedule of exams in the form of a single written exam. Criteria and assessment methods are contained in the syllabuses of teachers and are published on the educational portal.

For the period of the examination session, an appeal commission is created from among teachers whose qualifications correspond to the profile of the disciplines being appealed. A student who does not agree with the result of the final control submits an appeal no later than the next business day from the moment the exam results appear on the university portal in accordance with the Regulations on the Appeal Commission.

Analytical part

During the visit, EEC experts on this standard came to the following conclusions.

The autonomy of the student, ensuring his freedom of education, choice of disciplines, various topics for study and much more, makes it possible to satisfy individual educational needs. In order to improve the quality of education and inculcate professional competencies, departments are working to provide students with the opportunity to choose an individual learning path with the right to choose not only disciplines, but also a teacher. During the interviews, the students confirmed the university's ability to choose disciplines in a language other than the language of instruction. Also, in the process of interviewing students and teaching staff, the active use of the university portal was revealed, which confirms its effectiveness.

As a prompt response to student complaints, management ensures that students interact with advisors and respond immediately to complaints. The EEC especially notes the SU Solutions mobile application developed by university students, the main purpose of which is to regularly study the public opinion of students and employees. Monitoring is carried out by completely anonymous collection of ideas and problems that have arisen. All interested persons have the opportunity to ask a question, offer their ideas and ways to eliminate any problems that arise. However, according to OP 6B11310-Digital Logistics, there is no specific data on a documented procedure for responding to suggestions and complaints from students, including feedback.

In modern conditions, it is necessary to pay more attention to teaching teaching staff and the introduction of various forms and methods of teaching, including the use of digital technologies. At the same time, the effectiveness of certain technologies can be confirmed not only in the process of conducting questionnaires, surveys, conversations, etc., but, first of all, by conducting their own research in this area by teachers. The teaching staff has some experience in developing their own methods of teaching academic disciplines, but their share in the total volume of academic disciplines and modules of the EP is insignificant. In this regard, the EEC considers it necessary for the teaching staff to actively conduct research in the field of innovative methods of teaching disciplines, to study and adopt the positive experience of using innovative technologies in the educational process.

Taking into account the specifics of educational trajectories in EP 6B04104-Startup Bachelor's degree (Computer science, Biomedical Engineering, Electronic and Electrical Engineering), the EEC did not provide a mechanism to ensure that each EP graduate achieves learning outcomes, and guarantees for ensuring the completeness of their formation are also not provided.

43.9% of the teaching staff "very good" assess the degree of academic freedom of the teaching staff, 56.1% - "good".

65.9% of the teaching staff believe that teachers can use their own teaching strategies "very well", 34.1% - "good".

"Very good" can use their own teaching methods 78% of the teaching staff, "good" - 22%.

50.3% of students fully agree that the university provides equal opportunities for mastering the EP and personal development for all students, agree - 28%, partially agree - 17.4%, disagree - 4.3%.

43.7% fully agree with the fact that the teacher uses effective teaching methods, 30.3% agree, 19.1% partially agree, and 6.9% disagree.

Strengths in OP6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree:

- The management of the EP has created conditions to support the autonomy of students, including the possibility of choosing an individual learning path, academic disciplines and a teacher.

- The university actively uses its own developed application "SU Solutions", where all interested persons can apply with complaints and suggestions.

VEK recommendations for EP 6V11310-Digital Logistics, 6V04103-Business Engineering, 6V04104-Startup Bachelor's Degree:

-In 2023, develop a plan for the publication and implementation of the teaching staff's own research in the field of teaching methods of academic disciplines in the educational process; ensure the dissemination of information about the results of their own research on the university website.

Additional recommendations of the EEC for OP 6B11310-Digital Logistics:

-By the beginning of the 2023-2024 academic year, the management of the EP will update the documented procedure for responding to student complaints and provide feedback.

Additional recommendations for EP 6B04104-Startup bachelor's degree:

-In the 2023-2024 academic year, develop a mechanism to ensure that each EP graduate achieves learning outcomes and ensure the completeness of their formation.

-Annually monitor the progress of students along the educational trajectory; publish the monitoring results on the university website.

Conclusions of the EEC according to the criteria:

According to the standard "Student-centered learning, teaching and assessment" OP 6B11310-Digital Logistics has 2 strong, 8 satisfactory positions, 1 criterion needs to be improved.

According to the standard "Student-centered learning, teaching and performance assessment" OP 6V04103-Business engineering has 2 strong and 8 satisfactory positions.

According to the standard "Student-centered learning, teaching and performance assessment" EP 6B04104-Startup, the bachelor's degree has 2 strong, 7 satisfactory positions, 1 criterion needs to be improved.

6.6. Standard "Students"

- *The PA must demonstrate the existence of a policy for the formation of a contingent of students in the context of the EP, ensure transparency and publicity of its procedures governing the life cycle of students (from admission to completion).*

- *The management of the EP should determine the procedure for the formation of a contingent of students based on:*

- *minimum requirements for applicants;*
- *the maximum size of the group when conducting seminars, practical, laboratory and studio classes;*
- *predicting the number of government grants;*
- *analysis of available material, technical, information resources, human resources;*
- *analysis of potential social conditions for students, incl. provision of places in the hostel.*
- *The management of the EP must demonstrate its readiness to conduct special adaptation and support programs for newly enrolled and foreign students.*
- *The PA must demonstrate the compliance of its actions with the Lisbon Recognition Convention, the existence of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and non-formal education.*
- *The PA should cooperate with other educational organizations and national centers of the "European Network of National Information Centers for Academic Recognition and Mobility / National Academic Recognition Information Centers" ENIC / NARIC in order to ensure comparable recognition of qualifications.*
- *The PA should provide an opportunity for external and internal mobility of students of the EP, as well as readiness to assist them in obtaining external grants for training.*
- *The management of the EP must demonstrate readiness to provide students with internship places, promote the employment of graduates, and maintain contact with them.*
- *The PA should provide for the possibility of providing EP graduates with documents confirming the qualifications received, including the learning outcomes achieved, as well as the context, content and status of the education received and evidence of its completion.*

Evidence

The formation of the contingent is carried out annually in accordance with the Rules for admission to study under the bachelor's programs of NAO KazNITU named after. K.I. Satpaev. To this end, students, teaching staff of the departments carry out career guidance work in city schools and in other regions of Kazakhstan. To form a contingent, annually at the university and at the institutes, an "Open Day", "Excursions for schoolchildren" are held for students of schools in the city and region, where reference books, booklets about the university, institutes and EP are distributed. These processes are regulated in accordance with DP KazNITU 701 "Vocational guidance work", DP KazNITU 702 "Formation of a contingent of students".

Information about the contingent of students in the context of the EP is given in the table.

Table - The contingent of students in the context of EP

Academic year	Training period	Form of study	Total students	Grant students		Students on a paid basis		Number of deducted students
				rus	kaz	rus	kaz	
OP6B04103-Business engineering								
2022-2023	4	full-time	24	5	6	7	6	-
OP6B04104-Startup undergraduate								
2022-2023	4	full-time	7	4	-	3	-	-
OP6B11310-Digital logistics								
2022-2023	4	full-time	20	7	10	3	-	-

Admission of foreign citizens to study on a paid basis is carried out on the basis of an interview in accordance with the procedure "The procedure for the stay of foreign students in the NJSC KazNTU named after K.I. Satpaev".

The procedure and rules for the transfer of students from other universities, as well as the procedure for re-crediting disbursed loans are set out in the Rules for Credit Technology of Education, the Rules for Admission to Bachelor's Programs of NAO KazNITU named after K.I. Satpaev.

Places in the hostel are distributed on a competitive basis by a specially created commission of the institute. The competitive commission carries out the distribution of places in the hostel, taking into account the grounds and priority in the priority order specified in the Rules for living in hostels of NAO KazNITU named after K.I. Satpaev, Rules for the allocation of places in dormitories of NAO KazNITU named after K.I. Satpaev.

The implementation of academic mobility of KazNITU continues its progressive development within the framework of the set priority tasks of international cooperation for the further integration of the university into the world educational space. The University has 163 agreements, contracts and memorandums of cooperation with foreign universities, international organizations, firms, centers, academies of sciences from 20 countries. The University strives to establish new contractual relations with foreign universities included in the TOP-200 World Universities according to the Times Higher Education, QS World University Rankings. Acceptance of documents and holding a competition within the framework of the academic mobility program is carried out in accordance with the DP KazNITU 718 "Academic mobility".

Within the framework of EP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's degree, educational and industrial practice is provided. Programs and guidelines for practices are available at the departments. There are also contracts with ZhebeLogistics LLP, ALE SPM RK, MAIN. Negotiations are underway with DamuLogistics, DeutscheBahn, JSC "KTZ", JSC "KTZ-Freight Transportation" for internships, dual training, internship teaching staff OP 6B11310-Digital Logistics.

Upon completion of the EP, students are issued documents based on the decision of the attestation commission to award the graduate a qualification (degree) and issue him a document of his own sample: a diploma and applications in three languages.

To support graduates in employment at the university, the Career Center has been created and is successfully operating, which organizes meetings, seminars, conferences and coaching aimed at summarizing, analyzing and providing students with information about the state and trends of the labor market, about the requirements for a job seeker; increases the level of awareness of students and graduates about the state and trends of the labor market in order to ensure the maximum opportunity for their employment; creates and updates databases of vacancies offered by employers in relevant specialties; forms a data bank and provides employers with information about graduates, opportunities for students to receive additional educational services and

conditions for targeted training of specialists, taking into account the characteristics of a particular enterprise.

To maintain feedback with graduates of different years, the Alumni Association (<https://satbayev.university.ru/alumni>), the purpose and objective of which is to establish and strengthen business ties with companies and organizations in which university graduates successfully work.

Analytical part

In the course of the analysis of the submitted documents, based on the results of meetings with students, graduates and employers, the EEC came to the conclusion that the university has an effective policy for forming a contingent of students.

Analysis of the content of EP 6B04104-Startup Bachelor's Degree demonstrated the need to develop a policy for the formation of a contingent of students in the context of the EP, taking into account its specifics. The educational trajectories provided for in the EP 6B04104-Startup Bachelor's Degree (Computer Science, Biomedical Engineering, Electronic and Electrical Engineering) clearly require special preparation of applicants, different from the requirements for applicants in the direction of "Business and Management". Insufficient profile training of applicants, the lack of relevant knowledge, skills and mastered prerequisites can cause non-fulfillment of the curriculum and threaten to disrupt the life cycle of students (from admission to completion).

During the visit to the EEC, the leadership of EP 6B04104-Startup Bachelor's did not demonstrate readiness to provide students with internship places and promote the employment of graduates. During an interview with the management of EP 6B04104-Startup Bachelor's, an opinion was expressed that there is no need for employment of graduates of this EP, since they will be graduating from the heads of their own enterprises. The EEC considers that this provision does not correspond to the declared qualification level of EP 6B04104-Startup Bachelor's degree.

The results of the student survey showed that:

- completely satisfied with the level of accessibility and responsiveness of the university management - 57.7%, partially satisfied - 32.9%, partially dissatisfied - 5.4%, dissatisfied - 2.9%;

- completely satisfied with the availability of academic counseling - 55.1%, partially satisfied - 30.9%, partially dissatisfied - 7.7%, dissatisfied - 2.6%;

- completely satisfied with the availability of health care services - 62%, partially satisfied - 26%, partially dissatisfied - 3.7%, dissatisfied - 2.9%, found it difficult to answer - 5.4%;

- completely satisfied with the availability of library resources - 68.6%, partially satisfied - 21.4%, partially dissatisfied - 5.1%, undecided - 3.4%;

- completely satisfied with the existing educational resources - 63.1%, partially satisfied - 25.1%, partially dissatisfied - 5.4%, dissatisfied - 2.9%, found it difficult to answer - 3.4%;

- the relationship between the student and the teacher is fully satisfied - 60.3%, partially satisfied - 27.1%, partially dissatisfied - 7.1%, dissatisfied - 4.3%.

There are no strengths in OP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

VEK recommendations for OP 6V11310-Digital Logistics:

- By the beginning of the 2023-2024 academic year, the leadership of the EP needs to develop a special program for the adaptation and support of foreign students.

- Develop comprehensive measures for the practical implementation of the plan for external and internal mobility of students starting from the 2023-2024 academic year.

There are no VEC recommendations for OP 6V04103-Business Engineering.

Recommendations for EP 6B04104-Startup bachelor's degree:

- By the beginning of the 2023-2024 academic year, develop a policy for the formation of a contingent of students in the context of the EP, taking into account the specifics of the proposed learning paths; post the results on the website and ensure that potential applicants are informed.

- At the beginning of the 2023-2024 academic year, conclude agreements with specialized enterprises for students to undergo professional practice.

-In the 2024-2025 academic year, determine a list of priority employers and develop a long-term plan for the employment of graduates.

Conclusions of the EEC according to the criteria:

According to the standard "Students" EP 6B11310-Digital Logistics has 11 satisfactory positions, 1 criterion needs to be improved.

According to the "Students" standard, OP 6V04103-Business Engineering has 12 satisfactory positions.

According to the standard "Students" EP 6B04104-Startup, the bachelor's degree has 10 satisfactory positions, 2 criteria require improvement.

6.7. Standard "Teaching Staff"

• *The PA must have an objective and transparent personnel policy, including in the context of the EP, including recruitment, professional growth and development of personnel, ensuring the professional competence of the entire staff.*

• *The PA must demonstrate the compliance of the staff potential of the teaching staff with the specifics of the EP.*

• *The management of the EP must demonstrate awareness of responsibility for its employees and provide favorable working conditions for them.*

• *The management of the EP should demonstrate the change in the role of the teacher in connection with the transition to student-centered learning.*

• *The PA must determine the contribution of the teaching staff of the EP to the implementation of the development strategy of the PA, and other strategic documents.*

• *The PA should provide opportunities for career growth and professional development of the teaching staff of the EP.*

• *The management of the EP must demonstrate readiness to involve practitioners in the relevant industries in teaching.*

• *The PA must demonstrate the motivation for the professional and personal development of EP teachers, including encouragement for the integration of scientific activity and education, the use of innovative teaching methods.*

• *An important factor is the readiness to develop academic mobility within the framework of the EP, to attract the best foreign and domestic teachers.*

Evidence

EEC confirms the existence of the approved Personnel Policy of KazNITU named after K.I. Satpaev (approved by the decision of the Board No. 10 of 08/02/2022). The staff of the teaching staff of the departments is staffed in accordance with the legislation of the Republic of Kazakhstan and the rules for the competitive replacement of positions of scientific and pedagogical personnel of higher educational institutions. The university has developed Qualification requirements for the positions of employees of KazNITU named after K.I. Satpaev (approved by the decision of the Board No. 8 of 06/03/2022). Decisions of the management on the admission, transfer, promotion of teaching staff are made on the basis of the Rules for the competitive replacement of vacant positions of the teaching staff of NAO "KazNRTU named after K.I. Satpaev" and the Rules for the certification of the teaching staff of KazNITU named after K.I. Satpaev.

Indicators for the qualitative and quantitative composition of the teaching staff of the departments confirm the availability of human resources necessary for the implementation of the

EP and the corresponding qualification requirements for licensing educational activities. The Department of Logistics employs 16 people, of which 9 are full-time, 7 part-time; degree is 67%. The Department of Management and Mathematical Economics employs 19 people, of which 15 are full-time, 4 part-time; degree is 80%.

In general, the quantitative and qualitative composition of the teaching staff of accredited educational programs is stable. All teachers of the departments serving these accredited EPs have a basic education in their profile. Employment contracts have been concluded with all teachers based on the decision of the competition commission for filling positions and contracts. All teachers carry out the teaching load in accordance with the rules for the distribution of hours. The fulfillment of the teaching load and individual work plans of university teachers is considered at meetings of the faculty councils, the general report on the university is considered at the Academic Council of the university.

The university has a documented procedure DP KazNITU 610 "Occupational Safety and Health Management System", developed to ensure the safety of life and health of workers. The understanding of responsibility for employees is reflected in the Labor Regulations, job descriptions, safety and labor protection documentation.

Social support of workers is carried out by the trade union committee of the university. Members of the trade union have benefits for vouchers to sanatoriums, services at the polyclinic and various types of treatment.

Teaching staff are familiar with all the strategic documents of KazNITU named after K.I. Satpaev. On the basis of strategic documents, work plans of the department, plans for the development of educational programs, plans for publishing educational and methodological documentation, and individual educational work of the teaching staff are drawn up. For readable disciplines, teaching staff should develop syllabuses, guidelines for practical and laboratory work.

At the Department of "Management and Mathematical Economics" a scientific project is being implemented within the framework of grant funding "Development of productive models for managing the development portfolio of small and medium-sized businesses for the conditions of Kazakhstan based on the ideas and principles of Agile technologies" (IRN No. AP14871548).

The main goal of talent management at the university is to provide a comfort zone for young talented employees, creating optimal conditions, consistent development and growth for the successful work of the entire organization. The HR service is guided in its activities by the documented procedure DP KazNITU 602 "Professional development and training of personnel" and the Rules for the competitive replacement of teaching staff. Every year the university allocates funds from the university budget to improve the qualifications of the teaching staff of the university.

The university has developed a Regulation on remuneration, material incentives and social support for employees, where the establishment of the official salary of an employee is carried out on the basis of the qualification characteristics of the employee (education, level of English proficiency, etc.), the complexity, quantity, quality and effectiveness of the work performed by him. Bonuses are provided for employees on public and professional holidays, as well as individual bonuses for employees based on the results of half-year work and those involved in research work.

During the reporting period, the teaching staff of the departments improved their skills by participating in various seminars, advanced training courses, trainings, master classes in the universities of the Republic of Kazakhstan, foreign internships are planned.

Analytical part

Based on the analysis of the submitted documentation, visual inspection and interviewing of stakeholders, the EEC testifies that the university pursues an objective and high-quality personnel policy, creates the necessary conditions for the professional development of teaching staff. During the interviews, the staff and teaching staff expressed their satisfaction with the current personnel

policy at the university, demonstrated awareness of the procedure and nuances of the current personnel management system. Young teachers are also satisfied with the working conditions.

According to OP 6B11310-Digital Logistics, VEK considers it necessary to update the role of the teacher in the context of the successful implementation of student-centered learning. Favorable conditions for the work of teachers are not fully created. There are no incentive measures to encourage innovative teachers involved in inventive activities.

The experts state that the teaching staff meets the qualification requirements, however, according to the EP 6B04104-Startup, the bachelor's degree did not demonstrate the compliance of the personnel potential with the specifics of the EP, taking into account the envisaged learning paths: Computer science, Biomedical Engineering, Electronic and Electrical Engineering.

During the interview, the teaching staff spoke positively about the state of the moral and psychological climate at the university, the system of social support.

According to the results of the survey conducted by the teaching staff, the EEC IAAR experts found that:

- the university provides opportunities for teaching staff to use innovations in teaching - "very good" - 70.7%, "good" - 26.8% and "relatively bad" - 2.4%;
- The teaching staff assess the support of the university and its management of research activities as "very good" - 53.7%, "good" - 46.3%;
- 41.5% of the teaching staff assess the organization of work on academic mobility as "very good", "good" - 48.8%, "relatively bad" - 9.8%;
- the level of the teaching staff's ability to combine teaching with scientific research is "very good" - 39%, "good" - 48.8%, "relatively bad" - 12.2%;
- 43.9% of the teaching staff are fully satisfied with the terms of remuneration, 48.8% are partially satisfied, 7.3% are not satisfied;
- 63.4% are completely satisfied with the convenience of work, services available at the university, 31.7% are partially satisfied, and 4.9% are dissatisfied.

There are no strengths in OP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

VEK recommendations for OP 6V11310-Digital Logistics:

- The management of the EP on a systematic basis to conduct methodological seminars for teaching staff about the features of student-centered learning and the leading role of the teacher in the implementation of the student-centered approach.

There are no VEC recommendations for OP 6V04103-Business Engineering.

Recommendations for EP 6B04104-Startup bachelor's degree:

- In the 2023-2024 academic year, conduct an analysis of staffing needs for the effective implementation of the EP and develop a plan for advanced training of teaching staff in accordance with the specifics of the EP.

Conclusions of the EEC according to the criteria:

According to the standard "Teaching Staff" EP 6B11310-Digital Logistics has 7 satisfactory positions, 2 criteria require improvement.

According to the standard "Teaching staff" EP 6B04103-Business engineering has 9 satisfactory positions.

According to the standard "Teaching staff" EP 6B04104-Startup, the bachelor's degree has 8 satisfactory positions, 1 criterion needs to be improved.

6.8. Standard "Educational resources and student support systems"

- *The OO must guarantee a sufficient number of educational resources and student support services to ensure the achievement of the goal of the EP.*
- *The OO must demonstrate the sufficiency of material and technical resources and infrastructure, taking into account the needs of various groups of students in the context of the EP (adults, employed, foreign students, as well as students with disabilities).*
- *The management of the EP must demonstrate the existence of procedures for supporting various groups of students, including information and counseling.*
- *The EP management must demonstrate the compliance of information resources with the specifics of the EP, including:*
 - *technological support for students and teaching staff (for example, online learning, modeling, databases, data analysis programs);*
 - *library resources, including a fund of educational, methodical and scientific literature on general education, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases;*
 - *examination of the results of research, graduation works, dissertations for plagiarism;*
 - *access to educational Internet resources;*
 - *functioning of WI-FI on the territory of the educational organization.*
- *The OO demonstrates the planning of providing the EP with educational equipment and software similar to those used in the relevant sectors of the economy.*

Evidence

The university has created conditions to meet the social, personal and everyday needs of students. To do this, there are structural divisions that assist students in organizing the educational process and in solving social issues. The development of the material and technical base, information support and infrastructure is carried out in accordance with the DP KazNITU 612 "Audience fund and educational and laboratory base", the DP KazNITU 603 "Infrastructure Management" and the DP KazNITU 607 "Information Resource Management".

Educational programs are adequately equipped with a classroom fund and educational laboratories that provide all types of practical training and research work for students and comply with the current sanitary-epidemiological and fire safety norms and rules.

Departments of "Management and Mathematical Economics" and "Logistics" have computer classes and classrooms. The departments have 4 classrooms that are used in the educational process. One cabinet with Python, SPSS, R programming, AnyLogic and Stata software. Classrooms are equipped with projectors, whiteboards, computers, laptops, interactive whiteboards, TVs, speakers, workstations.

Acquisition of the fund and information support of the scientific and educational process are carried out on the basis of requests from the departments. Information support of educational programs is provided through printed publications, full-text documents, the University's Digital Library and subscription electronic resources.

The library is a structural subdivision of the University. The library provides: students' access to electronic scientific and educational resources; the formation of a library fund in accordance with the applications of the departments, which reflects the profile of academic disciplines and filling in the card index of the book supply of the educational process. The total fund of the library as of 01.01.2022 is 1,625,548 copies, including 369,832 copies in the state language. 508,150 copies of textbooks in general education disciplines, including in the state language - 158,552 copies. The fund contains 978,813 copies of textbooks and teaching aids, in the Kazakh language - 306,376 copies; 633,223 copies of scientific literature, in the Kazakh language - 48,715 copies.

In accordance with the educational and research needs of users, access to thematic electronic collections, the electronic catalog of the scientific library is also provided.

The procedures for supporting various groups of students are described in the DP KazNITU 715 "Social support for students" and the Regulation on integrated (inclusive) education. The order of stay and adaptation of foreign students / students from other universities are prescribed in the document "The order of stay of foreign students in NAO KazNTU named after K.I. Satpaev".

As part of the policy of academic honesty at the university, papers are examined for plagiarism through the StrikePlagiarism.com system. Checking the work of students for plagiarism is carried out by operators at the departments.

A dedicated Internet channel for students, teaching staff and staff with a bandwidth of 1000 Mbps provides high speed networking. The university has 49 WiFi access points, of which 4 are in dormitories and 45 are on campus.

Inspection of the material and technical base of the university showed that the premises in which the EP is implemented comply with the current sanitary standards, fire safety requirements. In order to ensure the safety of students and employees, all educational buildings of the university are equipped with fire alarm systems and fire extinguishing equipment.

An important condition in ensuring student satisfaction with the work of support services is the functioning of a mechanism for regular evaluation of student support services. Every year, a survey is conducted on "Student satisfaction with the quality of educational services", "Satisfaction of teaching staff and employees with the university", which includes questions about satisfaction with the level of technical teaching aids, their compliance with modern requirements.

Analytical part

As a result of a visual inspection by the members of the EEC of the objects of the material base, it is noted that in order to ensure the educational process of the accredited educational programs, the university has all the necessary educational and material assets. The university building complies with current sanitary standards and fire safety requirements. Classroom and laboratory facilities, classrooms and other premises comply with the established safety regulations.

At the same time, the EEC notes the need for constant updating of the library fund according to OP 6B11310-Digital Logistics.

There are failures in the stable functioning of Wi-Fi on the territory of the university and dormitories.

According to the results of the student survey:

- classrooms, classrooms for large groups "completely satisfied" 57.7% of students, "partially satisfied" - 26.6%, "partially dissatisfied" - 7.7%, "not satisfied" - 5.7%, "found it difficult to answer" - 2.3%;

51.1% are "completely satisfied" with student lounges, 28% are "partially satisfied", 10.9% are "partially dissatisfied", 7.7% are "not satisfied", "difficult to answer" - 2, 3%;

- available computer classes "fully satisfied" 56.6%, "partially satisfied" - 30.9%, "partially dissatisfied" - 4.3%, "not satisfied" - 6%, "difficult to answer" - 2.3 %;

- availability and quality of Internet resources "fully satisfied" 59.7%, "partially satisfied" - 25.1%, "partially dissatisfied" - 6%, "not satisfied" - 5.1%, "difficult to answer" - 4 %;

-providing with a hostel "fully satisfied" 58.9%, "partially satisfied" - 29.4%, "partially dissatisfied" - 4%, "not satisfied" - 4.9%, 2.9% found it difficult to answer.

There are no strengths in OP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

VEK recommendations for OP 6V11310-Digital Logistics:

- On an ongoing basis, ensure the sufficiency of material and technical resources, the fund of educational, methodological and scientific literature and infrastructure, taking into account the needs of students.

-OO to ensure the stable functioning of Wi-Fi on the territory of the university and in the dormitories.

There are no recommendations of the EEC for OP 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

Conclusions of the EEC according to the criteria:

According to the standard "Educational resources and student support systems" OP 6B11310-Digital Logistics has 8 satisfactory positions, 1 criterion needs to be improved.

According to the standard "Educational Resources and Student Support Systems" OP 6B04103-Business Engineering, 6B04104-Startup, the bachelor's degree has 9 satisfactory positions.

6.9. Public Information Standard

The PA must publish reliable, objective, up-to-date information about the educational program and its specifics, which should include:

- expected learning outcomes of the educational program being implemented;
- qualification and (or) qualifications that will be awarded upon completion of the educational program;
- approaches to teaching, learning, as well as a system (procedures, methods and forms) of assessment;
- information about passing scores and learning opportunities provided to students;
- information about employment opportunities for graduates.
- The management of the EP should provide for a variety of ways to disseminate information, including the media, information networks to inform the general public and interested parties.
- Informing the public should include support and explanation of the national development programs of the country and the system of higher and postgraduate education.
- The OO must demonstrate the reflection on the web resource of information that characterizes it as a whole and in the context of educational programs.
- An important factor is the availability of adequate and objective information about the teaching staff of the EP.
- An important factor is informing the public about cooperation and interaction with partners within the framework of the OP.

Evidence

Following the principles of openness and accessibility to the public, the university openly publishes complete and reliable information about the activities of the university, the rules for admission of applicants, educational programs, terms and forms of study, international programs and partnerships of the university, the advantages of the university and institutions, information about the employment of graduates, contact and other useful information for applicants and students in various information sources.

The main channel for informing the public (applicants, parents, students, graduates and employers) is the official (<https://satbayev.university.ru>), accounts in social networks: Vkontakte, Youtube, Facebook (<https://www.facebook.com/satbayevuniversity>), Instagram (https://www.instagram.com/satbayev_university). The media and electronic publications used by the university include: the republican newspaper "Kazakhstanskaya Pravda"; Forbes Kazakhstan; Yegemen Kazakhstan; ExpressK; Tengrinys; Nur.kz and others. The site's information is aimed at a wide audience: students, staff, teachers, applicants and their parents, employers, university partners, scientific and public organizations. All important events held by the university are reflected in presentations on large-format permanent monitors located at the university.

The University provides systematic information support to national programs for the development of the country and the system of higher and postgraduate education, carried out through the participation of teaching staff of the departments in events of various levels of promotions and their coverage on the website in the context of the university's activities. So, on the website of the university there is a page of the Program "Rukhani Zhangyru" (<https://official.satbayev.university.ru/university/roukhani-zhangyru->), Program "Nurly Zher" (<https://official.satbayev.university/en/nurly-zher-program>).

The website of the university provides information about the teachers of the departments (<https://official.satbayev.university.ru/project-management/nauchno-obrazovatelnyy-tsentri-matematicheskoy-ekonomiki>, <https://official.satbayev.university.ru/project-management/kafedra-logistiki>), which includes a profile containing a photo of the teacher, information about his scientific achievements, contacts, etc.

Informing the public about cooperation and interaction with partners within the framework of the EP, including scientific / consulting organizations, business partners, social partners and educational organizations, is carried out mainly through the university website and in electronic media.

Analytical part

EEC IAAR, having interviewed the rector, vice-rectors, directors of institutes, heads of departments, heads and employees of structural divisions, students, faculty, representatives of employers' organizations, notes that each focus group during the interview in one way or another referred to the university website. This confirms the fact that the official website is the main source of information.

The university management uses a variety of ways to disseminate information to inform the general public and stakeholders. The procedure for informing the public is based on providing information about the activities of the university, implemented by the EP, the general conditions of admission. At the same time, the site does not contain information about the approaches of teaching, learning, as well as procedures, methods and forms of assessment. Information about the qualifications that are assigned upon completion of accredited EPs is also not provided. For example, the website of the university provides information that according to EP 6B04104-Startup, undergraduate students are "training specialists in the field of business management in such areas as programming, biomedical engineering, electronics and electrical engineering", which can mislead potential applicants, their parents and other stakeholders regarding the qualifications that will be awarded as a result of the training. The website of the university does not fully reveal the competitive advantages of each individual EP and its positioning in the market of educational services.

The EEC notes that there is no up-to-date updated information on the development of EP 6V11310-Digital Logistics, its features, teaching staff, cooperation and interaction with partners (employers, graduates) within the framework of the EP, bases of practices, employment .

A survey of students conducted during the online visit of the EEC IAAR showed that 49.4% of students express complete satisfaction with the content and information content of the website of the university in general and faculties in particular, 25.4% are partially satisfied, 9.7% - partially dissatisfied, 12.9% - dissatisfied and 2.6% - found it difficult to answer.

There are no strengths in OP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

VEK recommendations for OP 6V11310-Digital Logistics:

- The management of the EP on an ongoing basis to update objective information about the specifics of the EP, expected results, teaching staff, bases of practice, employment of graduates.

- By the beginning of the 2023-2024 academic year, submit up-to-date information on cooperation and interaction with partners within the framework of the EP on the university website.

VEK recommendations for EP 6B04103-Business engineering, 6B04104-Startup bachelor's degree:

- By the beginning of the admission campaign for the 2023-2024 academic year, provide complete, up-to-date and objective information on the implemented EPs on the university website, including:

-data reflecting the positioning of the EP in the market of educational services;

-expected learning outcomes and the assigned qualifications for the EP;

- information about the educational opportunities provided to students;
- information about teaching, learning and assessment approaches;
- information about employment opportunities for graduates, etc.

Conclusions of the EEC according to the criteria:

According to the standard "Informing the public" OP 6V11310-Digital logistics, 6V04103-Business engineering have 9 satisfactory positions, 1 criterion needs to be improved.

According to the standard "Informing the public" EP 6B04104-Startup, the bachelor's degree has 8 satisfactory positions, 2 criteria require improvement.



(VII) OVERVIEW OF STRENGTHS/BEST PRACTICE FOR EACH STANDARD

According to the standard "Management of the educational program"

Strengths in OP 6B11310-Digital Logistics:

- The availability of the EP manual for students and teaching staff for timely response to the proposals of stakeholders, confirmed during conversations with focus groups and the results of a survey of students and teaching staff.

There are no strengths in EP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree.

According to the standard "Information Management and Reporting"

Strengths in EP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree:

- The university uses modern information and communication technologies and software tools HeRo Study Space and LMS Polytechnonline, through which information is collected, analyzed and managed in all areas of interest to stakeholders.

According to the standard "Development and approval of educational programs"

Strengths in OP 6B11310-Digital Logistics:

- The developed EP corresponds to the established goals, including the expected learning outcomes.

There are no strengths in EP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree.

According to the standard "Continuous monitoring and periodic evaluation of educational programs"

There are no strengths in OP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

According to the standard "Student-Centered Learning, Teaching and Assessment"

Strengths in OP6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree:

- The management of the EP has created conditions to support the autonomy of students, including the possibility of choosing an individual learning path, academic disciplines and a teacher.
- The university actively uses its own developed application "SU Solutions", where all interested persons can apply with complaints and suggestions.

According to the standard "Students"

There are no strengths in OP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

According to the standard "Teaching staff"

There are no strengths in OP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

According to the standard "Educational resources and student support systems"

There are no strengths in OP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelor's Degree.

According to the standard "Informing the public"
Strengths in EP 6B11310-Digital Logistics, 6B04103-Business Engineering, 6B04104-Startup Bachelormissing.



(VIII) OVERVIEW RECOMMENDATIONS FOR IMPROVING QUALITY FOR EACH STANDARD

According to the standard "Management of the educational program"

VEK recommendations for EP 6V11310-Digital Logistics, 6V04103-Business Engineering, 6V04104-Startup Bachelor's Degree:

-In the 2023-2024 academic year, the university management should create an internal regulatory document (or make appropriate additions to the Regulations on the development of educational programs) that describes the uniform requirements for the development of plans for the development of university educational programs, taking into account:

- analysis of the functioning of the educational program, its real positioning and demand in the market of educational services;
- specific indicative indicators, indicating the timing of implementation for the main activities of a particular EP;
- involvement of employers, students and teaching staff in the preparation of the EP development plan;
- determining the individuality and uniqueness of the EP development plan within the real positioning of the university;
- a mechanism for monitoring the implementation of the EP development plan and regular revision of the EP development plan.

Additional recommendations of the EEC for OP 6B11310-Digital Logistics:

- By the beginning of the 2023-2024 academic year, the management of the EP should revise the development plan for the EP, taking into account:

- analysis of proposals from employers, students and teaching staff;
- internal quality assurance system of the EP, including monitoring, decision-making based on facts;
- specification of possible risks and ways to minimize them.

Additional recommendations of the VEK for EP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree:

-In the 2023-2024 academic year, revise the development plans of the EP, bring them in line with the established requirements; EP development plans should be posted on the university website.

- At the beginning of the 2023-2024 academic year, conduct training on risk management for the heads of the EP and persons involved in the management of the EP.

-By the end of the 2023-2024 academic year, conduct a detailed risk analysis in the context of each individual EP (taking into account the specifics of the EP), specify measures to reduce the impact of risks, indicating measurable performance indicators, responsible persons and implementation deadlines.

- By the beginning of the 2023-2024 academic year, develop an action plan to introduce new innovative teaching and assessment methods, including our own, into the educational process, as well as provide feedback on the effectiveness of their use.

According to the standard "Information Management and Reporting"

Дополнительные рекомендации ВЭК по ОП 6B11310-Цифровая логистика:

- The management of the EP annually revise the content of the EP, taking into account changes in the labor market, the requirements of employers and professional standards and the social demand of society.

- By the beginning of the 2024-2025 academic year, develop training materials aimed at preparing students for professional certification.

Additional recommendations of the VEK for EP 6B04103-Business Engineering, 6B04104-Startup bachelor's degree:

-In the 2023-2024 academic year, develop Catalogs of elective disciplines / modules with a description of the content of the discipline, expected learning outcomes, pre- and post-requisites; post catalogs on the university website.

Additional recommendations for EP 6B04104-Startup bachelor's degree:

-In the 2023-2024 academic year, review the graduate model, ensure its discussion by the collegiate management bodies of the EP with the involvement of stakeholders and specialized specialists; publish the results on the university website.

-In the 2023-2024 academic year, clearly define the ratio of hard and soft skills, formed as a result of mastering the EP.

According to the standard "Continuous monitoring and periodic evaluation of educational programs"

VEC recommendations for EP 6V11310-Digital Logistics, 6V04103-Business Engineering, 6V04104-Startup Bachelor's Degree:

-Update the Regulations on the development of educational programs by the end of the 2022-2023 academic year, including requirements for monitoring and evaluating the quality of the EP.

-In 2023, determine and implement a mechanism for timely informing stakeholders about organizational decisions taken in relation to the EP.

According to the standard "Student-Centered Learning, Teaching and Assessment"

VEK recommendations for EP 6V11310-Digital Logistics, 6V04103-Business Engineering, 6V04104-Startup Bachelor's Degree:

-In 2023, develop a plan for the publication and implementation of the teaching staff's own research in the field of teaching methods of academic disciplines in the educational process; ensure the dissemination of information about the results of their own research on the university website.

Additional recommendations of the EEC for OP 6B11310-Digital Logistics:

-By the beginning of the 2023-2024 academic year, the management of the EP will update the documented procedure for responding to student complaints and provide feedback.

Additional recommendations for EP 6B04104-Startup bachelor's degree:

-In the 2023-2024 academic year, develop a mechanism to ensure that each EP graduate achieves learning outcomes and ensure the completeness of their formation.

-Annually monitor the progress of students along the educational trajectory; publish the monitoring results on the university website.

According to the standard "Students"

VEK recommendations for OP 6V11310-Digital Logistics:

-Develop comprehensive measures for the practical implementation of the plan for external and internal mobility of students starting from the 2023-2024 academic year.

There are no VEC recommendations for OP 6V04103-Business Engineering.

Recommendations for EP 6B04104-Startup bachelor's degree:

- By the beginning of the 2023-2024 academic year, develop a policy for the formation of a contingent of students in the context of the EP, taking into account the specifics of the proposed learning paths; post the results on the website and ensure that potential applicants are informed.

- At the beginning of the 2023-2024 academic year, conclude agreements with specialized enterprises for students to undergo professional practice.

-In the 2024-2025 academic year, determine a list of priority employers and develop a long-term plan for the employment of graduates.

According to the standard "Teaching staff"

VEK recommendations for OP 6V11310-Digital Logistics:

- The management of the EP on a systematic basis to conduct methodological seminars for teaching staff about the features of student-centered learning and the leading role of the teacher in the implementation of the student-centered approach.

There are no VEC recommendations for OP 6V04103-Business Engineering.

Recommendations for EP 6B04104-Startup bachelor's degree:

-In the 2023-2024 academic year, conduct an analysis of staffing needs for the effective implementation of the EP and develop a plan for advanced training of teaching staff in accordance with the specifics of the EP.

По стандарту «Образовательные ресурсы и системы поддержки студентов»

Рекомендации ВЭК по ОП 6B11310-Цифровая логистика:

-ОО обеспечить стабильное функционирование Wi-Fi на территории университета и в общежитиях.

Рекомендаций ВЭК для ОП 6B04103-Бизнес инжиниринг, 6B04104-Startup бакалавриат нет.

По стандарту «Информирование общественности»

Рекомендации ВЭК по ОП 6B11310-Цифровая логистика:

-Руководству ОП на постоянной основе актуализировать объективную информацию о специфике ОП, ожидаемых результатах, о ППС, базах практик, трудоустройстве выпускников.

-К началу 2023-2024 учебного года представить на сайте университета актуальную информацию о сотрудничестве и взаимодействии с партнерами в рамках ОП.

Рекомендации ВЭК для ОП 6B04103-Бизнес инжиниринг, 6B04104-Startup бакалавриат:

- By the beginning of the admission campaign for the 2023-2024 academic year, provide complete, up-to-date and objective information on the implemented EPs on the university website, including:

-data reflecting the positioning of the EP in the market of educational services;

-expected learning outcomes and the assigned qualifications for the EP;

-information about the educational opportunities provided to students;

-information about teaching, learning and assessment approaches;

-information about employment opportunities for graduates, etc.

(IX) RECOMMENDATION TO THE ACCREDITATION BOARD

The external expert commission made a unanimous decision to recommend to the IAAR Accreditation Council the educational program 6B11310-Digital Logistics to be accredited for a period of 5 years.

The external expert commission made a unanimous decision to recommend to the IAAR Accreditation Council that the educational program 6B04103-Business Engineering be accredited for a period of 5 years.

The external expert commission made a unanimous decision to recommend to the Accreditation Council of the IAAR the educational program 6B04104-Startup bachelor's degree to be accredited for a period of 3 years.



Annex 1. Evaluation table. PARAMETERS OF THE SPECIALIZED PROFILE (EX-ANTE)

The conclusion of the external expert commission based on the results of the quality assessment
educational program 6B11310-Digital logistics
Non-commercial joint stock company "Kazakh national research
Technical University named after K.I. Satpaev"

No. p \ p	No. n/n	Criteria for evaluation	Position of the educational organization			
			strong	Satisfactory	Assumes improvement	Unsatisfactory
Standard 1 "Educational program management»						
1	1.	The organization of higher and (or) postgraduate education must have a published quality assurance policy that reflects the relationship between research, teaching and learning		+		
2	2.	The organization of higher and (or) postgraduate education must demonstrate the development of a culture of quality assurance, including in the context of EP		+		
3	3.	Commitment to quality assurance should apply to any activity performed by contractors and partners (outsourcing), including the implementation of joint/double-degree education and academic mobility		+		
4	4.	The EP management demonstrates transparency in the development of the EP development plan, containing the start dates for implementation, based on an analysis of its functioning, the actual positioning of the EP and the focus of its activities on meeting the needs of the state, employers, students and other stakeholders		+		
5	5.	The EP management demonstrates the existence of mechanisms for the formation and regular review of the EP development plan and monitoring its implementation, assessing the achievement of learning goals, meeting the needs of students, employers and society, making decisions aimed at continuous improvement of the EP		+		
6	6.	The EP management should involve representatives of stakeholder groups, including employers, students and teaching staff in the formation of the EP development plan		+		
7	7.	The management of the EP must demonstrate the individuality and uniqueness of the EP development plan, its consistency with national priorities and the development strategy of the organization of higher and (or) postgraduate education		+		
8	8.	The organization of higher and (or) postgraduate education must demonstrate a clear definition of those responsible for business processes within the EP, an unambiguous distribution of staff duties, and delineation of functions of collegial bodies		+		
9	9.	The management of the EP must provide evidence of the transparency of the educational program management system		+		
10	10.	The management of the EP must demonstrate the existence of an internal quality assurance system for the EP, including its design, management and monitoring, their improvement, decision-making based on facts			+	
eleven	11.	The management of the EP must carry out risk management, including within the framework of the EP undergoing primary accreditation, and also demonstrate a system of measures aimed at reducing the degree of risk			+	
12	12.	The management of the EP should ensure the participation of representatives of employers, teaching staff, students and other interested parties in the collegiate management bodies of the educational program, as well as their		+		

		representativeness in making decisions on the management of the educational program				
13	13.	The OO must demonstrate innovation management within the EP, including the analysis and implementation of innovative proposals			+	
14	14.	The management of the EP must demonstrate evidence of readiness for openness and accessibility for students, teaching staff, employers and other interested parties	+			
15	15.	The management of the EP must be trained in education management programs		+		
Total by standard			1	elev en	3	0
Standard 2 Information Management and Reporting						
16	1.	The OO must demonstrate the existence of a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software, and that it uses a variety of methods to collect and analyze information in the context of the EP	+			
17	2.	The management of the EP must demonstrate the existence of a mechanism for the systematic use of processed, adequate information to improve the internal quality assurance system		+		
18	3.	The management of the EP must demonstrate fact-based decision making		+		
19	4.	Within the framework of the EP, a system of regular reporting should be provided, reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of the activities of departments and departments, scientific research		+		
20	5.	The PA must establish the frequency, forms and methods for assessing the management of the EP, the activities of collegial bodies and structural divisions, senior management, and the implementation of scientific projects		+		
21	6.	The OO must demonstrate the determination of the procedure for and ensuring the protection of information, including the identification of persons responsible for the reliability and timeliness of the analysis of information and the provision of data		+		
22	7.	An important factor is the availability of mechanisms for involving students, employees and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them.		+		
23	8.	The management of the EP must demonstrate the existence of a mechanism for communication with students, employees and other stakeholders, as well as mechanisms for resolving conflicts		+		
24	9.	OO must demonstrate the existence of mechanisms for measuring the degree of satisfaction with the needs of teaching staff, staff and students within the framework of the EP			+	
25	10.	The PA should provide for an assessment of the effectiveness and efficiency of activities, including in the context of the EP		+		
		<i>The information expected to be collected and analyzed within the framework of the EP should take into account:</i>				
26	elev n.	key performance indicators		+		
27	12.	the dynamics of the contingent of students in the context of forms and types		+		
28	13.	academic performance, student achievement and dropout		+		
29	14.	satisfaction of students with the implementation of the EP and the quality of education at the university		+		
thir ty	15.	availability of educational resources and support systems for students		+		
31	16.	The PA must confirm the implementation of the procedures for processing personal data of students, employees and teaching staff on the basis of their documented consent		+		
Total by standard			1	14	1	0
Standard 3 "Development and approval of the educational program"						

32	1.	The OO must define and document the procedures for developing the EP and their approval at the institutional level.		+		
33	2.	The management of the EP should ensure that the content of the EP complies with the established goals, including the intended learning outcomes.	+			
34	3.	The management of the EP must demonstrate the existence of mechanisms for reviewing the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social demand of society			+	
35	4.	The management of the EP should ensure the availability of developed models of the EP graduate that describe the learning outcomes and personal qualities		+		
36	5.	The management of the EP must demonstrate the conduct of external reviews of the content of the EP and the planned results of its implementation		+		
37	6.	The qualification awarded upon completion of the EP must be clearly defined and correspond to a certain level of the NSC and QF-EHEA		+		
38	7.	The EP management should determine the influence of disciplines and professional practices on the formation of learning outcomes		+		
thirty	8.	An important factor is the possibility of preparing students for professional certification (IS)		+		
40	9.	The management of the EP must provide evidence of the participation of students, teaching staff and other interested parties in the development of the EP, ensuring its quality		+		
41	10.	The management of the EP should ensure that the content of the academic disciplines and the planned results correspond to the level of education (bachelor's, master's, doctoral studies)		+		
42	11.	The structure of the EP should provide for various types of activities that ensure that students achieve the planned learning outcomes		+		
43	12.	An important factor is the correspondence between the content of the EP and the learning outcomes of the EP implemented by organizations of higher and (or) postgraduate education in the EHEA		+		
Total by standard			1	10	1	0
Standard 4 "Continuous monitoring and periodic evaluation of educational programs"						
44	1.	The PA should determine the mechanisms for monitoring and periodically evaluating the EP to ensure the achievement of the goal and meeting the needs of students, society, and show the focus of the mechanisms on the continuous improvement of the EP		+		
		<i>Monitoring and periodic evaluation of the EP should include:</i>				
45	2.	the content of the program in the light of the latest achievements of science in a particular discipline to ensure the relevance of the discipline taught		+		
46	3.	changing needs of society and the professional environment		+		
47	4.	workload, performance and graduation of students		+		
48	5.	effectiveness of student assessment procedures		+		
49	6.	expectations, needs and satisfaction of students with EP training		+		
50	7.	educational environment and support services, and their compliance with the objectives of the EP		+		
51	8.	The management of the EP must demonstrate a systematic approach in monitoring and periodically assessing the quality of the EP		+		
52	9.	The OO, the management of the EP should determine a mechanism for informing all interested parties about any planned or taken actions in relation to the EP			+	
53	10.	All changes made to the OP must be published		+		
Total by standard			0	9	1	0

Standard 5 "Student-Centered Learning, Teaching and Assessment"						
54	1.	The management of the EP should ensure respect and attention to different groups of students and their needs, provide them with flexible learning paths		+		
55	2.	The management of the EP should provide for the use of various forms and methods of teaching and learning		+		
56	3.	An important factor is the presence of own research in the field of teaching methods of academic disciplines of the EP			+	
57	4.	The management of the EP must demonstrate the existence of feedback mechanisms for the use of various teaching methods and the assessment of learning outcomes		+		
58	5.	The management of the EP must demonstrate the existence of mechanisms to support the autonomy of students with simultaneous guidance and assistance from the teacher	+			
59	6.	The management of the EP must demonstrate the existence of a procedure for responding to complaints from students	+			
60	7.	The OO must ensure the consistency, transparency and objectivity of the mechanism for evaluating learning outcomes for each SP, including appeal		+		
61	8.	The PA must ensure that the procedures for assessing the learning outcomes of students of the EP correspond to the planned results and goals of the program, the publication of criteria and assessment methods in advance		+		
62	9.	The PA should define the mechanisms to ensure the achievement of learning outcomes by each EP graduate and ensure the completeness of their formation.		+		
63	10.	Assessors must be familiar with modern methods for assessing learning outcomes and regularly improve their skills in this area.		+		
Total by standard			2	9	1	0
Standard 6 "Students»						
64	1.	The PA must demonstrate the existence of a policy for the formation of a contingent of students in the context of the EP, ensure transparency and publicity of its procedures governing the life cycle of students (from admission to completion)		+		
		<i>The management of the EP should determine the procedure for the formation of a contingent of students based on:</i>				
65	2.	minimum requirements for applicants		+		
66	3.	maximum group size during seminars, practical, laboratory and studio classes		+		
67	4.	predicting the number of government grants		+		
68	5.	analysis of available material and technical, information resources, human resources		+		
69	6.	analysis of potential social conditions for students, incl. provision of places in the hostel		+		
70	7.	The management of the EP must demonstrate readiness to conduct special adaptation and support programs for newly enrolled and foreign students		+		
71	8.	The PA must demonstrate the compliance of its actions with the Lisbon Recognition Convention, the existence of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and non-formal education		+		
72	9.	The PA should cooperate with other educational organizations and national centers of the "European Network of National Information Centers for Academic Recognition and Mobility / National Academic Recognition Information Centers" ENIC / NARIC in order to ensure comparable recognition of qualifications		+		
73	10.	The PA should provide an opportunity for external and internal mobility of students of the EP, as well as readiness to assist them in obtaining external grants for training			+	

74	11.	The management of the EP must demonstrate readiness to provide students with internship places, promote the employment of graduates, and maintain contact with them		+		
75	12.	The PA should provide for the possibility of providing graduates of the EP with documents confirming the qualifications received, including the achieved learning outcomes, as well as the context, content and status of the education received and evidence of its completion.		+		
Total by standard			0	elev en	1	0
Standard 7 "Teaching staff"						
76	1.	The PA must have an objective and transparent personnel policy, including in the context of the EP, including recruitment, professional growth and development of personnel, ensuring the professional competence of the entire staff		+		
77	2.	The PA must demonstrate the compliance of the staff potential of the teaching staff with the specifics of the EP		+		
78	3.	The management of the EP must demonstrate awareness of responsibility for its employees and provide them with favorable working conditions			+	
79	4.	The management of the EP should demonstrate the change in the role of the teacher in connection with the transition to student-centered learning			+	
80	5.	The PA must determine the contribution of the teaching staff of the EP to the implementation of the development strategy of the PA, and other strategic documents		+		
81	6.	The PA should provide opportunities for career growth and professional development of the teaching staff of the EP		+		
82	7.	The management of the EP must demonstrate readiness to involve practitioners in the relevant sectors of the economy in teaching		+		
83	8.	OO must demonstrate the motivation for the professional and personal development of EP teachers, including encouragement for the integration of scientific activities and education, the use of innovative teaching methods		+		
84	9.	An important factor is the readiness to develop academic mobility within the EP, to attract the best foreign and domestic teachers		+		
Total by standard			0	7	2	0
Standard 8 "Educational resources and student support systems"						
85	1.	The OO must guarantee a sufficient number of educational resources and student support services to ensure the achievement of the goal of the EP		+		
86	2.	The OO must demonstrate the sufficiency of material and technical resources and infrastructure, taking into account the needs of various groups of students in the context of the EP (adults, working, foreign students, as well as students with disabilities)		+		
87	3.	The management of the EP must demonstrate the existence of procedures for supporting various groups of students, including information and counseling		+		
		<i>The EP management must demonstrate the compliance of information resources with the specifics of the EP, including:</i>				
88	4.	technological support for students and teaching staff (for example, online learning, modeling, databases, data analysis programs)		+		
89	5.	library resources, including a fund of educational, methodical and scientific literature on general education, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases		+		
90	6.	examination of the results of research, graduation works, dissertations for plagiarism		+		
91	7.	access to educational Internet resources		+		
92	8.	functioning of Wi-Fi on the territory of the educational organization			+	

93	9.	The OO demonstrates the planning of providing the EP with educational equipment and software similar to those used in the relevant sectors of the economy		+		
Total by standard			0	8	1	0
Standard 9 Public Information						
		<i>The PA must publish reliable, objective, up-to-date information about the educational program and its specifics, which should include:</i>				
94	1.	expected learning outcomes of the implemented educational program		+		
95	2.	qualification and (or) qualification that will be awarded upon completion of the educational program		+		
96	3.	approaches to teaching, learning, as well as a system (procedures, methods and forms) of assessment		+		
97	4.	information about passing scores and learning opportunities provided to students		+		
98	5.	information about employment opportunities for graduates		+		
99	6.	The management of the EP should provide for a variety of ways to disseminate information, including the media, information networks to inform the general public and interested parties		+		
100	7.	Informing the public should include support and explanation of the national development programs of the country and the system of higher and postgraduate education		+		
101	8.	OO must demonstrate the reflection on the web resource of information characterizing it as a whole and in the context of educational programs		+		
102	9.	An important factor is the availability of adequate and objective information about the teaching staff of the EP		+		
103	10.	An important factor is informing the public about cooperation and interaction with partners within the framework of the EP			+	
Total by standard			0	9	1	0
TOTAL			5	86	12	0

5 (4.9%) parameters have a position of "strong"

86 (83.5%) parameters have a "satisfactory" position

12 (11.7%) parameters have the position "suggests improvement"

**The conclusion of the external expert commission based on the results of the quality assessment
educational program 6B04103-Business engineering
Non-commercial joint stock company "Kazakh national research
Technical University named after K.I. Satpaev"**

No. p \ p	No. n/n	Criteria for evaluation	Position of the educational organization			
			strong	Satisfactory	Assumes improvement	Unsatisfactory
Standard 1 "Educational program management»						
1	16.	The organization of higher and (or) postgraduate education must have a published quality assurance policy that reflects the relationship between research, teaching and learning		+		
2	17.	The organization of higher and (or) postgraduate education must demonstrate the development of a culture of quality assurance, including in the context of EP		+		
3	18.	Commitment to quality assurance should apply to any activity performed by contractors and partners (outsourcing), including the implementation of joint/double-degree education and academic mobility		+		
4	19.	The EP management demonstrates transparency in the development of the EP development plan, containing the start dates for implementation, based on an analysis of its functioning, the actual positioning of the EP and the focus of its activities on meeting the needs of the state, employers, students and other stakeholders			+	
5	20.	The EP management demonstrates the existence of mechanisms for the formation and regular review of the EP development plan and monitoring its implementation, assessing the achievement of learning goals, meeting the needs of students, employers and society, making decisions aimed at continuous improvement of the EP			+	
6	21.	The EP management should involve representatives of stakeholder groups, including employers, students and teaching staff in the formation of the EP development plan			+	
7	22.	The management of the EP must demonstrate the individuality and uniqueness of the EP development plan, its consistency with national priorities and the development strategy of the organization of higher and (or) postgraduate education			+	
8	23.	The organization of higher and (or) postgraduate education must demonstrate a clear definition of those responsible for business processes within the EP, an unambiguous distribution of staff duties, and delineation of functions of collegial bodies		+		
9	24.	The management of the EP must provide evidence of the transparency of the educational program management system		+		
10	25.	The management of the EP must demonstrate the existence of an internal quality assurance system for the EP, including its design, management and monitoring, their improvement, decision-making based on facts			+	
eleven	26.	The management of the EP must carry out risk management, including within the framework of the EP undergoing primary accreditation, and also demonstrate a system of measures aimed at reducing the degree of risk			+	
12	27.	The management of the EP should ensure the participation of representatives of employers, teaching staff, students and other interested parties in the collegiate management bodies of the educational program, as well as their representativeness in making decisions on the management of the educational program		+		

13	28.	The OO must demonstrate innovation management within the EP, including the analysis and implementation of innovative proposals			+	
14	29.	The management of the EP must demonstrate evidence of readiness for openness and accessibility for students, teaching staff, employers and other interested parties		+		
15	30.	The management of the EP must be trained in education management programs		+		
Total by standard			0	8	7	0
Standard 2 Information Management and Reporting						
16	10.	The OO must demonstrate the existence of a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software, and that it uses a variety of methods to collect and analyze information in the context of the EP	+			
17	11.	The management of the EP must demonstrate the existence of a mechanism for the systematic use of processed, adequate information to improve the internal quality assurance system		+		
18	12.	The management of the EP must demonstrate fact-based decision making		+		
19	13.	Within the framework of the EP, a system of regular reporting should be provided, reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of the activities of departments and departments, scientific research		+		
20	14.	The PA must establish the frequency, forms and methods for assessing the management of the EP, the activities of collegial bodies and structural divisions, senior management, and the implementation of scientific projects		+		
21	15.	The OO must demonstrate the determination of the procedure for and ensuring the protection of information, including the identification of persons responsible for the reliability and timeliness of the analysis of information and the provision of data		+		
22	16.	An important factor is the availability of mechanisms for involving students, employees and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them.		+		
23	17.	The management of the EP must demonstrate the existence of a mechanism for communication with students, employees and other stakeholders, as well as mechanisms for resolving conflicts		+		
24	18.	OO must demonstrate the existence of mechanisms for measuring the degree of satisfaction with the needs of teaching staff, staff and students within the framework of the EP		+		
25	10.	The PA should provide for an assessment of the effectiveness and efficiency of activities, including in the context of the EP		+		
		<i>The information expected to be collected and analyzed within the framework of the EP should take into account:</i>				
26	eleven.	key performance indicators		+		
27	12.	the dynamics of the contingent of students in the context of forms and types		+		
28	13.	academic performance, student achievement and dropout		+		
29	14.	satisfaction of students with the implementation of the EP and the quality of education at the university		+		
thirty	15.	availability of educational resources and support systems for students		+		
31	16.	The PA must confirm the implementation of the procedures for processing personal data of students, employees and teaching staff on the basis of their documented consent		+		
Total by standard			1	15	0	0
Standard 3 "Development and approval of the educational program"						
32	13.	The OO must define and document the procedures for developing the EP and their approval at the institutional level.		+		

33	14.	The management of the EP should ensure that the content of the EP complies with the established goals, including the intended learning outcomes.		+		
34	15.	The management of the EP must demonstrate the existence of mechanisms for reviewing the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social demand of society		+		
35	16.	The management of the EP should ensure the availability of developed models of the EP graduate that describe the learning outcomes and personal qualities		+		
36	17.	The management of the EP must demonstrate the conduct of external reviews of the content of the EP and the planned results of its implementation			+	
37	18.	The qualification awarded upon completion of the EP must be clearly defined and correspond to a certain level of the NSC and QF-EHEA		+		
38	19.	The EP management should determine the influence of disciplines and professional practices on the formation of learning outcomes		+		
thirty	20.	An important factor is the possibility of preparing students for professional certification (IS)		+		
40	21.	The management of the EP must provide evidence of the participation of students, teaching staff and other interested parties in the development of the EP, ensuring its quality		+		
41	22.	The management of the EP should ensure that the content of the academic disciplines and the planned results correspond to the level of education (bachelor's, master's, doctoral studies)		+		
42	23.	The structure of the EP should provide for various types of activities that ensure that students achieve the planned learning outcomes		+		
43	24.	An important factor is the correspondence between the content of the EP and the learning outcomes of the EP implemented by organizations of higher and (or) postgraduate education in the EHEA		+		
Total by standard			0	elev en	1	0
Standard 4 "Continuous monitoring and periodic evaluation of educational programs"						
44	11.	The PA should determine the mechanisms for monitoring and periodically evaluating the EP to ensure the achievement of the goal and meeting the needs of students, society, and show the focus of the mechanisms on the continuous improvement of the EP		+		
		<i>Monitoring and periodic evaluation of the EP should include:</i>				
45	12.	the content of the program in the light of the latest achievements of science in a particular discipline to ensure the relevance of the discipline taught		+		
46	13.	changing needs of society and the professional environment		+		
47	14.	workload, performance and graduation of students		+		
48	15.	effectiveness of student assessment procedures		+		
49	16.	expectations, needs and satisfaction of students with EP training		+		
50	17.	educational environment and support services, and their compliance with the objectives of the EP		+		
51	18.	The management of the EP must demonstrate a systematic approach in monitoring and periodically assessing the quality of the EP		+		
52	19.	The OO, the management of the EP should determine a mechanism for informing all interested parties about any planned or taken actions in relation to the EP			+	
53	20.	All changes made to the OP must be published			+	
Total by standard			0	8	2	0
Standard 5 "Student-Centered Learning, Teaching and Assessment"						

54	11.	The management of the EP should ensure respect and attention to different groups of students and their needs, provide them with flexible learning paths		+		
55	12.	The management of the EP should provide for the use of various forms and methods of teaching and learning		+		
56	13.	An important factor is the presence of own research in the field of teaching methods of academic disciplines of the EP		+		
57	14.	The management of the EP must demonstrate the existence of feedback mechanisms for the use of various teaching methods and the assessment of learning outcomes		+		
58	15.	The management of the EP must demonstrate the existence of mechanisms to support the autonomy of students with simultaneous guidance and assistance from the teacher	+			
59	16.	The management of the EP must demonstrate the existence of a procedure for responding to complaints from students	+			
60	17.	The OO must ensure the consistency, transparency and objectivity of the mechanism for evaluating learning outcomes for each SP, including appeal		+		
61	18.	The PA must ensure that the procedures for assessing the learning outcomes of students of the EP correspond to the planned results and goals of the program, the publication of criteria and assessment methods in advance		+		
62	19.	The PA should define the mechanisms to ensure the achievement of learning outcomes by each EP graduate and ensure the completeness of their formation.		+		
63	20.	Assessors must be familiar with modern methods for assessing learning outcomes and regularly improve their skills in this area.		+		
Total by standard			2	8	0	0
Standard 6 "Students»						
64	13.	The PA must demonstrate the existence of a policy for the formation of a contingent of students in the context of the EP, ensure transparency and publicity of its procedures governing the life cycle of students (from admission to completion)		+		
		<i>The management of the EP should determine the procedure for the formation of a contingent of students based on:</i>				
65	14.	minimum requirements for applicants		+		
66	15.	maximum group size during seminars, practical, laboratory and studio classes		+		
67	16.	predicting the number of government grants		+		
68	17.	analysis of available material and technical, information resources, human resources		+		
69	18.	analysis of potential social conditions for students, incl. provision of places in the hostel		+		
70	19.	The management of the EP must demonstrate readiness to conduct special adaptation and support programs for newly enrolled and foreign students		+		
71	20.	The PA must demonstrate the compliance of its actions with the Lisbon Recognition Convention, the existence of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and non-formal education		+		
72	21.	The PA should cooperate with other educational organizations and national centers of the "European Network of National Information Centers for Academic Recognition and Mobility / National Academic Recognition Information Centers" ENIC / NARIC in order to ensure comparable recognition of qualifications		+		
73	22.	The PA should provide an opportunity for external and internal mobility of students of the EP, as well as readiness to assist them in obtaining external grants for training		+		
74	23.	The management of the EP must demonstrate readiness to provide students with internship places, promote the employment of graduates, and maintain contact with them		+		

75	24.	The PA should provide for the possibility of providing graduates of the EP with documents confirming the qualifications received, including the achieved learning outcomes, as well as the context, content and status of the education received and evidence of its completion.		+		
Total by standard			0	12	0	0
Standard 7 "Teaching staff»						
76	10.	The PA must have an objective and transparent personnel policy, including in the context of the EP, including recruitment, professional growth and development of personnel, ensuring the professional competence of the entire staff		+		
77	11.	The PA must demonstrate the compliance of the staff potential of the teaching staff with the specifics of the EP		+		
78	12.	The management of the EP must demonstrate awareness of responsibility for its employees and provide them with favorable working conditions		+		
79	13.	The management of the EP should demonstrate the change in the role of the teacher in connection with the transition to student-centered learning		+		
80	14.	The PA must determine the contribution of the teaching staff of the EP to the implementation of the development strategy of the PA, and other strategic documents		+		
81	15.	The PA should provide opportunities for career growth and professional development of the teaching staff of the EP		+		
82	16.	The management of the EP must demonstrate readiness to involve practitioners in the relevant sectors of the economy in teaching		+		
83	17.	OO must demonstrate the motivation for the professional and personal development of EP teachers, including encouragement for the integration of scientific activities and education, the use of innovative teaching methods		+		
84	18.	An important factor is the readiness to develop academic mobility within the EP, to attract the best foreign and domestic teachers		+		
Total by standard			0	9	0	0
Standard 8 "Educational resources and student support systems"						
85	1.	The OO must guarantee a sufficient number of educational resources and student support services to ensure the achievement of the goal of the EP		+		
86	2.	The OO must demonstrate the sufficiency of material and technical resources and infrastructure, taking into account the needs of various groups of students in the context of the EP (adults, working, foreign students, as well as students with disabilities)		+		
87	3.	The management of the EP must demonstrate the existence of procedures for supporting various groups of students, including information and counseling		+		
		<i>The EP management must demonstrate the compliance of information resources with the specifics of the EP, including:</i>				
88	4.	technological support for students and teaching staff (for example, online learning, modeling, databases, data analysis programs)		+		
89	5.	library resources, including a fund of educational, methodical and scientific literature on general education, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases		+		
90	6.	examination of the results of research, graduation works, dissertations for plagiarism		+		
91	7.	access to educational Internet resources		+		
92	8.	functioning of Wi-Fi on the territory of the educational organization		+		
93	9.	The OO demonstrates the planning of providing the EP with educational equipment and software similar to those used in the relevant sectors of the economy		+		
Total by standard			0	9	0	0
Standard 9 Public Information						

		<i>The PA must publish reliable, objective, up-to-date information about the educational program and its specifics, which should include:</i>				
94	1.	expected learning outcomes of the implemented educational program		+		
95	2.	qualification and (or) qualification that will be awarded upon completion of the educational program		+		
96	3.	approaches to teaching, learning, as well as a system (procedures, methods and forms) of assessment			+	
97	4.	information about passing scores and learning opportunities provided to students		+		
98	5.	information about employment opportunities for graduates		+		
99	6.	The management of the EP should provide for a variety of ways to disseminate information, including the media, information networks to inform the general public and interested parties		+		
100	7.	Informing the public should include support and explanation of the national development programs of the country and the system of higher and postgraduate education		+		
101	8.	OO must demonstrate the reflection on the web resource of information characterizing it as a whole and in the context of educational programs		+		
102	9.	An important factor is the availability of adequate and objective information about the teaching staff of the EP		+		
103	10.	An important factor is informing the public about cooperation and interaction with partners within the framework of the EP		+		
Total by standard			0	9	1	0
TOTAL			3	89	eleven	0

3 (2.91%) parameters have a “strong” position

89 (86.41%) parameters have a position of "satisfactory"

11 (10.68%) parameters have the position “suggests improvement”

(... %) of the parameters have the position “suggests improvement”

**The conclusion of the external expert commission based on the results of the quality assessment
educational program 6B04104-Startup bachelor's degree
Non-commercial joint stock company "Kazakh national research
Technical University named after K.I. Satpaev"**

No. p \ p	No. n/n	Criteria for evaluation	Position of the educational organization			
			strong	Satisfactory	Assumes improvement	Unsatisfactory
Standard 1 "Educational program management»						
1	31.	The organization of higher and (or) postgraduate education must have a published quality assurance policy that reflects the relationship between research, teaching and learning		+		
2	32.	The organization of higher and (or) postgraduate education must demonstrate the development of a culture of quality assurance, including in the context of EP		+		
3	33.	Commitment to quality assurance should apply to any activity performed by contractors and partners (outsourcing), including the implementation of joint/double-degree education and academic mobility		+		
4	34.	The EP management demonstrates transparency in the development of the EP development plan, containing the start dates for implementation, based on an analysis of its functioning, the actual positioning of the EP and the focus of its activities on meeting the needs of the state, employers, students and other stakeholders			+	
5	35.	The EP management demonstrates the existence of mechanisms for the formation and regular review of the EP development plan and monitoring its implementation, assessing the achievement of learning goals, meeting the needs of students, employers and society, making decisions aimed at continuous improvement of the EP			+	
6	36.	The EP management should involve representatives of stakeholder groups, including employers, students and teaching staff in the formation of the EP development plan			+	
7	37.	The management of the EP must demonstrate the individuality and uniqueness of the EP development plan, its consistency with national priorities and the development strategy of the organization of higher and (or) postgraduate education			+	
8	38.	The organization of higher and (or) postgraduate education must demonstrate a clear definition of those responsible for business processes within the EP, an unambiguous distribution of staff duties, and delineation of functions of collegial bodies		+		
9	39.	The management of the EP must provide evidence of the transparency of the educational program management system			+	
10	40.	The management of the EP must demonstrate the existence of an internal quality assurance system for the EP, including its design, management and monitoring, their improvement, decision-making based on facts			+	
eleven	41.	The management of the EP must carry out risk management, including within the framework of the EP undergoing primary accreditation, and also demonstrate a system of measures aimed at reducing the degree of risk			+	
12	42.	The management of the EP should ensure the participation of representatives of employers, teaching staff, students and other interested parties in the collegiate management bodies of the educational program, as well as their representativeness in making decisions on the management of the educational program		+		

13	43.	The OO must demonstrate innovation management within the EP, including the analysis and implementation of innovative proposals			+	
14	44.	The management of the EP must demonstrate evidence of readiness for openness and accessibility for students, teaching staff, employers and other interested parties		+		
15	45.	The management of the EP must be trained in education management programs		+		
Total by standard			0	7	8	0
Standard 2 Information Management and Reporting						
16	19.	The OO must demonstrate the existence of a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software, and that it uses a variety of methods to collect and analyze information in the context of the EP	+			
17	20.	The management of the EP must demonstrate the existence of a mechanism for the systematic use of processed, adequate information to improve the internal quality assurance system		+		
18	21.	The management of the EP must demonstrate fact-based decision making		+		
19	22.	Within the framework of the EP, a system of regular reporting should be provided, reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of the activities of departments and departments, scientific research		+		
20	23.	The PA must establish the frequency, forms and methods for assessing the management of the EP, the activities of collegial bodies and structural divisions, senior management, and the implementation of scientific projects		+		
21	24.	The OO must demonstrate the determination of the procedure for and ensuring the protection of information, including the identification of persons responsible for the reliability and timeliness of the analysis of information and the provision of data		+		
22	25.	An important factor is the availability of mechanisms for involving students, employees and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them.		+		
23	26.	The management of the EP must demonstrate the existence of a mechanism for communication with students, employees and other stakeholders, as well as mechanisms for resolving conflicts		+		
24	27.	OO must demonstrate the existence of mechanisms for measuring the degree of satisfaction with the needs of teaching staff, staff and students within the framework of the EP		+		
25	10.	The PA should provide for an assessment of the effectiveness and efficiency of activities, including in the context of the EP		+		
		<i>The information expected to be collected and analyzed within the framework of the EP should take into account:</i>				
26	elevation.	key performance indicators		+		
27	12.	the dynamics of the contingent of students in the context of forms and types		+		
28	13.	academic performance, student achievement and dropout		+		
29	14.	satisfaction of students with the implementation of the EP and the quality of education at the university		+		
thirty	15.	availability of educational resources and support systems for students		+		
31	16.	The PA must confirm the implementation of the procedures for processing personal data of students, employees and teaching staff on the basis of their documented consent		+		
Total by standard			1	15	0	0
Standard 3 "Development and approval of the educational program"						
32	25.	The OO must define and document the procedures for developing the EP and their approval at the institutional level.		+		

33	26.	The management of the EP should ensure that the content of the EP complies with the established goals, including the intended learning outcomes.			+	
34	27.	The management of the EP must demonstrate the existence of mechanisms for reviewing the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social demand of society		+		
35	28.	The management of the EP should ensure the availability of developed models of the EP graduate that describe the learning outcomes and personal qualities			+	
36	29.	The management of the EP must demonstrate the conduct of external reviews of the content of the EP and the planned results of its implementation			+	
37	30.	The qualification awarded upon completion of the EP must be clearly defined and correspond to a certain level of the NSC and QF-EHEA		+		
38	31.	The EP management should determine the influence of disciplines and professional practices on the formation of learning outcomes			+	
thirty	32.	An important factor is the possibility of preparing students for professional certification (IS)		+		
40	33.	The management of the EP must provide evidence of the participation of students, teaching staff and other interested parties in the development of the EP, ensuring its quality		+		
41	34.	The management of the EP should ensure that the content of the academic disciplines and the planned results correspond to the level of education (bachelor's, master's, doctoral studies)		+		
42	35.	The structure of the EP should provide for various types of activities that ensure that students achieve the planned learning outcomes		+		
43	36.	An important factor is the correspondence between the content of the EP and the learning outcomes of the EP implemented by organizations of higher and (or) postgraduate education in the EHEA		+		
Total by standard			0	8	4	0
Standard 4 "Continuous monitoring and periodic evaluation of educational programs"						
44	21.	The PA should determine the mechanisms for monitoring and periodically evaluating the EP to ensure the achievement of the goal and meeting the needs of students, society, and show the focus of the mechanisms on the continuous improvement of the EP		+		
		<i>Monitoring and periodic evaluation of the EP should include:</i>				
45	22.	the content of the program in the light of the latest achievements of science in a particular discipline to ensure the relevance of the discipline taught		+		
46	23.	changing needs of society and the professional environment		+		
47	24.	workload, performance and graduation of students		+		
48	25.	effectiveness of student assessment procedures		+		
49	26.	expectations, needs and satisfaction of students with EP training		+		
50	27.	educational environment and support services, and their compliance with the objectives of the EP		+		
51	28.	The management of the EP must demonstrate a systematic approach in monitoring and periodically assessing the quality of the EP		+		
52	29.	The OO, the management of the EP should determine a mechanism for informing all interested parties about any planned or taken actions in relation to the EP			+	
53	30.	All changes made to the OP must be published			+	
Total by standard			0	8	2	0
Standard 5 "Student-Centered Learning, Teaching and Assessment"						

54	21.	The management of the EP should ensure respect and attention to different groups of students and their needs, provide them with flexible learning paths		+		
55	22.	The management of the EP should provide for the use of various forms and methods of teaching and learning		+		
56	23.	An important factor is the presence of own research in the field of teaching methods of academic disciplines of the EP		+		
57	24.	The management of the EP must demonstrate the existence of feedback mechanisms for the use of various teaching methods and the assessment of learning outcomes		+		
58	25.	The management of the EP must demonstrate the existence of mechanisms to support the autonomy of students with simultaneous guidance and assistance from the teacher	+			
59	26.	The management of the EP must demonstrate the existence of a procedure for responding to complaints from students	+			
60	27.	The OO must ensure the consistency, transparency and objectivity of the mechanism for evaluating learning outcomes for each SP, including appeal		+		
61	28.	The PA must ensure that the procedures for assessing the learning outcomes of students of the EP correspond to the planned results and goals of the program, the publication of criteria and assessment methods in advance		+		
62	29.	The PA should define the mechanisms to ensure the achievement of learning outcomes by each EP graduate and ensure the completeness of their formation.			+	
63	30.	Assessors must be familiar with modern methods for assessing learning outcomes and regularly improve their skills in this area.		+		
Total by standard			2	7	1	0
Standard 6 "Students»						
64	25.	The PA must demonstrate the existence of a policy for the formation of a contingent of students in the context of the EP, ensure transparency and publicity of its procedures governing the life cycle of students (from admission to completion)			+	
		<i>The management of the EP should determine the procedure for the formation of a contingent of students based on:</i>				
65	26.	minimum requirements for applicants		+		
66	27.	maximum group size during seminars, practical, laboratory and studio classes		+		
67	28.	predicting the number of government grants		+		
68	29.	analysis of available material and technical, information resources, human resources		+		
69	30.	analysis of potential social conditions for students, incl. provision of places in the hostel		+		
70	31.	The management of the EP must demonstrate readiness to conduct special adaptation and support programs for newly enrolled and foreign students		+		
71	32.	The PA must demonstrate the compliance of its actions with the Lisbon Recognition Convention, the existence of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and non-formal education		+		
72	33.	The PA should cooperate with other educational organizations and national centers of the "European Network of National Information Centers for Academic Recognition and Mobility / National Academic Recognition Information Centers" ENIC / NARIC in order to ensure comparable recognition of qualifications		+		
73	34.	The PA should provide an opportunity for external and internal mobility of students of the EP, as well as readiness to assist them in obtaining external grants for training		+		
74	35.	The management of the EP must demonstrate readiness to provide students with internship places, promote the employment of graduates, and maintain contact with them			+	

75	36.	The PA should provide for the possibility of providing graduates of the EP with documents confirming the qualifications received, including the achieved learning outcomes, as well as the context, content and status of the education received and evidence of its completion.		+		
Total by standard			0	10	2	0
Standard 7 "Teaching staff»						
76	19.	The PA must have an objective and transparent personnel policy, including in the context of the EP, including recruitment, professional growth and development of personnel, ensuring the professional competence of the entire staff		+		
77	20.	The PA must demonstrate the compliance of the staff potential of the teaching staff with the specifics of the EP			+	
78	21.	The management of the EP must demonstrate awareness of responsibility for its employees and provide them with favorable working conditions		+		
79	22.	The management of the EP should demonstrate the change in the role of the teacher in connection with the transition to student-centered learning		+		
80	23.	The PA must determine the contribution of the teaching staff of the EP to the implementation of the development strategy of the PA, and other strategic documents		+		
81	24.	The PA should provide opportunities for career growth and professional development of the teaching staff of the EP		+		
82	25.	The management of the EP must demonstrate readiness to involve practitioners in the relevant sectors of the economy in teaching		+		
83	26.	OO must demonstrate the motivation for the professional and personal development of EP teachers, including encouragement for the integration of scientific activities and education, the use of innovative teaching methods		+		
84	27.	An important factor is the readiness to develop academic mobility within the EP, to attract the best foreign and domestic teachers		+		
Total by standard			0	8	1	0
Standard 8 "Educational resources and student support systems"						
85	1.	The OO must guarantee a sufficient number of educational resources and student support services to ensure the achievement of the goal of the EP		+		
86	2.	The OO must demonstrate the sufficiency of material and technical resources and infrastructure, taking into account the needs of various groups of students in the context of the EP (adults, working, foreign students, as well as students with disabilities)		+		
87	3.	The management of the EP must demonstrate the existence of procedures for supporting various groups of students, including information and counseling		+		
		<i>The EP management must demonstrate the compliance of information resources with the specifics of the EP, including:</i>				
88	4.	technological support for students and teaching staff (for example, online learning, modeling, databases, data analysis programs)		+		
89	5.	library resources, including a fund of educational, methodical and scientific literature on general education, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases		+		
90	6.	examination of the results of research, graduation works, dissertations for plagiarism		+		
91	7.	access to educational Internet resources		+		
92	8.	functioning of Wi-Fi on the territory of the educational organization		+		
93	9.	The OO demonstrates the planning of providing the EP with educational equipment and software similar to those used in the relevant sectors of the economy		+		
Total by standard			0	9	0	0
Standard 9 Public Information						

		<i>The PA must publish reliable, objective, up-to-date information about the educational program and its specifics, which should include:</i>				
94	1.	expected learning outcomes of the implemented educational program		+		
95	2.	qualification and (or) qualification that will be awarded upon completion of the educational program			+	
96	3.	approaches to teaching, learning, as well as a system (procedures, methods and forms) of assessment			+	
97	4.	information about passing scores and learning opportunities provided to students		+		
98	5.	information about employment opportunities for graduates		+		
99	6.	The management of the EP should provide for a variety of ways to disseminate information, including the media, information networks to inform the general public and interested parties		+		
100	7.	Informing the public should include support and explanation of the national development programs of the country and the system of higher and postgraduate education		+		
101	8.	OO must demonstrate the reflection on the web resource of information characterizing it as a whole and in the context of educational programs		+		
102	9.	An important factor is the availability of adequate and objective information about the teaching staff of the EP		+		
103	10.	An important factor is informing the public about cooperation and interaction with partners within the framework of the EP		+		
Total by standard			0	8	2	0
TOTAL			3	80	20	0

3 (2.91%) parameters have a "strong" position

80 (77.67%) parameters have a position of "satisfactory"

20 (19.42%) parameters have the position "suggests improvement"

(... %) of the parameters have the position "suggests improvement"



