



«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 on the assessment of compliance with the requirements of the standards of primary specialized accreditation of the educational program (Ex-ante)

8D07104 OIL AND GAS AND ORE GEOPHYSICS

NON-PROFIT JOINT-STOCK COMPANY  
"KAZAKH NATIONAL RESEARCH TECHNICAL  
K.I. SATBAYEV UNIVERSITY"

Date of the EEC visit: from "19" to "21" April 2022

**INDEPENDENT ACCREDITATION AND RATING AGENCY**  
**External Expert Commission**

*Addressed  
To the IAAR  
Accreditation  
Council*



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**Almaty**

**"21" April 2022**

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## **(I) LIST OF DESIGNATIONS AND ABBREVIATIONS**

- BD** – basic disciplines
- BC** – basic curriculum
- IQM** – internal quality monitoring
- SCSE** – the state compulsory standard of education
- DP** – documented procedure
- DET** – distance educational technologies
- UNT** – unified national testing
- IC** – individual curriculum
- IDAT** – Institute of Development and Advanced Training
- CTT** – credit training technology
- CED**– catalog of elective disciplines
- MES RK** – Ministry of Education and Science of the Republic of Kazakhstan
- MEP** – modular educational program
- MC** – modular curriculum
- NJSC "KazNRTU"** – NJSC "Kazakh National Research Technical University named after K.I. Satbayev"
- Research and development** – research work
- R&D and IA** - research and innovation activities
- R&D** – research work of doctoral students
- GED** – general education disciplines
- EP** – educational program
- PD** – profile disciplines
- PC** – personal computer
- Teaching staff** – teaching staff
- RK** – Republic of Kazakhstan
- WC** – working curriculum
- QMS** – quality management system
- IWDS** – independent work of doctoral students
- IWDST**– independent work of doctoral students under the guidance of a teacher
- SC**– standard curriculum
- TSS** – training and support staff
- EMCS**– educational and methodical complex of the specialty
- EMCU** - educational and methodical council of the university
- EMW** – educational and methodical work
- ETM** – electronic teaching materials

## **(I) INTRODUCTION**

In accordance with Order No. 44-22-OD dated February 23, 2022 of the Director General of the Independent Accreditation and Rating Agency, from April 19 to April 21, 2022, an external expert commission assessed the compliance of the educational programs listed below, including an external assessment of the educational program 8D07104 Oil and Gas and Ore Geophysics of the Kazakh National Research Technical University named after K.I. Satbayev" for compliance with the standards of primary specialized accreditation of the educational program (Ex-ante) of the organization of higher and postgraduate education (put into effect by Order No. 68-18/1-OD dated May 25, 2018).

The report of the external expert commission (EEC) contains an assessment of the submitted educational programs according to the criteria of the IAAR standards, recommendations of the EEC for further improvement of educational programs and parameters of the profile of educational programs.

### **Composition EEC:**

*Chairman EEC IAAR* – Luschnik Alexander Cheslavovich, Professor, Head of the Laboratory of Ion Crystal Physics at the Institute of Physics of the University of Tartu (Tartu, Estonia).

*Coordinator EEC IAAR* – Guliyash Balkenovna Niyazova, Project Manager for institutional and specialized accreditation of universities (Nur-Sultan, Republic of Kazakhstan).

### ***Cluster 1. Primary specialized accreditation***

**6B05103**  
**Engineering**  
**ecology**

*Expert IAAR* – Berdenov Zharas Galimzhanovich, PhD, Associate Professor of the L.N. Gumilyov Eurasian National University (Nur-Sultan, Republic of Kazakhstan).

*Expert IAAR, student* – Serikkaliev Tasbolat Serikkaliyly (Serikkaliev Tasbolat Serikkalievich), Executive Director of the Branch of the Alliance of University Students in the West Kazakhstan region (Uralsk, Republic of Kazakhstan).

**7M08601**  
**Water resources**  
**and water use**

*Expert IAAR* – Mukhamedzhanova Rufina Rinatovna, Director of the Quality Department of the Almaty University of Energy and Communications named after G. Daukeev (Almaty, Republic of Kazakhstan).

**8D07104**  
**Oil and gas and ore**  
**geophysics**

*Expert IAAR* – Lozhnikov Alexey Vladimirovich, Doctor of Technical Sciences, Professor of the National Technical University "Dnipro Polytechnic" (Dnipro, Ukraine).

### ***Cluster 2. Primary specialized accreditation***

**6B07305**  
**Transport**  
**construction,**  
**7M07320**  
**Transport**  
**construction**

*Expert IAAR* – Rabat Ondabek Zhanakhmetuly, Doctor of Technical Sciences, Professor of the Kazakh Automobile and Road Academy named after L.B.Goncharov (Almaty, Republic of Kazakhstan).

**6B07115**  
**Technological**  
**machines**      **and**  
**equipment**      **(by**  
**industry)**

*Expert IAAR* – Sembayev Nurbolat Sakenovich, Candidate of Technical Sciences, Associate Professor of Toraigyrov University (Pavlodar, Republic of Kazakhstan).

*Expert IAAR, student* – Bekmyrza Zhumash Aitzhanuly, student of EP 8D07102 Technological machines and equipment (mechanical

engineering) Kostanay Regional University named after A. Baitursynov (Kostanay, Republic of Kazakhstan).  
**8D07114**  
**Nanomaterials and nanotechnology**  
*Expert IAAR* – Najipkyzy Meruert, Ph.D., Associate Professor of Al-Farabi Kazakh National University (Almaty, Republic of Kazakhstan).

**Cluster 3. Primary specialized accreditation**

**7M11201**  
**Occupational health and safety**  
*Expert IAAR* – Baytelesova Laura Ilyasovna, PhD, Associate Professor of the West Kazakhstan Innovation and Technology University (Uralsk, Republic of Kazakhstan).

**8D07304**  
**Engineering systems and networks**  
*Expert IAAR* – Kolpakova Valentina Pavlovna, Doctor of Technical Sciences, Associate Professor of D. Serikbayev East Kazakhstan Technical University (Ust-Kamenogorsk, Republic of Kazakhstan).

**8D07305**  
**Construction and production of building materials and structures**  
*Expert IAAR* – Murat Amanzholovich Rakhimov, Candidate of Technical Sciences, Associate Professor of Karaganda Technical University (Karaganda, Republic of Kazakhstan).

**8D07303**  
**Construction and production of building materials and structures.**  
*Expert IAAR* – Saktaganova Nargul Amanovna, PhD, Associate Professor of the Korkyt ata Kyzylorda University (Kyzylorda, Republic of Kazakhstan).

*Expert IAAR, employer* – Yuri Alexandrovich Pilipenko, Chairman of the International Association of Manufacturers of Goods and Services "Expobest" (Almaty, Republic of Kazakhstan).

**Cluster 4. Primary specialized accreditation**

**8D11301**  
**Transportation services**  
*Expert IAAR* – Pak Yuri Nikolaevich, Doctor of Technical Sciences, Professor of Karaganda Technical University (Republic of Kazakhstan).  
*Expert IAAR* – Inna Sidorova, MBA, Master of Science in Economics, Business Manager, BGC Partners, (London, United Kingdom).

**7M04104**  
**Executive MBA**  
*Expert IAAR* – Arzayeva Maya Zhetkergenovna, Candidate of Economics, Associate Professor of the Academy of Logistics and Transport (Almaty, Republic of Kazakhstan).

**8D04102**  
**Management**  
*Expert IAAR, student* – Kereeva Tansholpan Makhambetkyzy, 2nd year student of EP 7M04106 Aktobe Regional University named after K. Zhubanov (Aktobe, Republic of Kazakhstan).

**Cluster 5. Primary specialized accreditation**

**6B07114**  
**Biomedical engineering**  
*Expert IAAR* – Oksana Yurikova, PhD, Senior lecturer at Al-Farabi Kazakh National University (Almaty, Republic of Kazakhstan).

**6B07112**  
**Electronic and Electrical Engineering**  
*Expert IAAR* – Zhumazhanov Serik Karatayevich, Candidate of Technical Sciences, senior lecturer of the Kazakh Agrotechnical University named after S.Seifullin (Nur-Sultan, Republic of Kazakhstan).

**8D06105**  
*Expert IAAR* – Shunkeev Kuanyshbek Shunkeevich, Professor of

**Information security systems**

Aktobe Regional University named after K.Zhubanov (Aktobe, Republic of Kazakhstan).

**6B07112 Electronic and Electrical Engineering**

*Expert IAAR, student* – Talipova Janel Sairanovna, 2nd year student of EP 7M07105 Automation and Management of the Kazakh Agrotechnical University named after S.Seifullin (Nur-Sultan, Republic of Kazakhstan).

**Cluster 6. Primary specialized accreditation****8D06104 Cybernetics and artificial intelligence**

*Expert IAAR* – Gnatushenko Vladimir Vladimirovich, Doctor of Technical Sciences, Professor of the National Technical University "Dnipro Polytechnic" (Dnipro, Ukraine).

**6B07106 Engineering mechanics**

*Expert IAAR* – Bakhtiyar Balzhan Turepashkyzy, candidate of technical sciences, associate professor at the Academy of logistics and transport (Almaty, Republic of Kazakhstan).

**8D07110 Digital engineering of machinery and equipment**

*Expert IAAR* – Andrey Kichuk, President of the National Agency for Quality Assurance in Education and Research - ANACEC (Chisinau, Moldova).

**8D07109 Innovative technologies and new inorganic materials**

*Expert IAAR* – Mashan Togzhan Turgalievna, Candidate of Chemical Sciences, Associate Professor of L.N. Gumilyov Eurasian National University (Nur-Sultan, Republic of Kazakhstan).

*Expert IAAR, student* – Asylkhanova Dana Dauletkyzy, a student of the double-degree EP 7M07121 Nanomaterials and Nanotechnology in Chemistry of the Al-Farabi Kazakh National University – Peoples' Friendship University of Russia (Almaty, Republic of Kazakhstan).

**(II) REPRESENTATION OF THE EDUCATIONAL ORGANIZATION**

KazNTU named after K.I. Satbayev is the largest scientific and methodological center in Kazakhstan that develops special training programs for the needs of industry, complex projects and the creation of teams of world-class professionals. The history of KazNTU named after K.I. Satbayev begins with the establishment of the Kazakh Mining and Metallurgical Institute in 1934. July 5, 2001 By the Decree of the President of the Republic of Kazakhstan, the University has been given a special status – it has become a major educational center coordinating the training of scientific and engineering personnel in Kazakhstan. Academic activity of KazNRTU named after K.I. Satbayev is aimed at improving the quality of training of a competitive generation of modern engineers to meet the needs of industry not only in specialists, but also in their technological developments. Educational programs at KazNRTU named after K.I. Satbayev are developed on the principle of modular structuring, taking into account Dublin descriptors. The European ECTS academic credit transfer system has been implemented.

The university has implemented the transition to a multi-level system of higher and postgraduate education (bachelor's degree – master's degree - PhD). At the same time, the University has a license in 41 areas of training, including bachelor's degree – 15; doctoral studies – 15; PhD doctoral studies – 11.

KazNTU named after K.I. Satbayev is included in the University Partnership Program

sponsored by Chevron. Cambridge, Stanford Universities and the Massachusetts Institute of Technology participate in this program. Since 2005 in KazNRTU named after K.I. Satbayev has implemented a quality management system conforming to ISO 9001:2000, certified by the Russian Register and IQNet in relation to educational activities for training personnel with higher professional education based on the state educational standards of the Republic of Kazakhstan in specialties and areas in accordance with the field of licensing, state certification and accreditation. Subsequently, the University repeatedly (2008, 2011, 2014, 2017, 2020 years) passed the recertification procedure and confirmed the double Certificate ISO 9001-2015 dated 26.11.2020 No. 20.2014.026. KazNRTU is implementing an International Accreditation Program, and currently 16 EP are accredited in the field of engineering and technology in the ASIIN Agency. At the national level, institutional accreditation was successfully completed at the National Accreditation Center at the Ministry of Education and Science of the Republic of Kazakhstan and a certificate was obtained under No. 000001, at the international level – an institutional assessment in the European Association of Universities.

The University owns academic resources for the implementation of educational activities under an accredited EP.

### **(III) DESCRIPTION OF THE EEC VISIT**

The work of the EEC was carried out on the basis of the online visit Program of the expert commission on International primary specialized accreditation of the K.I. Satbayev Kazakh National Research Technical University in the period from April 19 to 21, 2022.

In order to coordinate the work of the EEC, an online installation meeting was held on April 15, 2022, during which powers were distributed among the members of the EEC, the schedule of the visit was clarified, and an agreement was reached on the choice of examination methods.

In accordance with the requirements of the standards, the visit program included online meetings with the Chairman of the Board - Rector, Vice-rectors, heads of structural divisions, deans, heads of departments of the university, teachers, students, employers and employees from various departments, interviewing and questioning teachers and students.

During the online tour, the members of the EEC got acquainted with the state of the material and technical base, visited lecture halls and classrooms for laboratory and practical work of departments where relevant educational programs are accredited.

At the on-line meetings of the IAAR EEC with the university's target groups, the mechanisms for implementing the university's policy were clarified and the specification of individual data presented in the university self-assessment report was carried out.

The events planned within the framework of the visit of the IAAR EEC contributed to the familiarization of experts with the databases of practices.

EEC members attended online training sessions. Unfortunately, there were no classes for students at the accredited EP 8D07104 – Oil and Gas and Ore Geophysics during the examination (ended in the first semester), so the experts reviewed the recordings of classes on the EP provided by the OO.

In accordance with the accreditation procedure, 71 teachers and 41 students were interviewed.

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

All conditions were created for the work of the EEC, access to all necessary information resources was organized. On the part of the staff of KazNRTU named after K.I. Satbayev, the presence of persons specified in the program of the visit was ensured, in compliance with the established time interval.



**(IV) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE**

The educational program 8D07104 Oil and gas and ore Geophysics external assessment for compliance with the standards of the primary specialized accreditation of the educational program (Ex-ante) of the organization of higher and postgraduate education (put into effect by Order No. 68-18/1-OD of May 25, 2018) is being held for the first time.



## **(V) COMPLIANCE WITH THE STANDARDS OF PRIMARY SPECIALIZED ACCREDITATION (EX-ANTE)**

### **6.1. Standard "Educational Program Management"**

- *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 should 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 readiness to ensure transparency in the development of the EP development plan based on an analysis of its functioning, the real positioning of the NGO and the orientation of its activities to meet the needs of the state, employers, students and other interested persons. The plan should contain the deadlines for the start of the educational program.*
  - *The management of the EP demonstrates the functioning of mechanisms for the formation and regular revision of the development plan of the EP and monitoring its implementation, assessing the achievement of training goals, meeting the needs of students, employers and society, making decisions aimed at continuous improvement of the EP.*
  - *The management of the EP should involve representatives of groups of interested persons, including employers, students and teaching staff in the formation of the development plan of the EP.*
  - *The management of the EP must demonstrate the individuality and uniqueness of the development plan of the EP, 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 should demonstrate a clear definition of those responsible for business processes within the framework of the EP, an unambiguous distribution of staff duties, and the differentiation of functions of collegial bodies.*
  - *The management of the educational institution 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 of the EP, including its design, management and monitoring, their improvement, and fact-based decision-making.*
  - *The management of the EP should carry out risk management, including within the framework of the EP undergoing primary accreditation, as well as demonstrate a system of measures aimed at reducing the degree of risk.*
  - *The management of the educational institution should ensure the participation of representatives of employers, teaching staff, students and other interested persons in the collegial management bodies of the educational program, as well as their representativeness in making decisions on the management of the educational program.*
  - *The OO should demonstrate innovation management within the framework of 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 persons.*
  - *The management of the EP should be trained in educational management programs.*

#### ***The evidentiary part***

The main procedures for managing the educational program are provided within the internal quality assurance system, which includes a Quality Policy. The quality policy reflects the main activities, intentions and obligations of NJSC KazNRTU at the moment and in the future, taking into account the strategic development plan of the university and is presented on the official website of the University (Quality Management System) in accordance with the international standard ISO 9001.

The presence of an internal quality system and its mechanisms is confirmed by a high external assessment, which directly depends on the level of the internal management system and quality assurance. The University was the first in Kazakhstan to pass and re-confirm the International Institutional Assessment in the European Association of Universities (EAG) under the International Assessment Program (IEP, International Evaluation Program). <https://www.iep-qa.org/reports-publications.html>. The Code of Academic Honor of a student of K.I. Satpayev KazNRTU developed at Satbayev University. Satbayeva defines a system of ethical rules of student behavior during the study period, sets the boundaries of his personal responsibility.

When developing a development plan for the EP special monitoring is carried out, which is considered at meetings of academic councils of institutes, the Educational and Methodological Council and the Academic Council of the University. Individual issues are considered at the meetings of departments and are coordinated with the interests of employers, which makes it possible to professionally adapt doctoral students of the university to the constantly changing trends of the labor market.

The formation of an EP development plan involves the involvement of representatives of groups of interested persons, including employers, students and teaching staff. In this regard, the development plan of the PhD program "Oil and Gas and ore Geophysics" is presented for review at the link [Аккредитация докторантуры-20220406T040701Z-001 — OneDrive \(live.com\)](#).

The individuality and uniqueness of EP 8D07104 Oil and gas and ore geophysics is explained by the fact that today it is the only educational program in Kazakhstan for the preparation of PhD doctors of engineering and technology in oil and gas and ore geophysics and is extremely necessary when solving issues of prospecting and exploration of mineral deposits.

The organization of higher education has a clear distribution of staff duties due to the organizational and legal consolidation of management functions, rational separation of powers, establishment of rights, duties and responsibilities of heads of departments. They are defined by the Regulations on Divisions and job descriptions developed in accordance with the current organizational and management documents of the university and standards (<https://official.satbayev.university/ru/vnutrennie-normativnye-dokumenty>).

The transparency of the EP management system is confirmed by the involvement of teachers of the department and employers in the development of EP 8D07104 Oil and Gas and ore Geophysics.

The university has a set of organizational structures of quality assurance organizations, a documented basis of the evidence base of the system, which are freely available on the website <https://official.satbayev.university/ru/docs>. The university conducts an internal audit (planned and unscheduled) [ДП КазНИТУ 801. Внутренний аудит](#)); external audit; as well as customer satisfaction and questionnaires are established ([ДП КазНИТУ 714. Анкетный опрос. Оценка удовлетворенности потребителей](#), ДП КазНИТУ 801 "Sociological monitoring: questionnaire survey").

Risk management at the university is carried out based on the assessment of the effectiveness of the strategy, policy and goals during the SWOT analysis, which serves to improve the university's activities.

The educational program management bodies take part in: Teaching staff of departments, the specialty council, which includes representatives from potential employers, the educational and methodological council of the institute, the educational and methodological council of the university, the academic council of the university.

Within the framework of the EP, a comprehensive intra-university assessment of activities is applied according to benchmarks, 2/3 of which are invariants and are used to assess the dynamics of process improvement, and the rest change depending on the state and importance of the processes and areas to be audited, which made it possible to streamline the activities of departments and systematize reporting documentation.

The University management demonstrates readiness for openness and accessibility for students, teaching staff, employers and other interested persons. All of them can visit the Rector's Blog — Satbayev University and ask their questions. In addition, interested persons can learn more about the Department of Geophysics from the soc.networks.

In 2021, the head of the EP was trained under the program "Anti-corruption management Systems ISO 37001:216". A certificate was provided for completing a training course on the topic "Improving pedagogical skills" in the period of January 18-22, 2021 in the amount of 72 hours. In addition, the head of the Department of Geophysics Abetov A.E. regularly passes professional trainings and develops foreign language skills. Participation in trainings on

technologies of conducting distance education, conducting exams in online format, improving pedagogical skills has also been confirmed.

***Analytical part***

Analysis of the SO report, internal documents submitted during the visit of the EEC, as well as conversations with target groups allowed us to establish that interested persons (students, teachers and employers) are aware of the existence of a Strategic Plan for the development of the university, quality policy and objectives, internal regulatory documents. The management of the EP demonstrated the functioning of the internal quality management system.

Prior to the start of the accreditation procedure, a development plan for the EP was presented in the report and in the annexes to the report. At the same time, information about the development plans of the EP was not found on the website of the University and the Department of Geophysics. The analysis of the development plan of the accredited EP 8D07104 Oil and Gas and Ore Geophysics (approved by Protocol No. 2 of September 14, 2021) provides general information on the main types of activities. There are no specific data on most of the measures, vague deadlines for implementation "within a year" are indicated. The main activities are assigned to the head of the department. Approved versions of development plans are not posted on the department's website. The involvement of external stakeholders and students in the development plan of the EP is not traced.

In the Public Organization, risk management is carried out based on the assessment of the effectiveness of the strategy, policy and goals during the SWOT analysis, which serves to improve the university's activities, but it has not been established whether there is a regulation on risk management and how it is applied. During the online visit and meetings with the heads of structural divisions, deans of faculties and the head of the department, it was not possible to establish how the management of the EP identifies and assesses potential risks. The issue of assessing the risks of successfully defending dissertations of a large number of doctoral students studying at the EP is particularly relevant. The management of the EP needs to update the risks in connection with the appropriate time of graduation of 19 doctoral students in the next 2 years.

Within the framework of accredited educational institutions, innovative processes are implemented through the formation of new content of educational programs and a comprehensive intra-university assessment of activities based on benchmarks, 2/3 of which are used to improve processes, and the rest change depending on the importance of the processes to be audited. At the same time, the EEC notes that if there is a close connection of partner enterprises with the EP, there is an opportunity for the introduction of innovative proposals into the educational process from both teaching staff and representatives of production.

According to the results of the survey, 80.5% of students are "completely satisfied" with the level of accessibility and responsiveness of the university management.

***Strengths/Best practices***

The University provides an annual improvement in the quality of the management of the EP, which, in turn, allows you to master modern methods of distance education, conducting exams in online format, issues of preventing plagiarism.

***EEC Recommendations for EP 8D07104 Oil and Gas and Ore Geophysics:***

***University management:***

- Comprehensively involve employers, students and teaching staff in drawing up a development plan for the EP when it is updated (for 5 years).
- Publish a mechanism for monitoring the implementation of the EP development plan, evaluating the achievement of learning goals and regularly reviewing the EP development plan in connection with possible changes in regulatory legal acts in the higher education system. The monitoring results should be communicated to all interested parties (by the end of 2022).
- The management of the EP should specify by the end of the academic year measures to reduce the impact of risks in the design and implementation of the EP, specifying measurable

performance indicators, responsible persons and deadlines for implementation. It is especially necessary to pay attention to the risks associated with the presence of a large number of doctoral students on the EP and the possibility of their successful writing and defending dissertations. Systematically analyze risk management at the level of the educational program.

➤ To develop a methodology for analysis and identify mechanisms to ensure the introduction of innovative proposals within the framework of the development of the EP (by the end of 2023).

***The conclusions of the EEC according to the criteria: (strong/ satisfactory/ suggest improvements/ unsatisfactory) for EP 8D07104 Oil and gas and ore Geophysics:***

***According to the standard "Educational Program Management", 15 criteria are disclosed, of which: 1 has a strong side; 13 have a satisfactory position, 1 suggests improvement.***

### 6.2 Information Management and Reporting Standard

- *The EO should 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 for collecting and analyzing information in the context of the EP.*
- *The management of the EP should 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 should demonstrate fact-based decision-making.*
- *A system of regular reporting reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of the activities of departments and departments, scientific research, should be provided within the framework of the EP.*
- *The EO should establish the frequency, forms and methods of evaluating the management of the EP, the activities of collegial bodies and structural units, senior management, and the implementation of scientific projects.*
- *The EO must demonstrate the definition of the procedure and ensuring the protection of information, including the identification of responsible persons 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 should demonstrate the existence of a mechanism for communication with students, employees and other stakeholders, as well as conflict resolution mechanisms.*
- *The EO should 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 EO should provide for an assessment of the effectiveness and efficiency of activities, including in the context of the EP.*
- *The information intended for collection and analysis within the framework of the EP should take into account:*
  - *key performance indicators;*
  - *dynamics of the contingent of students in the context of forms and types;*
  - *academic performance, student achievements and expulsion;*
  - *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 EO must confirm the implementation of procedures for processing personal data of students, employees and teaching staff on the basis of their documentary consent.*

### ***The evidentiary part***

The university has its own development – the Educational Portal [sso.satbayev.university](http://sso.satbayev.university), which is a single entry point for doctoral students and teaching staff and provides access to electronic educational materials, educational and individual plans, information about advisors and employers. The university also operates a single corporate directory Microsoft Active Directory, which has access to Microsoft cloud services used for training.

A mechanism of system processing by information flows has been introduced, which consists of: an educational portal <http://sso.kaznitu.kz/account/login/>; distance education portal <https://polytechonline.kz/>; Microsoft 365 platforms; "Anti-Plagiarism system" <http://strikeplagiarism.com/en/>, in which academic texts are checked for uniqueness, as well as a webinar that allows you to conduct online lectures.

Management decisions are made based on the analysis of information on the main types of activities that are regulated by the "Quality Manual" of documented procedures [ДП КазННТУ 502. Management analysis](#), [ДП КазННТУ 801. Internal audit](#), [ДП КазННТУ 714. Questionnaire survey. Assessment of customer satisfaction](#).

The EO uses a system of regular reporting, which includes monitoring and monitoring the progress of students after the certification week and after the end of the examination session, involves filling out a form by PPC and advisors [Ф КазННТУ 706-45. Results of academic performance in the department](#) at the meetings of the department. Heads of departments report to the Academic Council of the Institute on the semi-annual and annual results of the department's activities according to the form [Work plan \(report\) of the Institute \(department\)](#).

The evaluation of the university departments' activities is carried out twice a school year in accordance with the Documented Procedure [ДП КазННТУ 801. Internal audit](#). At the end of each academic year, the management of the EP submits reports on the form F KazNRTU 801-05. The collection, control and analysis of reports is carried out by the Corporate Development Department.

Responsible persons for collecting personal information are appointed by the heads of the department. Responsible persons comply with the requirements prescribed in the form of F KazNRTU 401-03. Familiarization log. Information protection is carried out according to the functional responsibilities of employees. The University applies the Information Security Policy N 029-08-47.6.01-2017. Each doctoral student and teacher has a personal page on the university's educational portal with secure access.

The mechanism of communication with students and employees is regulated in accordance with [The Code of Corporate Ethics](#) and [The Code of Academic Integrity](#). These codes provide mechanisms for all members of the university community to inform the head of emerging events or facts that cause a conflict of interest when making decisions or voting. In case of detection of the facts of such conflicts, administrative responsibility is established, determined by [Disciplinary Commission of the University](#) or By the Academic Ethics Committee of the University.

The University has developed mechanisms for measuring the satisfaction of teaching staff through a systematic analysis of the results of internal audits, competitions and a feedback system to verify the implementation of the Quality Policy ("[Management analysis](#) »).

Key performance indicators are calculated in accordance with the established mechanism, which includes self-assessment of educational programs and processes, as part of the QMS analysis.

The Department of Geophysics conducts a survey twice a year "Teacher through the eyes of a doctoral student" at the end of the academic semester. The results of the survey are transparent and the doctoral student can get acquainted with them through an adviser.

According to the legislation of the Republic of Kazakhstan, employees of NAO

KazNRTU, students provided their consent to the processing of personal data, which was confirmed during conversations with teaching staff and students and the analysis of documents. Consent to the collection and processing of personal data is confirmed by the form [Ф КазННТУ 601-22. Consent to data processing.doc](#).

### ***Analytical part***

Analysis of the self-assessment report on compliance with the requirements of the Information Management and Reporting standard for accredited EP, information provided by the EO during the visit, the commission notes that the university has a multi-level information and reporting management system.

The EEC believes that the internal regulatory documentation developed at the university (organization standards, regulations, rules, methodological instructions) determines the structure and volume of information collected, its reliability and timeliness. This allows you to generate analytical reports in a timely manner and make decisions based on facts. The processes of information management and reporting are evaluated by analyzing methods and collecting information, decisions of collegial bodies and management, surveys of information resources of the university, systems and software, and questionnaires of all interested parties.

At the same time, analyzing the SO and additional documents, meeting with target groups, the members of the EEC believe that the university management needs to continue work on widely informing students and teaching staff on the calculation of key performance indicators, to develop a system of information transfer between structural units using modern information technologies.

According to the results of the survey, 85.4% of students are "completely satisfied" with the content and usefulness of the website of the educational organization in general and faculties in particular, 12.2% are "partially satisfied", 2.4% are "partially dissatisfied". The clarity of the procedure for taking disciplinary measures is "fully satisfied" - 68.3%, "partially satisfied" - 24.4%, "difficult to answer" – 7.3% of students. 80.5% of students are "completely satisfied" with the level of accessibility of the dean's office.

28.2% answered "very well", "good" - 59.2%, "relatively bad" – 11.3%, "bad" – 1.4% of the teaching staff to the questionnaire question "Evaluate the involvement of the teaching staff in the process of making managerial and strategic decisions".

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

*Not identified*

### ***EEC Recommendations for EP 8D07104 Oil and Gas and Ore Geophysics:***

- To ensure transparency of information on the management of the system for collecting key performance indicators in the context of EP and availability until the end of the academic year (for example, on the university's website).
- To provide access to the evaluation of the effectiveness and efficiency of the university departments to ensure that doctoral students carry out scientific research (until the end of 2022).
- By the end of the academic year, to develop an effective mechanism that will take into account the degree of satisfaction of students with the implementation of the EP.

***The conclusions of the EEC according to the criteria: (strong/ satisfactory/ suggest improvements/ unsatisfactory) for EP 8D07104 Oil and gas and ore Geophysics:***

***According to the Information Management and Reporting standard, 16 criteria have been disclosed, of which: 16 have a satisfactory position.***

### 6.3. Standard "Development and approval of basic educational programs"

- *The EO should define and document the procedures for the development of the EP and their approval at the institutional level.*
- *The management of the EP should ensure that the developed EP meets the established goals, including the expected learning outcomes.*
- *The management of the EP should ensure the availability of developed models of the graduate of the EP, describing the learning outcomes and personal qualities.*
- *The management of the EP must demonstrate the conduct of external examinations of the content of the EPi of the planned results of its implementation.*
- *The qualifications obtained upon completion of the EP should be clearly defined, explained and correspond to a certain level of the NSC.*
- *The management of the EP should determine the impact 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 labor intensity of the EP should be clearly defined in Kazakhstan loans and ECTS.*
- *The management of the EP should ensure the content of academic disciplines and learning outcomes to the level of study (bachelor's, master's, doctoral studies).*
- *The structure of the EP should provide for various types of activities corresponding to the results of training.*
- *An important factor is the correspondence of the content of the EP and the results of the training of the EP, implemented by organizations of higher and (or) postgraduate education in the EHEA.*

#### **The evidentiary part**

The training of doctors of engineering and technology in EP 8D07104 Oil and gas and ore geophysics is carried out taking into account the compliance of competencies with modern realities and tasks of economic development in Kazakhstan. The approach in choosing specializations is consistent with the requirements of the Professional Standard "Geophysical methods of prospecting and exploration of mineral deposits" (approved by Order No. 404 of the Deputy Prime Minister of the Republic of Kazakhstan - Minister of Industry and New Technologies of the Republic of Kazakhstan dated December 9, 2013), as well as the Professional Standard: "Geological and geophysical work on oil and gas exploration" (Version 1, 2019).

The objectives of the doctoral program in the field of preparation 8D07104 Oil and gas and ore geophysics correspond to the mission, strategic plan, goals and objectives of KazNRTU named after K.I. Satbayev. They correspond to the strategic documents of the university: "University Development Strategy 2026" ([http://kazntu.kz/ru/aboutuniversity/strategicheskie\\_dokuvtyni](http://kazntu.kz/ru/aboutuniversity/strategicheskie_dokuvtyni)), The program and development plan of the University until 2025, as well as the "Policy and objectives in the field of quality assurance" (<https://official.satbayev.university/ru/vnutrennie-normativnye-dokumenty/3-uroven-upravlenie-obrazovatelnyim-protessom>).

Mechanisms for reviewing the content and structure of the EP take into account changes in the labor market, from the approach to determining changes in its needs and the mechanism for making changes to the EP. An example is the application of a systematic approach to assessing the prospects of oil and gas potential of local structures or prospects for the discovery of deposits of solid minerals of areas, districts and ore nodes. Both disciplines were included in the EP of doctoral studies in the field of training 8D07104 - "Oil and gas and ore geophysics" and approved at meetings of the Department of Geophysics, the Academic Council of the IGNGD and UMC KazNRTU named after K.I.Satbayev.



External evaluation of the quality of the EP of doctoral studies in the field of training 8D07104 "Oil and gas and ore geophysics" is carried out by external evaluation mechanisms and is represented by the accreditation procedures of the university by the rating of the EP and the university as a whole. When choosing external experts EP 8D07104 Oil and Gas and Ore Geophysics, the Department of Geophysics requires an academic degree of candidate or Doctor of Geological Sciences, PhD in the direction, as well as the organization of the corresponding profile.

The qualifications obtained upon completion of training in accredited EP are clearly defined, explained and correspond to a certain level of the NQF by ensuring compliance of the content of academic disciplines and planned learning outcomes, on the one hand, and on the other - the influence of professional practices on the formation of learning outcomes.

The management of the EP determines the impact of disciplines and professional practices on learning outcomes through research internships, as well as pedagogical practice for doctoral students at the Department of Geophysics under the mentorship of the Faculty.

The NGO provides an opportunity to prepare students for professional certification. For example, in the field of transport services, the Center for Management and Logistics in Transport has been carrying out voluntary conformity assessment (certification) since 2011. The Logistics Company has signed an agreement with the European Logistics Association (ELA) and they give their graduates a certificate. At EP 8D07104 Oil and Gas and Ore Geophysics, it is planned to implement the possibility of professional certification of students after they have completed the relevant courses.

The SO report states that the participation of doctoral students in the development or improvement of the EP is realized by accumulating their proposals on its content with subsequent submission for discussion at a meeting of the Department of Geophysics, at which these proposals are considered and filtered with the joint participation of doctoral students and teachers. However, during the interview with the students, these facts were not confirmed.

At the EP, the content of academic disciplines corresponds to the level of training. In the educational program of the doctoral program in the field of preparation 8D07104 Oil and gas and ore geophysics, there are 180 credits in total, of which BD – 25 and PD – 20, NIRD–123, registration and defense of a doctoral dissertation-12.

The main bases of professional practices are enterprises that, according to the specifics of their activities, correspond to the direction of training specialists for the EP under consideration – Azimut Geologiya LLP, Batysgeozertteu LLP, Batys Geofizservice LLP, GEOKEN NCP, Uzenpromgeofizika JSC, KOR Oil Company JSC, Kazpromgeofizika JSC, KazNIPI Munaygas JSC, Karazhanbasmunai JSC, Institute of Seismology of the Ministry of Education and Science of the Republic of Kazakhstan LLPPGD Services", JSC "NAC KazAtomProm", LLP "TatArka", "KAZ MineralsPLS", LLP "Kazakh Geophysical Company", LLP JV "KATKO", JSC "KazMunayGas", JSC "Turgay-Petroleum", LLP "Tsentrpromgeofizika" JSC "Embamunaygas", etc.

The survey conducted during the visit of the EEC showed:

- informing the requirements in order to successfully complete this educational program (specialty) "fully satisfied" – 82.9% of students;
- informing students about courses, educational programs and academic degrees received "fully satisfied" – 75.6 %

Analytical part

Analyzing the standard "Development and approval of educational programs", the members of the EEC came to the conclusion that the review and approval of the EP takes place at meetings of the Department of Geophysics, the Academic Council of the IGNGD and UMC KazNRTU named after K.I. Satbayev.

The members of the EEC note that EP 8D07104 Oil and gas and ore geophysics are provided by WC, EMCD, which are compiled in accordance with regulatory documents and

meet the specifics of accredited EP. At the same time, the set of CAD disciplines is very limited (it is necessary to choose 9 out of 12 disciplines). Elective disciplines are not supported by syllabuses, which limits the possibilities of doctoral students with their choice. The choice of enterprises for practical training and their number contributes to the formation of professional competencies of students.

The EEC experts note that according to the results of the analysis of the studied documents and interviews conducted with students, teaching staff and employers, the involvement of students in the development of the EP has not been proven.

The presence of a significant number of interested enterprises in the specialists of this OP should contribute to the preparation of students for professional certification, however, it is not currently being carried out.

During the meeting of the EEC members with students, it was found that students do not participate in the development and quality assurance of the EP, which does not correspond to the format of student-centered learning.

The survey of students conducted during the visit of the EEC showed that:

- responsiveness to feedback from teachers regarding the educational process "fully satisfied" – 80.5%; "partially satisfied" – 14.6%, "not satisfied" – 4.9%.
- satisfied with the quality of teaching "fully" – 78%, "partially satisfied" – 22%.

To the question to the teachers "How much does the content of the educational program meet your scientific and professional interests and needs?", the answer "very good" was provided by 40.8%, "good" - 54.9%, "relatively bad" – 2.8%, "bad" – 1.4% of respondents.

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

The management of the EP fully ensures compliance with the unique in Kazakhstan EP 8D07104 Oil and gas and ore Geophysics with the established training goals, including the expected results of training, in accordance with the Professional Standard: "Geological and geophysical work on oil and gas exploration" (Version 1, 2019).

The management of the EP demonstrated the functioning of the mechanism for reviewing the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social request of society. The recommendations received from employers made it possible to develop and approve at the meetings of the Department of Geophysics, the Academic Council of the IGNGB and the UMC KazNRTU named after K.I.Satbayev two disciplines that were included in the EP of doctoral studies in the field of preparation 8D07104 Oil and gas and ore Geophysics.

The management of the EP provides external expertise of the educational program and the planned results of its implementation, by attracting candidates or doctors of geological sciences, PhD in the direction, as well as the organization of the relevant profile.

#### ***EEC Recommendations for EP 8D07104 Oil and Gas and Ore Geophysics:***

➤To update the methodological instructions for the development of educational programs by the beginning of the 2022-2023 academic year, including the requirements for the organization and conduct of an external examination of the content of the EP, taking into account:

- compliance with the EP structure;
  - relevance of thematic content;
  - compliance of expected learning outcomes with market requirements;
  - availability of competence-critical assessment of learning outcomes.
- Develop syllabuses for all elective disciplines and post them on the website of the Department of Geophysics (until the end of 2022).

➤When developing the EP and ensuring its quality, it is mandatory to involve students, teaching staff and other interested persons (for 5 years).

- Provide for the possibility of professional certification of students during the

implementation of the EP with the assistance of employers (for example: labor protection; metrologist, standardization and certification specialist).

***The conclusions of the EEC according to the criteria: (strong/ satisfactory/ suggest improvements/ unsatisfactory) for EP 8D07104 Oil and gas and ore Geophysics:***

***According to the standard "Development and approval of basic educational programs", 12 criteria are disclosed, of which: 3 have a strong position, 8 have a satisfactory position, 1 position suggests improvement.***

#### **6.4. The standard "Continuous monitoring and periodic evaluation of basic educational programs"**

- *The EO should define mechanisms for monitoring and periodic evaluation of the EP in order to ensure the achievement of the goal and meet the needs of students and society. The results of these processes should be aimed at continuous improvement of the EP.*

- *Monitoring and periodic evaluation of the EP should include:*

- *The content of programs in the light of the latest scientific achievements in a particular discipline to ensure the relevance of the discipline taught;*

- *Changes in the needs of society and the professional environment;*

- *Workload, academic performance and graduation of students;*

- *Effectiveness of student assessment procedures;*

- *Expectations, needs and satisfaction of students with training in the EP;*

- *The educational environment and support services and their compliance with the goals of the EP.*

- *The EO, the management of the EP should define a mechanism for informing all interested parties about any planned or undertaken actions in relation to the EP.*

- *All changes made to the EP must be published. The management of the EP should develop a mechanism for reviewing the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social request of society.*

#### ***The evidentiary part***

The procedure for monitoring the periodic evaluation and revision of the content of educational programs at the university is supervised by the Educational and Methodological Council of the Institute and the University. To adjust the content of syllabuses and work programs - the graduating departments and the directorate of the Institute. During the preparation of the IUP, a regular survey of doctoral students is conducted for feedback and evaluation of the quality of the educational program. Every year, the EP's working curriculum for a new stream of students is reviewed and updated. Teachers and students participate in the working group on the development of the EP.

Monitoring and evaluation of the EP is carried out within the framework of the internal university quality system by academic management bodies (Academic Planning Committee and Internal Control Committee) and SU institutional structures (Corporate Development Department, Registrar's office).

The assessment of students and their effectiveness are reflected in the syllabuses of disciplines, as well as in the Rules of the student's credit technology. Control of educational achievements, assessment of student's knowledge, etc. The documents are posted on the official website of the University in the Documents section/Internal regulatory documents ([3 Educational Process management level](#)). <https://sso.satbayev.university/>.

According to the results of the conducted pedagogical, industrial and research practices, doctoral students submit a report containing a task for practice, an explanatory note and the results of the work carried out. Every year, a survey is conducted of employers who speak

positively about the work of doctoral students of the University.

The mechanism for informing all interested parties (stakeholders of the educational process: the State; teaching staff; students; enterprises, organizations and employers supplying their goods and services to universities, etc.) in relation to the educational process takes place using the portal <https://sso.satbayev.university/account/login?ReturnUrl=https%3A%2F%2Fsso.satbayev.university%2F#!/> electronic means of communication and mailing invitations.

Publication of changes made to the EP has various forms: approval by e-mail; arrival of a representative from the enterprise to the university; departure of a representative of the university to the enterprise.

The analysis of the results of training courses in the context of the EP and the dynamics of the recruitment of doctoral students, the efficiency and reliability of information for quality management of educational activities allows us to assert that all information on the educational activities of students is monitored in a timely manner and evaluated with sufficient frequency.

### ***Analytical part***

The EEC notes that the EO provides a review of the content and structure of educational programs with the participation of employers. The Commission draws attention to the need to use various methods to identify changes in the labor market and take into account global trends. In particular, it is recommended to regularly analyze the labor market in order to take into account the expected learning outcomes in the content of the EP, as well as to adjust possible risks during the implementation of the EP.

According to the developers of the EP, informing the public and all interested parties about possible changes to the EP is carried out using the portal <https://sso.satbayev.university/account/login?ReturnUrl=https%3A%2F%2Fsso.satbayev.university%2F#!/> electronic means of communication and mailing invitations. It should also be noted that when analyzing the information presented on the university's website, a number of positions (learning outcomes, the effectiveness of student assessment procedures) were not reflected.

At the same time, the EEC notes that the portal is protected from unauthorized users, and access to the EP requires the installation of special passwords, which restricts access. Consequently, only the audience that will have an invitation will be able to get acquainted with the content of the EP, and this makes it impossible for all interested parties to be available.

Since the publication of all changes in the EP is not carried out on the department's website, it is difficult to say that a wide range of interested parties will be informed in a timely manner.

In this regard, the EEC believes that it is necessary to ensure constant and timely informing of students, teaching staff, employers through the official website of the University and the Department of Geophysics about all the changes made in the EP. It is also necessary to ensure accessibility to all materials related to the development of the EP.

Based on the results of the survey:

The material proposed by the teacher is relevant "full consent" - 53.7%, "consent" – 31.7% of students;

The evaluation criteria used by the teacher are clear: "full consent" – 68.3%, "consent" – 22% of students;

The objectivity of the assessment of knowledge, skills and other educational achievements "full consent" – 63.4%, "consent" – 31.7% of students.

To the question "Assess how students' knowledge obtained at this university corresponds to the realities of the requirements of the modern labor market", 26.8%, teaching staff answered "very well" and 59.2% - "well".

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

*Not identified*

**EEC recommendations for EP "8D07104 Oil and gas and ore geophysics":**

- Implement a mechanism for timely informing all interested parties about any planned or taken actions regarding the EP using the official page of the Department of Geophysics on the university's website before the end of the academic year.
- Provide free access to inform the public about all changes made to the EP directly on the website of the University and the Department of Geophysics until the end of the academic year.

***The conclusions of the EEC according to the criteria: (strong/ satisfactory/ suggest improvements/ unsatisfactory) for EP 8D07104 Oil and gas and ore Geophysics:***

***According to the standard "Continuous monitoring and periodic evaluation of basic educational programs", 10 criteria are disclosed, of which: 8 have a satisfactory position, 2 positions suggest improvement.***

**6.5 The standard "Student-centered learning, teaching and assessment of academic performance".**

- *The management of the EP should ensure respect and attention to different 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 availability of own research in the field of teaching methods of educational disciplines of the EP.*
- *The management of the EP should demonstrate the existence of a feedback system for the use of various teaching methods and evaluation of learning outcomes.*
- *The management of the EP should demonstrate support for the autonomy of students with simultaneous guidance and assistance from the teacher.*
- *The management of the EP must demonstrate the existence of a procedure for responding to complaints from students.*
- *The EO should ensure consistency, transparency and objectivity of the learning outcomes assessment mechanism for each EP, including the appeal.*
- *The EO should ensure that the procedures for evaluating the learning outcomes of the students of the EP correspond to the planned results and goals of the program. Criteria and evaluation methods within the framework of the EP should be published in advance.*
- *The EO should define mechanisms to ensure that each graduate of the EP achieves learning outcomes and ensures the completeness of their formation.*
- *Evaluators should be familiar with modern methods of evaluating learning outcomes and regularly improve their skills in this area.*

***The evidentiary part.***

The main idea of student-centered learning is aimed at forming students' independent position in the learning process, therefore, the university follows the principle of introducing a full-fledged credit technology. This system has been operating and improving at the university since 2016 and is regulated by Chapter 5 [Rules of credit technology of training](#).

Flexible trajectories of doctoral students are determined at all its stages: familiarization and choice of discipline, self-registration, familiarization and signature of syllabus, disagreement and withdrawal from the discipline.

The Department of Geophysics carries out educational, research and innovation activities aimed at solving multi-profile tasks in priority scientific and applied areas. Together with the Canadian company Phoenix Geophysics, a Kazakh-Canadian scientific and educational center

was opened in priority areas of processing and modeling of geological structure.

The existence of own research in the field of teaching methods is confirmed by the development of textbooks, manuals and methodological guidelines for conducting classes, which are periodically reviewed, discussed and approved by the department and the methodological council of the Institute.

Feedback mechanisms with students on the assessment of satisfaction with methodological innovations are conducted in the form of a questionnaire, which allows updating the educational programs of the doctoral program on EP 8D07104 - "Oil and gas and ore geophysics" on a regular basis.

EP teachers create such conditions in the educational process that motivate doctoral students to work independently. The fulfillment of this task will require the teacher to correct the functions of activity by conducting research on the analysis of the effectiveness of measures aimed at activating the independent work of doctoral students.

According to the SO report, any complaint of a student implies further actions - an investigation of the situation to develop a better solution. If the complaint is made in an anonymous form, then in this case the University does not have the opportunity to conduct a full investigation. The official consideration of an anonymous complaint does not imply a decision on the complaint. At the same time, interviews with the trainees showed that they are not aware of the behavior in case of conflict situations, which implies the improvement of this mechanism and familiarization with it for all students.

For the period of the examination session, the appeal and examination commissions are created in the EO. The composition of the commissions are qualified teachers who correspond to the profile of the specialty, and their level and competence are determined according to the Order of the Minister of Education and Science of the Republic of Kazakhstan dated April 12, 2018 No. 152: "On amendments to the order of the Minister of Education and Science of the Republic of Kazakhstan dated January 27, 2016 No. 83.

Intermediate certification of doctoral students is carried out in accordance with the working curriculum, academic calendar and professional training programs. The comprehensive exam is taken no later than 1 month before the defense of the doctoral dissertation. His retake with a positive assessment in order to increase it is not allowed. A doctoral student who has passed a comprehensive exam is allowed to defend a dissertation work. After the public defense of a doctoral dissertation, the degree of Doctor of PhD is awarded by the decision of the Specialized Academic Council for the Defense of Doctoral Dissertations.

The mechanism of providing each graduate with learning outcomes is implemented within the framework of the internal university quality system by academic management bodies (Academic Planning Committee and Internal Control Committee) and institutional structures of KazNRTU (Corporate Development Department, Registrar's office) monitoring the quality of educational programs is carried out within the internal audit and quality assessment procedures.

University teachers are fully proficient in modern methods of evaluating learning outcomes, through training at educational and methodological and scientific seminars. Teaching staff of the Department of Geophysics annually take advanced training courses and specialized trainings to improve pedagogical skills.

### ***Analytical part***

When analyzing the standard "Student-centered learning, teaching and assessment of academic performance", the EEC found that teaching staff uses traditional teaching methods with new information and communication technologies when conducting training sessions. This was confirmed during the analysis of the video recording of EP classes.

Feedback systems are used, as well as various methods of teaching and evaluating learning outcomes are used. The University ensures consistency, transparency and objectivity of the mechanism for evaluating learning outcomes for each EP. A mechanism for appealing learning outcomes has also been developed.

During the work of the EEC, it was found that there is no clarity regarding the existence of a procedure for responding to complaints from students. It also remains unclear what provision regulates this procedure in the EO.

The evaluation criteria developed for the disciplines of students in doctoral programs take into account the timely and independent performance of all types of tasks, the ability to properly investigate problematic issues, find answers.

Intermediate certification of doctoral students is carried out in accordance with the working curriculum, academic calendar and professional training programs.

The members of the EEC note that the mechanism for providing each graduate with learning outcomes is implemented within the framework of the internal university quality system by academic management bodies (the Academic planning committee and the Internal control Committee), as well as by the institutional structures of KazNRTU.

The survey conducted during the visit of the EEC IAAR showed that students express full and partial satisfaction:

- teaching methods in general are "fully satisfied" – 77.3%, "partially satisfied" – 29.3 %;
- the quality of teaching is "fully satisfied" – 78%, "partially satisfied" – 22 %;
- the objectivity of the assessment of knowledge, skills and other educational achievements "fully satisfied" – 80.5%, "partially satisfied" – 14.6 %;
- the timeliness of the assessment of students' academic achievements is "fully satisfied" – 75.6%, "partially satisfied" – 19.5 %;
- equal opportunities are provided to all students "full consent" – 65.9%, "consent" – 24.4%.

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

*Not identified*

#### ***EEC Recommendations on EP 8D07104 Oil and gas and Ore Geophysics:***

➤ The management of the EP to improve the mechanism for responding to complaints. Familiarize all students with it and fix it in the appropriate position. Post a notice on the website of the department (university) regarding the behavior of students in case of conflict situations before the end of 2022.

***The conclusions of the EEC according to the criteria: (strong/ satisfactory/ suggest improvements/ unsatisfactory) for EP 8D07104 Oil and gas and ore Geophysics:***

***According to the standard "Student-centered learning, teaching and assessment of academic performance", 10 criteria are disclosed, of which: 9 have a satisfactory position, 1 position implies improvement.***

#### **6.6. The standard "Students"**

• *The EO must demonstrate the existence of a policy for the formation of a contingent of students in the context of the EP from admission to graduation and ensure transparency of its procedures. The procedures governing the life cycle of students (from admission to completion) must be defined, approved, published.*

- *The management of the EP should determine the order of formation of the contingent of students based on:*
- *Minimum requirements for applicants;*
- *The maximum size of the group during seminars, practical, laboratory and studio classes;*
- *Forecasting the number of state grants;*
- *Analysis of available material and technical, information resources, human resources;*
- *Analysis of potential social conditions for students, including the provision of places in the dormitory.*
- *The management of the educational institution should demonstrate readiness to conduct special adaptation and support programs for newly enrolled and foreign students.*
- *The EO must demonstrate compliance of its actions with the Lisbon Recognition Convention.*

- The EO 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 management of the educational institution should demonstrate the existence of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and informal training.
- The EO 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 should demonstrate readiness to provide students with internship places, promote the employment of graduates, and maintain communication with them.
- The EO should provide for the possibility of providing graduates of the EP with documents confirming the qualifications obtained, including the achieved learning outcomes, as well as the context, content and status of the education received and certificates of its completion.
- An important factor is the availability of mechanisms for monitoring the employment and professional activity of graduates of the EP.

### ***The evidentiary part***

The policy of forming a contingent of students of the EO when recruiting for the KazNRTU doctoral program is transparent. Persons with a master's degree in engineering and technology or persons who have completed a master's degree in related specialties are accepted for training. Admission of persons entering KazNITA is carried out through the placement of an educational grant of higher education, at the expense of the republican budget or the local budget, as well as tuition fees at the expense of the student's own funds and other sources.

Admission to study at the University is carried out in accordance with the Standard Rules for admission to study at educational organizations implementing educational programs of higher education, approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan dated 31.10.2018 No. 600 with amendments as of 08.06.2020. To enroll in the university, you need to register on the website [kb.satbayev.university](http://kb.satbayev.university), and after confirming the registration, provide the original documents to the admissions committee.

When forming a contingent of students, the minimum requirements for applicants entering the field of training 8D07401 Oil and gas and ore geophysics is a set of points for admission to doctoral studies - at least 150 points.

In the 2017-2021 academic year, 21 people enrolled in the educational program. Currently, 17 doctoral students are being trained, Table 1.

**Table 1 – Contingent of students of the educational program  
8D07104 Oil and gas and ore Geophysics**

<b>Accepted students</b>	<b>2017 y.</b>	<b>2018 y.</b>	<b>2019 y.</b>	<b>2020 y.</b>	<b>2021 y.</b>
<b>Total</b>	2	2	7	6	4
<b>Grant</b>	2	2	7	6	4
<b>Paid</b>	-	-	-	-	-

The maximum set of doctoral students in EP 8D07104 Oil and gas and ore geophysics in accordance with the state educational order for the training of specialists with higher education for the 2021-2022 academic year is 6 students, which corresponds to the personnel potential of the Department of Geophysics.

When predicting the number of state grants, their total number for all educational programs is 2,000. The training is carried out on state grants and on a contractual basis. [Results of the grant competition](#) published at the beginning of August. [About passing UNT scores](#)

The analysis of material and technical, information resources and human resources is carried



out through the development plan of the educational program, indicative indicators of the development of the department, institute and university, planned and annual reports on the results of the work. Subsequently, the results of this analysis are discussed and approved at meetings of the Department of Geophysics.

When analyzing the potential social conditions for doctoral students, including the provision of places in a dormitory according to a SWOT analysis of the results of the self-assessment of the "Students" standard (Appendix 1), an insufficient number of places for living in a dormitory (in the House of Young Scientists) was revealed.

At the University, social assistance and support for doctoral students and staff is one of the most priority areas of social work carried out at the University, which provides solutions to social problems in order to create optimal conditions for the training and development of doctoral students. The support includes psychological, legal, financial and recreational assistance for newly enrolled and foreign students.

The mechanism of recognition of learning outcomes mastered during academic mobility programs at other universities occurs in accordance with the Regulations on Academic Mobility (in the appendix). According to this provision, the director of the registrar's office, the director and the Vice-rector for Academic Affairs can give an assessment for the subject. However, it was impossible to verify this procedure, since students at EP 8D07104 Oil and Gas and Ore Geophysics did not participate in academic mobility. The procedure and rules for transferring students from other universities to Satbayev University, as well as the procedure for transferring completed loans, are set out in the Rules of Credit Technology Training [Rules of credit technology of education in the NAO KazNITU named after K.I.Satpayev \(bachelor's degree\) Pr 029-03-18.1.10-2019](#).

The EO cooperates with other educational organizations and national centers. To date, Satbayev University has 163 agreements, agreements and memorandums of cooperation with foreign universities, international organizations, firms, centers, academies of sciences from 20 countries of the world. During the reporting period, 49 cooperation agreements were concluded.

The implementation of academic mobility of the EO continues its progressive development within the framework of the priority tasks of international cooperation for further integration of the university into the world educational space. The University participates in Erasmus+ and other international grant projects, however, students studying at EP 8D07104 Oil and Gas and Ore Geophysics currently do not have successful practices of foreign academic mobility.

After graduation, doctoral students are given the opportunity to find employment at work or at the university. The University has a Career and Business Partnership department, which deals with the organization of professional (research practice) of students and the promotion of employment of University graduates.

The EO provides graduates after defending their dissertation with a diploma and a transcript application confirming their qualifications.

The implementation of feedback with graduates of different years takes place through the Satbayev University website <https://satbayev.university.ru> in the category "Alumni" and social networks. The Association of Graduates of KazGMI-KazPTI-KazNTU named after K.I. Satbayev also functions in the NGO to strengthen business ties with companies and organizations in which graduates of the university successfully work.

The results of the survey of students conducted during the visit of KazNRTU showed that 41 students took part in the general survey, of which only 4 people from the educational program 8D07104 Oil and gas and ore Geophysics, which does not exceed 10% of their total number. The responses of the students were distributed as follows:

- "Fully satisfied" – 82.9%, "Partially satisfied" – 17.1%, "Partially dissatisfied" - 0%, "Not satisfied" – 0%, "Not satisfied" - 0%, "I find it difficult to answer" - 0%.

- Responsiveness to feedback from teachers regarding the educational process "Fully satisfied" – 80.5%, "Partially satisfied" – 14.6%, "Partially dissatisfied" – 4.9%, "Not satisfied" - 0%.

***Analytical part***

The policy of forming a contingent in the NGO is regulated and reflected in the Academic Policy of KazNRTU. The principles of creating an educational environment for doctoral students to achieve the required professional level are presented. The methods of feedback and informing students, aspects of the cultural and social life of students satisfy students. The university conducts an assessment of communication with employers. The NGO hosts cultural and social events, sports and recreation activities, etc. At the same time, the EEC found that the transparency and publication of the policy of forming a contingent of students in the context of the EP "8D07104 Oil and Gas and ore Geophysics", with the regulation of the life cycle of students on the university's website is not published on the university's website, which reduces the level of its transparency.

The work of the EEC commission has established that within the framework of the accredited educational institution, the university has not yet implemented an external mobility program for students, although contracts have been concluded with a large number of foreign educational institutions. It is noted that NPCs from other universities are invited to teach.

There is no section on the university's website that allows students to get open access to information about the mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and informal education. It also remains unclear the mechanism of how students will be selected for academic mobility programs in foreign educational institutions.

The interviewing of doctoral students revealed that a significant part of them already have a workplace at enterprises and came to training in the EP with practical experience to improve their qualifications. At the same time, interviews with students showed that they face the problem of a shortage of places to stay in dormitories. The problem may worsen due to the plans of the NGO to expand the contingent of students in the next years.

The analysis of the meeting with the management of the EO confirmed that the university has developed a mechanism for recognizing the learning outcomes mastered during academic mobility programs at other universities in accordance with the Regulations on Academic Mobility (in the appendix). However, it was not possible to verify this statement, since those students who came to the interview did not participate in academic mobility programs.

Analysis of the available information in the process of accreditation for the EP "8D07104 Oil and Gas and ore Geophysics" showed a sufficient amount of material and technical base for the preparation of future doctoral students, however, when interviewing students, only 61% of respondents replied that they were completely satisfied with the available computer classes.

***Strengths/Best practices***

*Not identified*

***Recommendations of the EEC on EP "8D07104 Oil and gas and ore geophysics":***

The management of the NGO is recommended to ensure transparency and publication of the policy for the formation of the contingent of students in the context of EP 8D07104 Oil and Gas and Ore Geophysics, with the regulation of the life cycle of students on the website of the University and the Department of Geophysics until the end of 2022.

➤ It is recommended to increase the number of missing places to stay in a dormitory (in the House of Young Scientists). This issue becomes especially relevant in the context of the strategic plans of the university to increase the number of students (for 5 years).

➤ To develop an academic mobility program within the framework of EP 8D07104 Oil and Gas and Ore Geophysics with foreign partners. At the same time, it is recommended to involve students in the EP in its development and implementation (until the end of 2024).

***The conclusions of the EEC according to the criteria: (strong/ satisfactory/ suggest***

*improvements/ unsatisfactory)*

***According to the "Students" standard, the accredited educational program EP 8D07104 Oil and Gas and ore Geophysics has 9 satisfactory and 3, suggesting an improvement in positions.***

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

- *The EO should have an objective and transparent personnel policy, including in the context of the EP, including hiring, professional growth and development of personnel, ensuring the professional competence of the entire staff.*
- *The EO must demonstrate the compliance of the personnel potential of the teaching staff with the development strategy of the EO and the specifics of the EP.*
- *The management of the EP must demonstrate awareness of responsibility for its employees and ensure 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 EO should determine the contribution of the teaching staff of the EP to the implementation of the development strategy of the EO, and other strategic documents.*
- *The EO should provide opportunities for career growth and professional development of the teaching staff of the EP.*
- *The management of the EP should demonstrate readiness to involve practitioners of relevant industries in teaching.*
- *The EO should demonstrate motivation for the professional and personal development of the teachers of the educational institution, 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.*

#### ***The evidentiary part***

The personnel policy of the University (KP 029-06-02.03.01.-2021) is transparent and posted on the official website of SU in open access (<https://cutt.ly/7Gzhynj>). Management decisions on admission, transfer, promotion of PSS are made on the basis of Pr.029-06-01-3.02-2020 Rules for competitive replacement of vacant positions of teaching staff of the NAO "KazNRTU named after K.I. Satbayev" and P029-06-03.3.01-2021 Rules of certification of the teaching staff of KazNTU named after K.I. Satbayev. The specifics of career planning and professional growth at the university depend on the official status, education profile, work experience, personal qualities and abilities. The career of a teacher includes a fairly large number of stages: assistant, tutor, lecturer, signor-lecturer, assistant professor, associate professor, professor.

At the same time, according to the results of the survey of teaching staff conducted within the framework of the activities of the EEC IAAR, the NGO provides an opportunity for teachers to continuously develop their potential at "Very good" (33.8%), "Good" (57.7%), "Relatively bad" (4.2%), "Bad" (1.4%) and Very bad (2.8%).m

The staff of teachers who ensure the implementation of EP 8D07401 – "Oil and gas and ore geophysics" is formed from highly qualified and competent employees who have a fairly extensive experience in scientific, pedagogical and practical activities in accordance with the labor legislation of the Republic of Kazakhstan and the Rules of competitive replacement of positions of scientific and pedagogical personnel of higher educational institutions.

3 teachers teach classes at the Department of Geophysics in the field of training 8D07401. All of them are doctors of geological and mineralogical sciences: Abetov A.E. – Doctor of Geological and mineralogical Sciences; Isaeva L.D. – Doctor of Geological and mineralogical

Sciences; Iskhova S.A. – Doctor of geological and mineralogical sciences. According to this criterion, the settlement of the teaching staff is 100%. During 2020 – 2021, the faculty of the department published 26 articles in foreign publications indexed in Tomson Reuters, Scisearch, Springer databases. Each of these teaching staff has completed the appropriate refresher courses in 2020.

The total quantitative composition of the Department of "Geophysics", where training is conducted on accredited EP (Table 2).

Responsibility for employees and providing them with favorable working conditions in the NGO is carried out in accordance with the approved "State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020 - 2025 (Resolution of the Government of the Republic of Kazakhstan No. 726 dated 12.10. 2021). A new career development system has been introduced in the NGO, which involves an increase in wages up to 50% of the official salary (teacher, teacher moderator, teacher expert, teacher researcher, teacher master). Teaching staff teaching in English have an additional payment of 20% of the basic salary.

Table 2 – Indicators of staffing of the faculty of the department

Academic year	General teaching staff (total)	Full-time teaching staff	Of the main (full-time faculty) staff have:					Academic degree of Master of Science	% of settlement	% of full-time teachers
			Academic degree			Academic title				
			Doctors of Sciences	Candidate of Sciences	PhD	Professor	Assistant Professor			
2020-2021	17	16	3	1	3	3	4	8	47	94

The management of the NGO demonstrates the intentions of moving to a student-centered approach. Various surveys of teaching staff by professional organizations of departments are conducted. Based on the statements and complaints of the teaching staff, implemented through a direct appeal to the Rector of KAZNIT on the educational portal and by an official statement in accordance with the established procedure, considered according to [ДП КазННТУ 714. Questionnaire survey. Assessment of customer satisfaction](#) , [ДП КазННТУ 721. Consideration of appeals of citizens and legal entities](#) . At the same time, interviews with doctoral students and an analysis of the curriculum of the EP show insufficient availability of elective disciplines. If there are 11 elective disciplines, it is necessary to choose 9 (81%). At the same time, disciplines chosen by other EP are not available.

In order to determine the contribution of the staff of the EP to the implementation of the development strategy of the EO at least once a quarter, each manager discusses with his subordinates the results of his activities. For each position, a number of mandatory skills and qualities should be established (usually about 15 types – for example, the ability to work in a team, knowledge of project management, etc.). Also, each employee sets a list of current goals for the year, which are developed during the preparation of the annual plan based on the strategic goals of the University, reflected in strategic documents.

The EO provides opportunities for career growth of teaching staff through the development of professional and pedagogical competencies (participation in seminars, trainings, advanced training), which are confirmed by certificates and a positive assessment when students are surveyed. To provide the teaching staff with qualification requirements, the level and specifics of the EP, the institute conducts advanced training courses, the topics of which correspond to the direction of the EP.

The management of the EP demonstrates the willingness to involve geophysicists in teaching. Thus, Sirazhev A.N. - CEO of Seis.A company, Dzhukebaev M.Y. – Chief geophysicist of Nomad Geoservices company, Bermukhanova A.S. – leading specialist of NCT Geoken company are involved in the educational process.

The EO demonstrates the motivation of professional and personal development of teaching staff through bonuses. The university has developed [Regulations on remuneration of employees and students at the NAO KazNITU named after K.I.Satpayev for publications in rating \(peer-reviewed\) scientific journals](#) indexed by scientometric databases Scopus and Web of Science. Also, internal regulatory documents have been introduced to motivate and stimulate teachers to be active in teaching staff, including the "Temporary Regulation on differentiated remuneration of teaching staff of K.I.Satbayev KazNRTU P 029-002.08.3.06".

The process of implementing academic mobility of teaching staff in the EO is carried out in accordance with the internal Documented Regulation "Academic Mobility" of the KazNRTU DP 718. In the 2019-2020 academic year, 21 professors from the UK, USA, Belgium, Germany, India, Czech Republic, Germany, Poland, etc., who lectured students of KazNRTU named after K.I. Satbayev, were invited. However, no facts of teaching by foreign lecturers were revealed at EP 8D07104 Oil and Gas and Ore Geophysics.

According to the results of the survey of teaching staff organized by the EEC IAAR, teachers assess the support of the university and its leadership in the research initiatives of teaching staff at "very good" - 39.4%; "good" – 50.7%; "relatively bad" – 7%; "bad" – 1.4%; "very bad" - 1.4%.

The state of the moral and psychological climate at the department is characterized by stability, a creative attitude to the performance of their duties. Labor and performance discipline at the proper level. University teachers take an active part in the public life of the city and the Republic.

The survey of the teaching staff conducted during the visit of the EEC IAAR showed that:

- Teaching staff satisfies the content of the educational program by "very good" - 40.8%, "good" – 54.9%; "relatively bad" – 2.8%; "bad" – 1.4%;
- the feedback level of the PPP with the management satisfies at "very good" - 40.8%, "good" – 50.7%; "relatively bad" – 5.6%; "bad" – 1.4%; "very bad" – 1.4%.
- Teachers can use their own innovations in the learning process at "very good" - 53.5%, "good" – 40.8%; "relatively bad" – 4.2%; "bad" - 1.4%;
- How is the work on academic mobility set to "very good" - 25.4%, "good" – 57.7%; "relatively bad" – 14.1%; "bad" – 2.8 %;
- How is the work on improving the qualifications of teaching staff set to "very good" - 25.4%, "good" – 52.1%; "relatively bad" – 19.7%; "bad" – 1.4%; "very bad" - 1.4 %;
- The involvement of teaching staff in the process of making managerial and strategic decisions is "very good" - 28.2%, "good" – 59.2%; "relatively bad" – 11.3%; "bad" – 1.4%.

### ***Analytical part***

In general, the teaching staff of the special and profile disciplines of the EP fully meets the qualification requirements. At the same time, the university's website does not provide enough information about teaching staff (scientific directions, publication of articles, disciplines taught, etc.).

During the work of the EEC commission, it was revealed that not enough attention is paid to the student-centered approach at the EP. This is confirmed by interviews with doctoral students and an analysis of the curriculum of the EP. Currently, there is insufficient availability of elective disciplines, while students cannot choose educational components from other EP. In the curriculum for the 2021-2022 academic year, there are 11 elective subjects available, of which 9 (81%) must be selected. This significantly reduces the ability of students to choose their own educational trajectory.

The analysis of the SO report and the interview with the NPS confirms that the management

of the EP demonstrates the willingness to involve geophysicists who work at the leading enterprises of the country in teaching.

The high level of publication activity of teachers in the context of the disciplines taught has been established. It also confirms the high activity of teaching staff when publishing articles in journals with a high citation index. The Department of Geophysics confirms the high level of participation of teaching staff in scientific work.

Having held meetings, conversations and interviews with vice-rectors, deans, heads of departments, heads and employees of structural divisions, students, faculty, representatives of employers' organizations and graduates, as well as conducting questionnaires of students and teaching staff, detailed familiarization of experts with the educational infrastructure of the university, material, technical and informational-methodological resources, as well as the necessary documents, notes the following:

***Strengths/Best practices***

The strength of EP 8D07104 Oil and Gas and ore Geophysics" is the exemplary compliance of the personnel potential of the teaching staff with the specifics of the educational program. All disciplines are taught by 100% settled teaching staff. The teaching staff also demonstrates a large number of publications in foreign publications indexed in Thomson Reuters, Scopus, Springer databases (26 articles for 2020-2021). Each of the teaching staff at the EP passed the appropriate refresher courses in 2020.

***EEC Recommendations on EP 8D07104 Oil and gas and Ore Geophysics:***

- To create conditions for obtaining the opportunity of academic mobility of teaching staff of accredited EP (until the end of 2023).
- Take into account the wishes of teaching staff when developing plans to improve their skills (constantly);
- Increase the involvement of teaching staff in the management decision-making process (until the end of 2023);
- To increase the number of elective subjects in the EP to at least 50%, which will demonstrate commitment to student-centered learning in the EP (before the beginning of the next academic year).
- To confirm the change in the role of the teacher in connection with the transition to a student-centered approach of teaching by developing syllabuses for all elective disciplines and placing them in open access on the website of the Department of Geophysics (before the beginning of the next academic year).

***The conclusions of the EEC according to the criteria: (strong/ satisfactory/ suggest improvements/ unsatisfactory)***

***According to the "Teaching Staff" standard, the accredited educational program EP 8D07104 Oil and Gas and Ore Geophysics has 1 strong, 7 satisfactory and 1 suggesting improvement positions.***

**6.8. Standard "Educational resources and student support systems"**

- *The EO should guarantee a sufficient number of educational resources and student support services that meet the goals of the EP.*
- *The EO 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 educational institutions (adults, working, foreign students, as well as students with disabilities).*
- *The management of the EP should demonstrate the existence of support procedures for various groups of students, including information and counseling. The management of the EP*

*must demonstrate compliance of information resources with the specifics of the EP, including:*

- *technological support for students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs);*
- *library resources, including the fund of educational, methodological and scientific literature on general education, basic and profile disciplines on paper and electronic media, periodicals, access to scientific databases;*
- *examination of research results, graduation papers, dissertations for plagiarism;*
- *access to educational Internet resources;*
- *functioning of WI-FI on the territory of the educational organization.*
- *The EO should strive to ensure that the educational equipment and software intended for use in the development of educational programs are similar to those used in the relevant industries.*

### ***The evidentiary part***

The EO has good material and technical, information and library resources and cloud platforms used to organize the process of teaching and educating students and to implement the mission, goals and objectives of the university.

The material and technical base of the university (academic buildings, catering and healthcare facilities, dormitories, sports facilities, library book collection, etc.) is sufficient for the preparation of doctoral students in v 8D07104 Oil and gas and ore Geophysics. At the same time, the EO regularly monitors and evaluates the quality of material, technical and information resources on the basis of: analysis of the adequacy of library resources.

An Educational portal is used at the university to provide support for various groups of students studying at the EP <http://portal.kazntu.kz>, <http://.kazntu.kz/portal> and the e-learning portal <http://portal.kazntu.kz/moodle> Universities that serve as links between all participants of the educational process. The university has developed a system of allowances for scholarships for orphans, hearing and vision disabilities, as well as discounts for tuition on a fee basis.

When training specialists in the accredited EP 8D07104 Oil and gas and ore geophysics, the base of the Mining and Metallurgical Institute named after O.A. Baikonurov is used. In the educational process, laboratories and classrooms of the Department of Geophysics are used to read disciplines. All computers connected to the university's educational network have access to the Internet. Students living in dormitories are provided with Internet access and free Wi-Fi. The presence of computer classes with access to the Internet makes it possible to teach doctoral students modern software products.

The main information and communication tool in the educational process for on-line training is the cloud services of the Microsoft Office 365 package for educational institutions. The university operates the Satbayev University Information Platform, which combines the educational portal [so.satbayev.university](http://so.satbayev.university), applications Office.com, and [polytechonline.kz](http://polytechonline.kz). These platforms offer students, undergraduates, doctoral students and faculty a single entry point to the Educational Portal under corporate accounts.

The total fund of the library as of 01.01.2021 is 1717,115 copies, including 364,368 copies in the state language. At the service of readers 508 150 copies . textbooks on general education subjects, including in the state language – 158 552 copies. The fund has 1,190114 copies . textbooks on basic and specialized disciplines, in Kazakh – 372,432 copies. The library has 687461 copies of scientific literature, in Kazakh - 46064 copies. The composition of the fund is reflected in tables 8.2.1 and 8.2.2.

To conduct exams and assess knowledge, teachers have the opportunity to use the service "Emtihunter" developed by employees of the Department of Information Systems <https://emtihunter.satbayev.university> .

When preparing doctoral students for the EP, the level of computer and multimedia technology is sufficient. The training uses modern specialized software: Autodesk, CHEMCAD,

Schlumberger, KAPPA Engineering, Microsoft M365.

The presence of plagiarism in the academic text of articles and dissertations, research results presented by teaching staff in monographs, is assessed by checking them according to the system "StrikePlagiarism.com" (website for checking documents for plagiarism <http://sandyk.kazntu.kz/index.php>).

The survey of students conducted during the visit of the EEC IAAR to KazNRTU showed that full satisfaction:

- the level of availability of library resources is – 82.9 %;
- the quality of services provided in libraries and reading rooms – 82.9 %;
- existing educational resources of the university – 75.6 %;
- available computer classes – 61 %;
- availability and quality of Internet resources – 68.3 %;
- The usefulness of the website of educational organizations in general and faculties in particular – 85.4 %;
- Rest rooms for students – 46.3%.

### ***Analytical part***

Familiarization by the members of the EEC with the objects of the material base by means of online connection and videos presented to the experts, it should be noted that to ensure the educational process of the accredited EP, the university has a sufficient number of educational and material assets. The EEC also notes the availability of the necessary amount of specialized literature in electronic format. At the same time, there is no long-term plan to equip specialized laboratories of the Department of Geophysics with additional modern equipment and software that are actually used at oil and gas and ore exploration enterprises.

The Commission notes the availability of specialized software and laboratory equipment for EP, which meets the criterion: "software tools for the development of EP should be similar to those used in the relevant industries." When conducting exams and assessing knowledge, teaching staff use the service "Emtihunter" developed by employees of the Department of Information Systems <https://emtihunter.satbayev.university>.

As a result of the analysis of the activities of accredited EP according to this standard, it can be concluded that an assessment of the completeness and availability of material, technical and information resources of these EP has been carried out. However, the survey of students made it possible to establish that they do not have enough "rest rooms for students" in the EO, since during a secret survey more than 53% of students stated that there was a real need for them.

When carrying out educational activities, the university is guided by regulatory documents regulating mandatory regulatory requirements for the material, technical, educational and laboratory facilities of educational organizations. There is a fairly good level of information support for educational and scientific-educational activities with access to full-text electronic resources of educational and scientific significance, which satisfies the needs of students and teaching staff.

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

*No strengths and best practices have been identified for this Standard.*

### ***EEC Recommendations for EP 8D07104 Oil and Gas and Ore Geophysics:***

➤ The management of the University and the EP to develop a long-term plan for staffing specialized laboratories of the Department of Geophysics with additional modern equipment and software that is actually used at oil and gas and ore exploration enterprises (until the end of 2022).

➤ The management of the EO is recommended to create rest rooms for students in the university buildings, since during a secret survey more than 53% of students stated that there is a



real need for them (before the beginning of the next academic year).

*The conclusions of the EEC according to the criteria: (strong/ satisfactory/ suggest improvements/ unsatisfactory)*

*According to the standard "Educational Resources and Student Support Systems", the accredited educational program EP 8D07104 Oil and Gas and Ore Geophysics has 9 satisfactory positions.*

#### 6.9. The standard "Informing the public"

- *The EO should publish reliable, objective, up-to-date information about the educational program and its specifics, which should include:*
  - *expected learning outcomes of the implemented educational program;*
  - *qualifications and (or) qualifications that will be awarded upon completion of the educational program;*
  - *teaching and learning approaches, as well as the system (procedures, methods and forms) of assessment;*
  - *information about passing scores and educational opportunities provided to students;*
  - *information about graduate employment opportunities.*
- *The management of the EP should provide for a variety of ways to disseminate information, including mass media, information networks to inform the general public and interested persons.*
  - *Public awareness should include support and explanation of the national development programs of the country and the system of higher and postgraduate education.*
  - *The EO must demonstrate the reflection on the web resource of information that characterizes it in general and in the context of educational programs.*
  - *An important factor is the availability of adequate and objective information about the PPP of the EP.*
  - *An important factor is informing the public about cooperation and interaction with partners within the framework of the EP.*

#### ***The evidentiary part***

The EO publishes information about its activities on the pages "About the University" and in «[The main provisions](#)». On the page «[Guarantees of the quality of training](#)» the priority directions of the university's activities are outlined, as well as its achievements in providing students with quality education and scientific work.

Each EP at the university has a clear description containing a description of employment opportunities after graduation, as well as learning conditions. When the content of educational programs changes, the description changes.

The details of the EP (passports of educational programs) are published on the website (official.satbayev.university) in the section "Documents: Educational programs" in three languages, compiled in accordance with the requirements [documents on the management of business processes and the educational process of the university](#). Passports also reflect learning outcomes.

The university has developed feedback with students through the feedback service via «[Rector's blog](#)» on the university's website.

In their personal offices, doctoral students can get acquainted with the results of the current, intermediate and final control. At the end of academic periods, the student receives complete information about the progress in the studied disciplines (transcript).

The NGO has a center that constantly works to inform applicants and students about employment opportunities after graduation in social networks and on the website. Since the beginning of 2020, there is an updated section on the site [Alumni](#), most of which is devoted to the career path of graduates.

A variety of information channels, including electronic media and 9 social networks, are functioning to ensure that the public is informed about the activities of the OO. The dissemination of information is carried out by the Marketing and Communication Department on the basis of internal standards of the university.

The formation of a positive attitude of the public is realized through: the University Museum, traditional events both inside the university and in the external environment (Open Day, Student Community Fair, Job Fair), published every two months [student magazine UNIQUUM](#).

The NGO has an integrated system of information support for students and teachers based on a Web site for all educational programs. Except for the website [satbayev.university](#), this system includes a Distance Learning Portal [Polytech Online](#). At the same time, the university's website provides insufficient information for those wishing to enroll in EP 8D07104 Oil and Gas and Ore Geophysics. The main problem is that on the website of the Department of Geophysics there is no link to the EP file, curriculum for the program and syllabuses of all elective disciplines.

The website of the Department of Geophysics provides adequate information regarding the teaching staff. Their profiles are posted on the pages of the institutes on the website <https://official.satbayev.university/> in the "Institutes" section. Profiles of the best teachers are available on the pages of the institutes on the website <https://satbayev.university/> in the "Institutes" section.

The EO informs the public about cooperation with partners within the framework of the EP in the section «[Новости](#)». It contains up-to-date information about the university's activities, including in the context of educational programs and student training.

According to the results of the survey of students, full satisfaction with the information about courses, educational programs and the academic degree received is 75.6%.

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

The EEC notes that in the field of information dissemination policy, KazNTU demonstrates a policy of transparency, moderate openness, involvement of applicants, employers, participants in the educational process and all interested persons in informing the public, constant development and adaptability to the changing realities of society. There is a CSO in the NGO, which is engaged in informing applicants and students about employment opportunities after graduation on social networks and on the website.

Assessment of satisfaction with information about the activities of the NGO, the specifics and progress of the implementation of the EP is carried out regularly by means of questionnaires and surveys of interested persons.

Basic information about the Department of Geophysics and the main directions of its activities are available at the link (<https://official.satbayev.university/ru/geology-oil-gas-business/gph>). However, the EEC notes that the information on the EP is presented in a limited form. There is no information about the disciplines taught by teaching staff, the curriculum for the program and syllabuses of all elective disciplines. Also on the website of the department and the university, insufficient attention is paid to informing the public about the implementation of the EP "8D07104 Oil and Gas and ore Geophysics".

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

*Not identified*

#### ***EEC Recommendations for EP 8D07104 Oil and Gas and Ore Geophysics:***

Update the information on the Geophysics website regarding the current state of affairs. To correct the information regarding the current EP, for which students are currently being trained (until the end of the academic year).

The EP management should post links to the EP file, curriculum for the program and

syllabuses of all elective disciplines on the website of the Department of Geophysics. This will allow us to characterize in general EP 8D07104 Oil and gas and ore Geophysics and answer additional questions for those wishing to enroll in doctoral studies (before the beginning of the next academic year).

To ensure that the public is informed about the progress of the implementation of the EP on the university's website (before the beginning of the next academic year).

*The conclusions of the EEC according to the criteria: (strong/ satisfactory/ suggest improvements/ unsatisfactory)*

*According to the "Informing the Public" standard, the accredited educational program 8D07104 Oil and Gas and Ore Geophysics has 9 satisfactory and 1 requiring improvement positions.*



## **(VI) OVERVIEW OF STRENGTHS/BEST PRACTICES FOR EACH STANDARD**

### **According to the standard "Educational program Management":**

- The University provides an annual improvement in the quality of the management of the EP, which, in turn, allows you to master modern methods of distance education, conducting exams in online format, issues of preventing plagiarism.

### **According to the Standard "Information Management and reporting"**

- Within the framework of this Standard, no strengths have been identified.

### **According to the Standard "Development and approval of the educational program":**

- The management of the EP fully ensures compliance with the unique in Kazakhstan EP "8D07104 Oil and gas and ore Geophysics" with the established training goals, including the expected results of training, in accordance with the Professional Standard: "Geological and geophysical work on oil and gas exploration" (Version 1, 2019).

- The management of the EP demonstrated the functioning of the mechanism for reviewing the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social request of society. The recommendations received from employers made it possible to develop and approve at the meetings of the Department of Geophysics, the Academic Council of the IGnOGB and the UMC KazNRTU named after K.I.Satbayev two disciplines that were included in the EP of doctoral studies in the field of preparation 8D07104 Oil and gas and ore Geophysics.

- The management of the EP provides external expertise of the educational program and the planned results of its implementation, by attracting candidates or doctors of geological sciences, PhD in the direction, as well as the organization of the relevant profile.

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

- Within the framework of this Standard, no strengths have been identified.

### **According to the standard "Student-centered learning, teaching and assessment of academic performance":**

- Within the framework of this Standard, no strengths have been identified.

### **According To the "Students" Standard:**

- Within the framework of this Standard, no strengths have been identified.

### **According to the Standard "Teaching staff":**

The strength of EP 8D07104 Oil and gas and ore geophysics is the exemplary compliance of the personnel potential of the teaching staff with the specifics of the educational program. All disciplines are taught by 100% settled teaching staff. The teaching staff also demonstrates a large number of publications in foreign publications indexed in Thomson Reuters, Scopus, Springer databases (26 articles for 2020-2021). Each of the teaching staff at the EP passed the appropriate refresher courses in 2020.

### **According to the Standard "Educational resources and student support systems":**

- Within the framework of this Standard, no strengths have been identified

### **According to the Standard "Informing the public" :**

- Within the framework of this Standard, no strengths have been identified.

## **(VII) OVERVIEW RECOMMENDATIONS FOR QUALITY IMPROVEMENT FOR EACH STANDARD**

### **Standard "Educational Program Management"**

University management:

- Comprehensively involve employers, students and teaching staff in drawing up a development plan for the EP when it is updated (for 5 years).
- To publish a mechanism for monitoring the implementation of the development plan of the educational institution and evaluating the achievement of learning goals and regular revision of the development plan of the educational institution in connection with possible changes in regulatory legal acts in the higher education system. The monitoring results should be communicated to all interested parties (by the end of 2022).
- The management of the EP should specify by the end of the academic year measures to reduce the impact of risks in the design and implementation of the EP, specifying measurable performance indicators, responsible persons and deadlines for implementation. It is especially necessary to pay attention to the risks associated with the presence of a large number of doctoral students on the EP and the possibility of their successful writing and defending dissertations. Systematically analyze risk management at the level of the educational program.
- Develop a methodology for analysis and identify mechanisms to ensure the implementation of innovative proposals within the framework of the development of the EP (by the end of 2023).

### **Information Management and Reporting Standard**

To ensure transparency of information on the management of the system for collecting key performance indicators in the context of EP and availability until the end of the academic year (for example, on the university's website).

To provide access to the evaluation of the effectiveness and efficiency of the university departments to ensure that doctoral students carry out scientific research (until the end of 2022).

By the end of the academic year, to develop an effective mechanism that will take into account the degree of satisfaction of students with the implementation of the EP.

### **Standard "Development and approval of basic educational programs"**

- Update the methodological instructions for the development of educational programs by the beginning of the 2022-2023 academic year, including requirements for the organization and conduct of an external examination of the content of the EP, taking into account:
  - compliance with the EP structure;
  - relevance of thematic content;
  - compliance of expected learning outcomes with market requirements;
  - availability of competence-critical assessment of learning outcomes.
- Develop syllabuses for all elective disciplines and post them on the website of the Department of Geophysics (until the end of 2022).
- When developing the EP and ensuring its quality, it is mandatory to involve students, teaching staff and other interested persons (for 5 years).
- Provide for the possibility of professional certification of students during the implementation of the EP with the assistance of employers (for example: labor protection; metrologist, standardization and certification specialist).

### **The standard "Continuous monitoring and periodic evaluation of basic educational programs"**

- Implement a mechanism for timely informing all interested parties about any planned or taken actions regarding the EP, using the official page of the Department of Geophysics on the university's website until the end of the academic year.
- Provide free access to inform the public about all changes made to the EP directly on

the website of the University and the Department of "Geophysics" until the end of the academic year.

**Standard "Student-centered learning, teaching and assessment of academic performance"**

➤ The management of the EP should improve the mechanism for responding to complaints and familiarize all students with it and fix it in the appropriate position. Post a notice on the website of the department (university) regarding the behavior of students in case of conflict situations before the end of 2022.

***The standard "Students"***

➤ The management of the EO is recommended to ensure transparency and publication of the policy for the formation of the contingent of students in the context of EP 8D07104 Oil and Gas and Ore Geophysics with the regulation of the life cycle of students on the website of the University and the Department of Geophysics until the end of 2022.

➤ It is recommended to increase the number of missing places to stay in a dormitory (in the House of Young Scientists). This issue becomes especially relevant in the context of the strategic plans of the university to increase the number of students (for 5 years).

➤ To develop an academic mobility program within the framework of EP 8D07104 Oil and Gas and Ore Geophysics with foreign partners. At the same time, it is recommended to involve students in the EP in its development and implementation (until the end of 2024).

***Standard "Teaching staff"***

➤ To create conditions for obtaining the opportunity of academic mobility of teaching staff of accredited EP (until the end of 2023).

➤ Take into account the wishes of teaching staff when developing plans to improve their skills (constantly);

➤ Increase the involvement of teaching staff in the management decision-making process (until the end of 2023);

➤ To increase the number of elective subjects in the EP to at least 50%, which will demonstrate commitment to student-centered learning in the EP (before the beginning of the next academic year).

➤ To confirm the change in the role of the teacher in connection with the transition to a student-centered approach of teaching by developing syllabuses for all elective disciplines and placing them in open access on the website of the Department of Geophysics (before the beginning of the next academic year).

***Standard "Educational resources and student support systems"***

➤ The management of the University and the EP should develop a long-term plan for staffing the specialized laboratories of the Department of Geophysics with additional modern equipment and software that are actually used at oil and gas and ore exploration enterprises (until the end of 2022).

➤ The management of the EO is recommended to create rest rooms for students in the university buildings, since during a secret survey more than 53% of students stated that there is a real need for them (before the beginning of the next academic year).

***The standard "Informing the public"***

➤ Update the information on the Geophysics website regarding the current state of affairs. To correct the information regarding the current EP, for which students are currently being trained (until the end of the academic year).

➤ The EP management should post links to the EP file, curriculum for the program and syllabuses of all elective disciplines on the website of the Geophysics Department. This will

allow us to characterize in general EP 8D07104 Oil and gas and ore Geophysics and answer additional questions for those wishing to enroll in doctoral studies (before the beginning of the next academic year).

➤ To ensure that the public is informed about the progress of the implementation of the EP on the university's website (before the beginning of the next academic year).

**(VIII) OVERVIEW RECOMMENDATIONS FOR THE DEVELOPMENT OF THE ORGANIZATION OF EDUCATION**

*Not available*

**(IX) RECOMMENDATION TO THE ACCREDITATION COUNCIL**

The external Expert Commission made a unanimous decision to recommend to the Accreditation Council to accredit the educational program EP 8D07104 Oil and Gas and Ore Geophysics of the Non-profit Joint-Stock Company "Kazakh National Research Technological University named after K.I. Satbayev" for a period of 5 (five) years.



**Application 1. Evaluation table "SPECIALIZED PROFILE PARAMETERS" (EX-ANTE)**

**Conclusion of the external expert commission on the assessment of the quality of the educational program 8D07104 Oil and gas and ore Geophysics  
Non-profit Joint-stock Company "Kazakh National Research Technological University named after K.I. Satbayev"**

№ п/п	№ п/п	Evaluation criteria	The position of the organization of education			
			Strong	Satisfactory	Suggests improvement	Unsatisfactory
<b>Standard 1 "Educational Program Management"</b>						
1	1.	The organization of higher and (or) postgraduate education should have a published quality assurance policy that reflects the relationship between scientific research, teaching and learning		+		
2	2.	The organization of higher and (or) postgraduate education should 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 management of the EP demonstrates transparency in the development of the EP development plan containing the start dates of implementation, based on an analysis of its functioning, the real positioning of the EO and the orientation of its activities to meet the needs of the state, employers, students and other interested parties		+		
5	5.	The management of the EP demonstrates the existence of mechanisms for the formation and regular revision of the development plan of the EP and monitoring its implementation, assessing the achievement of training goals, meeting the needs of students, employers and society, making decisions aimed at continuous improvement of the EP		+		
6	6.	The management of the EP should involve representatives of groups of interested persons, including employers, students and teaching staff in the formation of the development plan of the EP		+		
7	7.	The management of the EP must demonstrate the individuality and uniqueness of the development plan of the EP, 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 framework of the EP, an unambiguous distribution of staff		+		



		responsibilities, and the differentiation of functions of collegial bodies				
9	9.	The management of the educational institution 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 of the EP, including its design, management and monitoring, their improvement, and fact-based decision-making		+		
11	11.	The management of the EP should carry out risk management, including within the framework of the EP undergoing primary accreditation, as well as demonstrate a system of measures aimed at reducing the degree of risk			+	
12	12.	The management of the educational institution should ensure the participation of representatives of employers, teaching staff, students and other interested persons in the collegial management bodies of the educational program, as well as their representativeness in making decisions on the management of the educational program		+		
13	13.	The EO should demonstrate innovation management within the framework of 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 persons		+		
15	15.	The management of the EP should be trained in educational management programs	+			
<b>Total according to the standard</b>			1	13	1	0
<b>Standard 2 "Information management and reporting"</b>						
16	1.	The EO should 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 for collecting and analyzing information in the context of the EP		+		
17	2.	The management of the EP should 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 should demonstrate fact-based decision-making		+		
19	4.	A system of regular reporting reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of the activities of departments and departments, scientific research, should be provided within the framework of the EP		+		
20	5.	The EO should establish the frequency, forms and methods of assessing the management of the EP, the activities of collegial bodies and structural units, senior management, and the implementation of scientific projects		+		
21	6.	The EO must demonstrate the definition of the procedure and ensuring the protection of information, including the identification of responsible persons 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 should demonstrate the existence of a mechanism for communication with students, employees and other stakeholders, as well as conflict resolution mechanisms.		+		

24	9.	The EO should 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 EO should provide for an assessment of the effectiveness and efficiency of activities, including in the context of the EP		+		
		<i>The information intended for collection and analysis within the framework of the EP should take into account:</i>				
26	11.	key performance indicators		+		
27	12.	dynamics of the contingent of students in the context of forms and types		+		
28	13.	academic performance, student achievements and expulsion		+		
29	14.	satisfaction of students with the implementation of the EP and the quality of education at the university		+		
30	15.	availability of educational resources and support systems for students		+		
31	16.	The EO must confirm the implementation of procedures for processing personal data of students, employees and teaching staff on the basis of their documentary consent		+		
<b>Total according to the standard</b>			0	16	0	0
<b>Standard 3 "Development and approval of the educational program"</b>						
32	1.	The EO should define and document the procedures for the development of the EP and their approval at the institutional level		+		
33	2.	The management of the EP should ensure that the content of the EP meets the established goals, including the expected learning outcomes	+			
34	3.	The management of the EP should 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 request of society	+			
35	4.	The management of the EP should ensure the availability of developed models of the graduate of the EP, describing the learning outcomes and personal qualities		+		
36	5.	The management of the EP must demonstrate the conduct of external examinations of the content of the EP and the planned results of its implementation	+			
37	6.	The qualification assigned upon completion of the EP must be clearly defined and correspond to a certain level of the NSC and QF-EHEA		+		
38	7.	The management of the EP should determine the influence of disciplines and professional practices on the formation of learning outcomes		+		
30	8.	An important factor is the possibility of training 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 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 of the content of the EP and the results of the training of the EP, implemented by organizations of higher and (or) postgraduate education in the EHEA		+		
<b>Total according to the standard</b>			3	8	1	0
<b>Standard 4 "Continuous monitoring and periodic evaluation of educational programs"</b>						

44	1.	The EO should define mechanisms for monitoring and periodic evaluation of the EP to ensure the achievement of the goal and meet the needs of students, society and show the orientation of the mechanisms for 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.	changes in the needs of society and the professional environment		+		
47	4.	workload, academic performance and graduation of students		+		
48	5.	effectiveness of student assessment procedures		+		
49	6.	expectations, needs and satisfaction of students with training in EP		+		
50	7.	educational environment and support services, and their compliance with the goals of the EP		+		
51	8.	The management of the EP should demonstrate a systematic approach to monitoring and periodic evaluation of the quality of the EP		+		
52	9.	The EO, the management of the EP should define 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 EP must be published			+	
<b>Total according to the standard</b>			0	8	2	0
<b>Standard 5 "Student-centered learning, teaching and assessment of academic performance"</b>						
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 availability of own research in the field of teaching methods of educational disciplines.		+		
57	4.	The management of the EP should demonstrate the existence of feedback mechanisms for the use of various teaching methods and evaluation of learning outcomes		+		
58	5.	The management of the EP should 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 EO should ensure consistency, transparency and objectivity of the learning outcomes assessment mechanism for each EP, including the appeal		+		
61	8.	The EO should ensure that the procedures for evaluating the learning outcomes of the students of the EP correspond to the planned results and goals of the program, the publication of criteria and evaluation methods in advance		+		
62	9.	The EO should define mechanisms to ensure that each graduate of the EP achieves learning outcomes and ensures the completeness of their formation		+		
63	10.	Evaluators should be familiar with modern methods of evaluating learning outcomes and regularly improve their skills in this area		+		
<b>Total according to the standard</b>			0	9	1	0
<b>Standard 6 "Students"</b>						
64	1.	The NGO must demonstrate the existence of a policy for the formation of a contingent of students in the context of the EP, ensure transparency and			+	

		publication of its procedures governing the life cycle of students (from admission to completion)				
		<i>The management of the EP should determine the order of formation of the contingent of students based on:</i>				
65	2.	minimum requirements for applicants		+		
66	3.	of the maximum group size when conducting seminars, practical, laboratory and studio classes		+		
67	4.	forecasting the number of state grants		+		
68	5.	analysis of available material, technical, information resources, human resources		+		
69	6.	analysis of potential social conditions for students, including the provision of places in the dormitory			+	
70	7.	The management of the educational institution should demonstrate readiness to conduct special adaptation and support programs for newly enrolled and foreign students		+		
71	8.	The NGO must demonstrate 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 NGO 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 EO 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 should demonstrate readiness to provide students with internship places, promote the employment of graduates, and maintain communication with them		+		
75	12.	The EO should provide for the possibility of providing graduates of the EP with documents confirming the qualifications obtained, including the achieved learning outcomes, as well as the context, content and status of the education received and certificates of its completion		+		
<b>Total according to the standard</b>			0	9	3	0
<b>Standard 7 "Teaching staff"</b>						
76	1.	The NGO should have an objective and transparent personnel policy, including in the context of the EP, including hiring, professional growth and development of personnel, ensuring the professional competence of the entire staff		+		
77	2.	The NGO must demonstrate the compliance of the personnel 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 ensure favorable working conditions for them		+		
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 NGO should determine the contribution of the PPP of the EP to the implementation of the development strategy of the NGO, and other strategic documents		+		
81	6.	The NGO should provide opportunities for career growth and professional development of the teaching staff of the EP		+		
82	7.	The management of the EP should demonstrate readiness to involve practitioners of relevant sectors of the economy in teaching		+		
83	8.	The NGO should demonstrate the motivation of the professional and personal development of the teachers of the EP, including encouragement for the integration of scientific activity and education, the use of innovative teaching methods		+		

84	9.	An important factor is the readiness to develop academic mobility within the framework of the EP, to attract the best foreign and domestic teachers		+		
<b>Total according to the standard</b>			1	7	1	0
<b>Standard 8 "Educational resources and student support systems"</b>						
85	1.	The EO should guarantee a sufficient number of educational resources and student support services to ensure the achievement of the goal of the EP		+		
86	2.	The NGO 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 educational institutions (adults, working, foreign students, as well as students with disabilities)		+		
87	3.	The management of the EP should demonstrate the existence of support procedures for various groups of students, including information and counseling		+		
		The management of the EP should demonstrate the compliance of information resources with the specifics of the EP, including:				
88	4.	technological support for students and teaching staff (for example, online training, modeling, databases, data analysis programs)		+		
89	5.	library resources, including a fund of educational, methodological and scientific literature on general education, basic and profile disciplines on paper and electronic media, periodicals publications, access to scientific databases		+		
90	6.	examination of research results, graduation papers, dissertations on plagiarism		+		
91	7.	access to educational Internet resources		+		
92	8.	functioning of Wi-Fi on the territory of the educational organization		+		
93	9.	The EO demonstrates the planning of providing the EP with educational equipment and software tools similar to those used in the relevant sectors of the economy		+		
<b>Total according to the standard</b>			0	9	0	0
<b>Standard 9 "Informing the public"</b>						
		<i>The NGO 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.	qualifications and (or) qualifications that will be assigned upon completion of the educational program		+		
96	3.	teaching approaches, training, as well as the system (procedures, methods and forms) of assessment		+		
97	4.	information about passing scores and educational opportunities provided to students		+		
98	5.	information about graduate employment opportunities		+		
99	6.	The management of the EP should provide for a variety of ways to disseminate information, including mass media, information networks to inform the general public and interested persons		+		
100	7.	Public awareness should include support and explanation of the national development programs of the country and the system of higher and postgraduate education		+		
101	8.	The NGO must demonstrate the reflection on the web resource of information that characterizes it in general and in the context of educational programs			+	
102	9.	An important factor is the availability of adequate and objective information about the PPP EP		+		
103	10.	An important factor is informing the public about cooperation and		+		

	interaction with partners within the framework of the EP				
<b>Total according to the standard</b>		0	9	1	0
<b>IN TOTAL</b>		<b>5</b>	<b>88</b>	<b>10</b>	<b>0</b>

- 4 % of parameters have the position "strong"
- 85% of parameters have the position "satisfactory"
- 11 % of parameters have the position "suggests improvement"
- 0 % of parameters have the position "suggests improvement"

