

«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING

# REPORT

on the results of the work of an external expert commission t o assess compliance with the requirements of standards for primary specialized accreditation of educational programs

7M07109 Materials science and nanotechnology of materials (profile) (primary accreditation) 7M07204 Metallurgy of ferrous and non-ferrous metals (profile) (primary accreditation) 7M07101 Technology for processing new structural materials (primary accreditation) 7M07104 Technology for processing new structural materials (profile) (primary accreditation)

KARAGANDA INDUSTRIAL UNIVERSITY

during the period from March 25 to March 27, 2024

# INDEPENDENT ACCREDITATION AND RATING AGENCY External expert commission

Addressed to the IAAR Accreditation Council



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# **CONTENT**

(I) LIST OF SYMBOLS AND ABBREVIATIONS
(II) INTRODUCTION
(III) REPRESENTATION OF THE EDUCATIONAL ORGANIZATION
(IV) DESCRIPTION OF PREVIOUS ACCREDITATION PROCEDURE
(V) DESCRIPTION OF THE VISIT OF EEC
(VI) COMPLIANCE WITH PRIMARY SPECIALIZED ACCREDITATION STANDARDS 11
6.1. Standard "Educational Program Management"11
6.2. Information Management and Reporting Standard14
6.3. Standard "Development and approval of an educational program"
6.4. Standard "Continuous monitoring and periodic evaluationeducational programs"
6.5. Standard "Student-centered learning, teaching and assessment"
6.6. Standard "Students"
6.7. Standard "Faculty and teaching staff" 26
6.8. Standard "Educational Resources and Student Support Systems"
6.9. Public Information Standard
(VII) OVERVIEW OF STRENGTHS/BEST PRACTICES FOR EACH STANDARD
(VIII) OVERVIEW OF RECOMMENDATIONS FOR IMPROVING QUALITY FOR EACH STANDARD
(IX) OVERVIEW OF RECOMMENDATIONS FOR THE DEVELOPMENT OF EDUCATIONAL ORGANIZATIONS
(X) RECOMMENDATION TO THE ACCREDITATION BOARD
Appendix 1. Evaluation table "Conclusion of the external expert commission"

# (I) LIST OF SYMBOLS AND ABBREVIATIONS

**AC**–Academic calendar **BD**– Basic disciplines EAEA- External assessment of educational achievements **SCC**– State Certification Commission SCE– State compulsory education standard **DET**– Distance educational technologies **UNT**– Unified national testing EHEA- European Higher Education Area **ECTS**– European Credit Transfer System **IBC**– Information and library complex **ICT**– Information and communication technologies **IC**– Individual curriculum CCh– Component of choice **CT**–Comprehensive testing **CTT**– Credit technology of training **CED**– Catalog of elective disciplines MES RK- Ministry of Education and Science of the Republic of Kazakhstan MEP- Modular educational programs **RW**– Research work **SRW**– Student research work **RC**– Required component **GED**– General education disciplines **EP**– Educational programs **PD**– Profile disciplines **TS**– Teaching staff **RIEB**–Republican Interuniversity Electronic Library **RK**– Republic of Kazakhstan WTP– Working training plan **OMS**–Quality management system SVE- Secondary vocational education **IWS**– Independent work of students **IWST**– Independent work of students under the guidance of a teacher **TTP**– Typical training plan EMCD- Educational and methodological complex of the discipline **EMP**–Educational and methodological department

EMA- Educational and methodological advice

#### (II) **INTRODUCTION**

In accordance with Order No. 31-24-OD of 2024 of the Independent Agency for Accreditation and Rating, from March 25 to March 27, 2024, an external expert commission assessed the compliance of educational programs 7M07109 Materials Science and Nanotechnology of Materials (profile) (primary accreditation), and 7M07204 Ferrous Metallurgy and non-ferrous metals (profile) (primary accreditation), 7M07101 Technology for processing new structural materials (primary accreditation), 7M07104 Technology for processing new structural materials (primary accreditation) of the Karaganda Industrial University to the standards of primary specialized accreditation of the educational program (exante) of an organization of higher and (or) postgraduate education (No. 68-18/1-OD dated May 25, 2018, first edition) in a hybrid format.

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

Composition of EEC:

1) *Chairman of the IAAR Commission* – Shcherbina Alexey, Candidate of Economic Sciences, Doctor of Philosophy, Associate Professor of the Federal State Autonomous Educational Institution of Higher Education "Southern Federal University" (Russian Federation)*Off-line participation* 

2) *IAAR Expert*– Tsopa Natalya, professor, doctor of economic sciences, head of the department of technology, organization and construction management, Crimean Federal University named after V.I. Vernadsky" (Russian Federation) *On-line participation* 

3) *IAAR Expert*–Ryvkina Natalya, master's degree, senior lecturer of the Department of Construction, Eurasian National University. L.N. Gumileva (Astana) *Off-line participation* 

4) *IAAR Expert*— Elubay Madeniet, Ph.D., Professor, Dean of the Faculty of Natural Sciences, Toraighyrov University (Republic of Kazakhstan) *On-line participation* 

5) *IAAR Expert*–Zakirova Dilnara, PhD, Associate Professor of the Department of Tourism and Service, Turan University (Republic of Kazakhstan) *Off-line participation* 

6) **IAAR Expert**–Nazhipkyzy Meruert, Ph.D., Associate Professor, Department of Chemical Physics and Materials Science, Kazakh National University. al-Farabi (Republic of Kazakhstan)*Offline participation* 

7) **IAAR Expert**-Mazdubai Asylkhan, PhD, associate professor, head of the department of "Mechanics and Oil and Gas Engineering" Toraighyrov University (Republic of Kazakhstan) *On-line* participation

8) *IAAR Expert*- Dzholdasbaeva Gulnar, Doctor of Economics, Professor, Head of the Department of Economics and Management, Almaty Technological University (Republic of Kazakhstan) *On-line participation* 

9) *IAAR Expert*– Kilibaev Erkebulan, Ph.D., senior lecturer of the department of "Metallurgy of Non-Ferrous Metals", Corresponding Member of the International Academy of Informatization, Eurasian National University. L.N. Gumileva (Republic of Kazakhstan) *Off-line participation* 

10) **IAAR expert, employer-**Turebekova Zhanar Meiramovna, Head of the Human Capital Development Department of the Chamber of Entrepreneurs of Almaty (Republic of Kazakhstan) *Online participation* 

11) *IAAR expert, employer*-Madiev Temirlan, leading expert of the department for supporting investment projects of the Chamber of Entrepreneurs of Almaty (Republic of Kazakhstan) Op-line participation

12) *IAAR expert*, student–Amanbaev Chingis, 1st year master's student of the OP "Construction", member of the Alliance of Students of Kazakhstan, Eurasian National University. L.N. Gumileva (Astana) *On-line participation* 

13) *IAAR expert, student*– Yamaltdinov Bogdan, 1st year master's student of the EP "Chemical technology of organic substances", member of the Alliance of Students of Kazakhstan, Toraighyrov University (Republic of Kazakhstan) *On-line participation* 

14) *IAAR expert, student*- Tynymbaeva Aruzhan, master's student of the EP "Materials Science and Technology of New Materials", Kazakh National Research Technical University named after. K.I. Satpayeva (Republic of Kazakhstan) *On-line participation* 

15) *IAAR expert, student*- Kulkubaev Erzhan, 1st year master's student of the Economics program, member of the Alliance of Students of Kazakhstan, Almaty Humanitarian and Economic University(Republic of Kazakhstan) *On-line participation* 

16) **IAAR Coordinator** – Saidulaeva Malika, project manager of the Independent Agency for Accreditation and Rating (Republic of Kazakhstan)*Off-line participation* 



#### (III) <u>REPRESENTATION OF THE EDUCATIONAL ORGANIZATION</u>

Non-profit joint-stock company "Karaganda Industrial University" (hereinafter referred to as NJSC "KariU") is the leading university in Kazakhstan in training highly qualified personnel with higher and postgraduate education in metallurgical, mechanical engineering, chemical, construction and other areas related to metallurgy, which are priorities for the mining and metallurgical industry Republic of Kazakhstan.

NJSC "KariU" was reorganized in accordance with the Decree of the Government of the Republic of Kazakhstan dated October 11, 2019 No. 752 "On some issues of higher educational institutions of the Ministry of Education and Science of the Republic of Kazakhstan" from the Republican State Enterprise with the right of economic management "Karaganda State Industrial University" (formerly Plant - Higher technical school at the Karaganda Metallurgical Plant, created on the basis of a branch of the Karaganda Polytechnic Institute in 1963).

The university trains specialists in 22 bachelor's degree programs, 20 master's degree programs, 6 doctoral programs and 2 applied bachelor's programs.

The university includes 3 faculties, 11 departments and 1 scientific structural unit - DSiIC.

NJSC Karaganda Industrial University, a leading university among educational institutions that train personnel in technical specialties, is therefore popular among employers in the metallurgical and mechanical engineering industries. It has a good reputation thanks to its activities to improve the quality of educational services provided and increase research potential, improve indicators of academic reputation, reputation among employers, citations, and the ratio of students to faculty.

In the General ranking of the TOP-20 universities of the Republic of Kazakhstan by the Independent Agency for Accreditation and Rating in 2023, the university took 13th position.

In the National Ranking of the Best Technical Universities of Kazakhstan by the Independent Agency for Quality Assurance in Education in 2022 – 7th position.

<u>University student population at the time of accreditation.</u> The contingent of full-time students as of January 1, 2024 is only 2323 people, of which: on the basis of a state educational grant - 1144. Master's students - 38, of which 30 are on state orders, doctoral students - 17, of which 17 are on state orders.

<u>University staff</u>(as of 09/01/2023): The number of full-time teachers at the university is 125 people; of which 8 are Doctors of Science, 36 Candidates of Science, PhD - 17, Masters - 54 people. The average age of teaching staff at the university is 49 years. The degree of full-time teachers is 49%.

<u>Contingent of students</u>accredited EP 7M07101 – Technology of processing of new structural materials (scientific and pedagogical), 7M07104 – Technology of processing of new structural materials (profile), 7M07109 Materials science and nanotechnology of materials (profile), 7M07204 Metallurgy of ferrous and non-ferrous metals (profile) as of January 1, 2024 g. is missing.

Currently, master's students are trained in EP 7M07101 – Technology of processing of new structural materials (scientific and pedagogical), 7M07104 – Technology of processing of new structural materials (profile), 7M07109 Materials science and nanotechnology of materials (profile), 7M07204 Metallurgy of ferrous and non-ferrous metals (profile) is carried out on the basis of license No. KZ86LAA00019217 dated October 30, 2020, issued by the Committee for Control in the Field of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan dated October 29, 2020 No. 426.

The graduating department for EP 7M07101 – Processing technology of new structural materials (scientific and pedagogical) 7M07104 – Processing technology of new structural materials (profile) is the department "Formation of metals", according to EP 7M07109 Materials science and nanotechnology of materials (profile) and 7M07204 Ferrous and non-ferrous metallurgy metals (profile) is the Department of Metallurgy and Materials Science.

Currently, the departments of "Metal Forming" and "Metallurgy and Materials Science" are a structural subdivision of the Faculty of "Metallurgy and Mechanical Engineering".

# Information about the Department of Metal Forming

The Department of Metal Forming was established in 1964.

The department trains bachelors in EP 6B07201 - Forming of materials, 6B07108 - Forging and stamping production in mechanical engineering, 6B07501 - Standardization, metrology and certification, masters in EP 7M07101 - Processing technology of new structural materials and Ph.D. in OP 8D07101 - Nanotechnologies in engineering.

Education at the department is conducted in Kazakh and Russian languages, and multilingual groups have been opened since the 2018 academic year.Master's studies in EP 7M07101 – Technology for processing new structural materials (scientific and pedagogical)/7M07104 – Technology for processing new structural materials (profile) (6M071200-Mechanical Engineering) began in 2004. In accordance with the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 No. 2 "On approval of state compulsory standards of higher and postgraduate education," graduates are awarded the degree of Master of Technical Sciences/Master of Engineering and Technology. The duration of training for the EP is EP 7M07101 – TPNSM (scientific and pedagogical) - 2 years, for OP 7M07104 – TPNSM - 1.5 years.

The mission of the Department of Metal Forming (MDP) of the Faculty of Metallurgy and Mechanical Engineering (FMM) is to prepare competitive graduates based on the advanced achievements of science, technology and technology that are in demand in the labor market in the metalworking industry.

According to the 2023 rating for the Republic of Kazakhstan of the Independent Agency for Accreditation and Rating (IAAR) for groups of educational programs in accordance with the areas and levels of training of specialists in M103 Mechanics and Metalworking (OP 7M07101/ 7M07104 - TPNSM) took 2nd place.

Qualitative and quantitative composition of the department's teachers:

In the 2023-2024 year, the Department of General Medicine includes 7 teaching staff, the percentage of degrees is 66.7%, teaching EP classes is 100%, of which: Ph.D. -1, PhD -3 and 2 master and 1 engineer. The average age of teaching staff in the department is 39 years.

The employment rate of graduates of the last three years in the accredited EP 7M07101/7M07104 – TPNSM is 100%.

Research, contractual projects for the department in the context of accredited EP:

Carrying out research projects financed from the state budget:

1. Development of theoretical foundations for the implementation of innovative combined processes of deformation of non-ferrous metals and alloys in order to obtain an ultra-fine-grained structure (IRN AP13067723).

2. Development and research of an innovative method of rolling with macro-shear, ensuring the production of high-quality thick sheets of non-ferrous metals and alloys (IRN AP14869080).

3. Development of information and digital principles for management and quality control of metal products (IRN AP15473350).

4. Development of innovative technology of twisting in an equal-channel stepped matrix with subsequent drawing (IRN AR19676903)

In addition, the faculty of the department submitted 2 applications for grant funding for 2024-2026.

# Information about the Department of Metallurgy and Materials Science (MM)

The Department of MM was created in 1964.

The department trains bachelors in EP 6B07103 Materials science and technology of new materials, 6B07207 Mineral processing, 6B07203/6B07205 Metallurgy of non-ferrous metals, 6B07202/6B07206 Metallurgy of ferrous metals, masters in EP 7M07106/7M07109 Materials science and nanotechnology materials, 7M07203/7M07204 Metallurgy of ferrous and non-ferrous metals, Doctor of Philosophy in OP 8D07202 Metallurgy of ferrous and non-ferrous metals.

Education at the department is conducted in Kazakh and Russian languages, and multilingual groups have been opened since the 2018 academic year. Master's studies in EP 7M07106/7M07109 Materials science and nanotechnology of materials, 7M07203/7M07204 Metallurgy of ferrous and non-ferrous metals began in 2004. In accordance with the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 No. 2 "On approval of state compulsory standards of higher and postgraduate education," graduates are awarded the degree of Master of Technical Sciences/Master of Engineering and Technology. The duration of study for the EP is EP 7M07203/7M07106 (scientific and pedagogical) - 2 years, for EP 7M07204/7M07109 - 1.5 years.

The mission of the Department of Metallurgy and Materials Science (M&M) of the Faculty of Metallurgy and Mechanical Engineering (FMiM) is to train highly qualified competitive personnel in demand in the labor market in the mining and metallurgical industry of the Republic of Kazakhstan.

According to the 2023 rating for the Republic of Kazakhstan of the Independent Agency for Accreditation and Rating (IAAR) for groups of educational programs in accordance with the areas and levels of training of specialists, M101 MSNM (7M07106/7M07109 MSNM) took 2nd place, M117 Metallurgical Engineering (7M07203/7M07204 MFNFM) took 1st place.

Qualitative and quantitative composition of the department's teachers:

In the 2023-2024 year, the Department of M&M includes 18 teaching staff on staff and 3 parttime workers, the percentage of degrees is 88%, teaching EP classes is 100%, of which: Doctor of Technical Sciences. – 2, Ph.D. – 6, PhD – 8 and 2 master's. The average age of teaching staff in the department is 51 years.

### <u>Research, contractual projects for the department in the context of accredited EP:</u> Carrying out research projects financed from the state budget:

1. Increasing the strength and performance properties of austenitic chromium-nickel steel wire by thermomechanical processing (AP19576369).

2. Development and study of the influence of the combined technology of radial-shear broaching and drawing on the properties of carbon steel rods (AP19678974);

3. Research and development of technology for processing steel with a complex alloy Fe-Si-Mn-Al (AP13068023).

4. Study of the deoxidizing ability of a new complex deoxidizer in the smelting of semi-mild and mild steel grades (AP13268863);

5. Study of the influence of high-ash bituminous coals on the technological parameters of smelting carbon grades of ferrochrome (AP14972699);

6. Study of the process of selective reduction of iron with hydrogen gas from oolitic ores with high phosphorus content (AP19579175);

7. Study of the possibility of processing technogenic waste from ferrous metallurgy to obtain a metallized intermediate product (AP19175779);

8. AR19177929 - Study of the use of borate ores in the production technology of technical silicon with the formation of boron-containing oxide systems under oxidizing and reducing conditions (AR19177929).

*Execution of contractual work for the accredited period:* 

1. "Study of the possibility of preserving and more rational use of quartz resources of the Aktas deposit. Approbation of the technology for smelting technical silicon in a large-scale laboratory electric arc furnace using briquetted raw materials based on silica-containing materials and screenings of a carbonaceous reducing agent as part of the charge" for Silicon Mining LLP;

2. "Development of technology for remelting ferromanganese ore to produce high-manganese slag and pig iron from standard grades of ferrosilicon-manganese using high-manganese slag" for - IZOMAST LLP;

3. "Development of optimal modes for producing agglomerate with increased strength characteristics from a charge based on phosphate rocks fr. 0-10 mm Kazphosphate LLP and determination of preliminary technical and economic indicators for Kazphosphate LLP;

4. "Approbation of the technology for smelting rich titanium slag (HTSH) from pelletized monocharge based on titanium raw materials produced by Obukhovsky GOK LLP for Modernization Innovation and Development LLP."

<u>The employment rate of graduates of the last three years in all accredited master's degree</u> programs is 100%.

### (IV) DESCRIPTION OF PREVIOUS ACCREDITATION PROCEDURE

International primary specialized accreditation EP 7M07109 Materials science and nanotechnology of materials (profile) (primary accreditation), and 7M07204 Metallurgy of ferrous and non-ferrous metals (profile) (primary accreditation), 7M07101 Processing technology of new structural materials (primary accreditation), 7M07104 Processing technology of new structural materials (profile) (primary accreditation) of Karaganda Industrial University according to IAAR standards is carried out for the first time.

# (V) DESCRIPTION OF THE VISIT OF EEC

The work of the EEC was carried out on the basis of the approved Visit Program of the expert commission for specialized accreditation of educational programsKaraganda Industrial University from March 25 to March 27, 2024.

In order to coordinate the work of the EEC, an on-line orientation meeting was held on March 24, 2024, during which powers were distributed among the commission members, the visit schedule was clarified, and agreement was reached on the choice of examination methods.

To obtain objective information about the quality of educational programs and the entire infrastructure of the university, and to clarify the content of self-assessment reports, meetings were held with the rector, vice-rectors of the university in areas of activity, heads of structural divisions, heads of departments, teachers, students, graduates, and employers. A total of 151 representatives took part in the meetings (Table 1).

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

Category of participants	Quantity
Rector	1
Pro-rector's building	3
Heads of structural divisions	15
Deans	1
Heads of departments	2
Teachers	60
Students, master's students, doctoral students	4
Employers and alumni	58
Total	151

During the visual inspection, members of the EEC got acquainted with the state of the material and technical base, visited the university museum, and the department's laboratories:

- Laboratory for collective use of "Electron microscopy and nanotechnology": sample preparation and chemical analysis, optical microscopy, scanning microscopy and transmission microscopy;
- Industrial and production site (B-building);

- laboratory of modern methods of MF;
- sample preparation laboratory;
- laboratory of forging, pressing and rolling equipment (A-building).

As part of the work of the commission, various departments of the Qarmet JSC practice base were visited, including the Metallurgy and Flaw Detection Laboratory and the blast furnace shop. In accordance with accreditation procedures, online surveys were conducted with 87 teachers and 22 students. To confirm the information presented in the Self-Assessment Report, external experts requested and analyzed the university's working documentation. Experts also studied the university's Internet presence through the university's official website https://tttu.edu.kz/.

As part of the planned program, recommendations for improving the accredited educational programs of Karaganda Industrial University, developed by the EEC based on the results of the examination, were presented at a meeting with the management on March 27, 2024.

# (VI) <u>COMPLIANCE WITH PRIMARY SPECIALIZED ACCREDITATION</u> <u>STANDARDS</u>

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

• An organization of higher and/or postgraduate education must have a published quality assurance policy. Quality assurance policies should reflect the relationship between research, teaching and learning.

• An organization of higher and (or) postgraduate education must demonstrate the development of a culture of quality assurance, including in the context of EP.

• A commitment to quality assurance must apply to any activity carried out by contractors and partners (outsourcing), including joint/double degree education and academic mobility.

• The management of the EP demonstrates its readiness to ensure transparency in the development of the EP development plan based on an analysis of its functioning, the real positioning of the EP and the focus of its activities on meeting the needs of the state, employers, students and other interested parties. The plan must contain the start date for the implementation of the educational program.

• The leadership of the EP demonstrates the functioning of the mechanisms for the formation and regular review of the EP development plan and monitoring its implementation, assessing the achievement of learning goals, compliance with the needs of students, employers and society, and making decisions aimed at constantly improving the EP.

• The management of the EP should involve representatives of stakeholder groups, including employers, students and teaching staff in the formation of a development plan for the EP.

• The leadership of the EP must demonstrate the individuality and uniqueness of the EP development plan, its consistency with national priorities and the development strategy of the organization of higher and (or) postgraduate education.

• An organization of higher and (or) postgraduate education must demonstrate a clear definition of those responsible for business processes within the EP, an unambiguous distribution of job responsibilities of staff, and delimitation of the functions of collegial bodies.

• The management of the educational program must provide evidence of the transparency of the educational program management system.

• The management of the EP must demonstrate the existence of an internal quality assurance system for the EP, including its design, management and monitoring, their improvement, and decision-making based on facts.

• The management of the educational institution must manage risks, including within the framework of the educational institution undergoing primary accreditation, and also demonstrate a system of measures aimed at reducing the degree of risk.

• The management of the educational program must ensure the participation of representatives of employers, teaching staff, students and other interested parties in the collegial bodies governing the educational program, as well as their representativeness when making decisions on issues of managing the educational program.

• The OT must demonstrate innovation management within the EP, including the analysis and implementation of innovative proposals.

• The management of the EP must demonstrate evidence of readiness for openness and accessibility for students, teaching staff, employers and other interested parties.

• The management of the EP must passtraining in educational management programs.

# Evidence

Karaganda Industrial University (KarIU) pursues a quality assurance policy, which is part of its strategic management and is aimed at ensuring high quality educational services provided to consumers and customers.

In KarIU at management of educational programs is carried out within the framework of the internal quality assurance system, which includes the Quality Assurance Policy and a description of processes in a series of internal documents of the University, developed within the framework of a certified quality management system.

As noted in the self-assessment report, The main goal of the Quality Policy of KarIU is to prepare graduates capable of ensuring the functioning and development of various areas of activity at the level of advanced achievements, who are worthy citizens of the Republic of Kazakhstan.

The EEC confirms that the management of educational programs is carried out in the context of the Strategic Development Plan NJSC KarIU containingmission, vision and strategic goals of the university. The mechanism for developing goals and objectives for the development of accredited EPs is based on the Development Strategy NJSC KarIU until 2029.

Availability of the main documents of the quality assurance policy for teaching staff, employees and students is ensured by posting them on the university website (<u>https://tttu.edu.kz</u>/) and at the stands of structural divisions and departments. Posting quality assurance policy documents on open resources allows employers and other interested parties to familiarize themselves with them.

Management of EP includes the following main stages: constant analysis of the current state of the mining, metallurgical, metalworking and nanotechnology industries in the Republic of Kazakhstan and beyond, analysis of the labor market and its needs in areas of training, formation of goals, objectives of EP and the EP itself, discussion of the content of EP with stakeholders internal (faculty, doctoral students and DAP) and external (stakeholders/employers and experts from academia) at

department meetings and via email. Stakeholders make their proposals for the formation of the EP. Next, the finished MEP is sent for review and examination to representatives from production and universities, including external ones.

The management of the EP annually analyzes, processes and implements innovative proposals coming from all interested parties - employers, teaching staff, students and the Ministry of Education and Science of the Republic of Kazakhstan.

KarIU has a comprehensive database of internal regulations that regulate all the main business processes within the EP. Access to this database is available to management personnel and authorized persons responsible for the functioning and development of the QMS in the structural divisions of the university.

EEC experts were convinced that in order to support the main business processes at the university, a set of internal regulatory documentation has been developed and implemented to regulate the implementation of the EP. EP management is carried out through the work of collegial bodies, the planning system and the functioning of the internal quality assurance system.

Within the framework of accredited educational programs, responsible persons for business processes are appointed, the job responsibilities of staff are distributed (the job descriptions presented are developed, available, and the functions of collegial bodies are delineated). The development of accredited educational programs was carried out with the participation of interested parties, in particular the teaching staff of the department.

Certain information about the management system is presented on the university website and distributed through other means, but it is not possible to evaluate the system as transparent. In most cases, information is available only to internal consumers.

The management of the EP invites new employers, organizes meetings with them, and concludes social partnership agreements. An Open Day is regularly held, and a Job Fair is held with the involvement of all business partners of the university.

The openness and accessibility of the EP management for teaching staff, students and other interested parties is ensured by posting information on the university website and the possibility of appealsto the rector's blog, via e-mail messages to the rector, vice-rectors, dean, head of the departments of medical science and medical science.

The management of the EP, represented by the heads of the departments of MF and M&M, regularly undergo training in various educational management programs.

# Analytical part

Analysis of fundamental documents showed that NJSC KarIU demonstrates the management of educational programs, in accordance with the current legislation of the Republic of Kazakhstan in the field of education and science, the focus of the mission, strategy and vision to meet the needs of the state, society, sectors of the real economy, and potential stakeholders.

EEC notes that interested parties (students, teachersand employers) are aware of the existence of the University Development Program, Quality Policy and Goals, and internal regulatory documents. The management of the EP demonstrated the efficiency of the internal quality management system. The transparency of the processes of forming the EP development plan is confirmed by the participation of interested parties in it. This is evidenced by the activities of the Academic Council, the rector's office, the educational and methodological council, and academic committees that ensure the management of the main educational programs.

The EEC, during a visual inspection and analysis of documents, was convinced that those responsible for the educational processes were appointed, within the framework of which the implementation of the EP was regulated, the job responsibilities of the staff were distributed, and the functions of collegial bodies were delineated. The university demonstrates the development of a quality assurance culture in the context of educational programs. The quality of the educational process includes not only the quality of educational programs and technologies, the quality of human resources

involved in the educational process, the quality of the material and technical base, etc., but also the quality of the scientific potential of the university, the quality of new knowledge transmitted by teachers.

The management of the EP ensures the participation of employer representatives in the processes of managing the educational program and its development, which was revealed as a result of interviews with teachers and employers.

The EEC notes the need to analyze the functions of University employees involved in the management of educational programs in order to clarify their responsibilities in connection with changes made to regulations in the field of education and new approaches to determining the qualification characteristics of teaching staff positions.

To develop strategic documents, the team conducts an assessment of the university in meeting the needs of stakeholders, as well as a long-term analysis of the development of the educational services market. The individuality of the EP development plan is partially traced. At the same time, the formulation of the uniqueness and individuality of the development plan for the EP and its consistency with national development priorities and the development strategy of the University KarIU not detailed enough.

Familiarization with the documents and the results of the interview with the head of the EP 7M07101 – Technology for processing new structural materials (scientific and pedagogical) 7M07104 – Technology for processing new structural materials (profile), EP 7M07109 Materials science and nanotechnology of materials (profile) and 7M07204 Metallurgy of ferrous and non-ferrous metals (profile) made it possible to understand that there is no clear idea of The uniqueness and individuality of these EP, except as a guide to entrepreneurship, did not reveal their competitive advantages.

According to the submitted documents, it was established that the heads of the departments of MF and M&M - the heads of the EP - were trained in educational management.

*Strengths/Best Practices:* Not identified.

# EEC recommendations:

- Concretize and update the development plan for accredited EP in order to determine their uniqueness and taking into account the priority areas for the development of scientific research for industries and in the fieldnanotechnology, in accordance with the Strategydevelopment of the university and with changes in regulations in the higher education system (until January 1, 2025).

# EEC conclusions based on the criteria:

According to the "Educational Program Management" standard, educational programs have 13 satisfactory positions, 2 – suggest improvement.

#### 6.2. Information Management and Reporting Standard

• The organization must demonstrate that it has a system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software, and that it uses a variety of methods to collect and analyze information in the context of the organization.

• The management of the EP must demonstrate the existence of a mechanism for the systematic use of processed, adequate information to improve the internal quality assurance system.

• EP management must demonstrate evidence-based decision making.

• The EP must provide for a system of regular reporting, reflecting all levels of the structure, including assessment of the effectiveness and efficiency of the activities of departments and departments, and scientific research.

• The OT must establish the frequency, forms and methods of assessing the management of the EP, the activities of collegial bodies and structural divisions, senior management, and the implementation of scientific projects.

• The OT must demonstrate the determination of the procedure and ensuring the protection of information, including the identification of responsible persons for the accuracy and timeliness of information analysis and data provision.

• An important factor is the presence of mechanisms for involving students, employees and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them.

• The management of the EP must demonstrate the existence of a communication mechanism with students, employees and other interested parties, as well as mechanisms for resolving conflicts.

• The organization must demonstrate that it has mechanisms for measuring the degree of satisfaction of the needs of teaching staff, staff and students within the EP.

• The OT must provide for an assessment of the effectiveness and efficiency of activities, including in the context of EP.

- Information to be collected and analyzed within the framework of the EP should take into account:
- key performance indicators;
- dynamics of the student population in terms of forms and types;
- academic levels, student achievement and attrition;
- satisfactionstudents in the implementation of EP and the quality of education at the university;
- availability of educational resources and support systems for students;

• The OT must confirm the implementation of procedures for processing personal data of students, employees and teaching staff on the basis of their documented consent.

#### Evidence

Information management in NJSC KarIU is the activity of generating, processing, transmitting and using information within the organization and outside it. Providing all interested parties with complete, impartial, objective, accurate and accessible information about the activities of the KarIU is carried out in accordance with the internal document of the QMS P-4-27-2022 "Regulations on public information".Information management processes within the KarIU are regulated by the organization standard QMS STO II.7-04.02-2021 "Internal Information". Internal information processes are provided by management documentation, its composition is determined by the competence of the organization, the procedure for resolving issues, the volume and nature of connections between the divisions of the KarIU.

The university has created a local unified information network that unites all computers and information resources, such as web portals and file servers, which ensures effective management of the educational process and all information resources. All university buildings have access to a wireless Wi-Fi network with Internet access. Management of educational processes and the study system is carried out using the AIS "PLATONUS" and LMS "MOODLE" systems. Verification of the accuracy of information is carried out in accordance with the regulations on ensuring academic integrity at NJSC "KarIU". Access to the international scientific databases Scopus and Web of Science is provided thanks to funding from the Ministry of Education and Science of the Republic of Kazakhstan from the state budget. The university also regularly organizes training seminars with the participation of companies.

#### Analytical part

Analyzing compliance with the requirements of the standard "Information Management and Reporting" for accredited EP 7M07101/7M07104 – TPNSM, 7M07109 – MSNM, 7M07204 – MFNFM, the commission notes that the university has an information management and reporting system for student enrollment, academic performance, student movement, and personnel , academic mobility of teaching staff and students, etc., which is presented in regular reports at meetings of collegial bodies of the university.

The commission notes that the internal regulatory documentation developed at the university (organizational standards, documented procedures, methodological instructions) determines the structure and volume of information collected, its reliability and timeliness, allows for the generation of analytical reports and decision-making based on facts.

The university has established the frequency, forms and methods of assessing the activities of managers and collegial bodies, the procedure has been determined and the protection of information is ensured.

Key performance indicators are fully defined; accordingly, the system for collecting them is complete and sufficient.

The information collection system is not complete, but it is not always fully used for analysis and, accordingly, for decision-making. Of particular note is the analysis of student satisfaction with the implementation of the EP and the quality of training and the employment and career of graduates; work in these areas is carried out at a high level.

The commission also notes that the educational portal does not provide sufficient information about teaching staffand OP managers, their achievements. Refinement and addition of information oneducational portal. For example, a page for each teacher, and about their disciplines taught, certificates, etc..

*Strengths/Best Practices:* Not identified.

#### EEC recommendations:

- To provide participants in the educational process with the necessary information on the levels of training implemented by the educational program, addpersonal pages of teaching staff and heads of educational programs (valid until January 1, 2025).

-Develop, document and include clear quantitative criteria in the information collection and analysis systemassessment of the effectiveness and efficiency of activities for the implementation of the EP (duration until January 1, 2025).

# EEC conclusions based on the criteria:

According to the "Information Management and Reporting" standard, educational programs have 16 satisfactory positions.

#### 6.3. Standard "Development and approval of an educational program"

• The PA must define and document procedures for developing EP and their approval at the institutional level.

• OP management must ensure compliance EP developed for established purposes, including intended learning outcomes.

• The management of the EP must demonstrate the existence of mechanisms for revising the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social demands of society.

• The leadership of the EP must ensure the availability of developed models of the EP graduate that describe learning outcomes and personal qualities.

• The management of the EP must demonstrate that external examinations of the content of the EP and the planned results of its implementation have been carried out.

• The qualification awarded upon completion of the EP must be clearly defined and correspond to a certain level of the NQF and QF-EHEA.

• The management of the educational program must determine the influence of disciplines and professional practices on the formation of learning outcomes.

• An important factor is the ability to preparestudents for professional certification.

• The management of the EP must provide evidence of the participation of students, teaching staff and othersstakeholders in developing OPs and ensuring their quality.

• The management of the EP must ensure the content of academic disciplines and learning outcomes to the level of study (bachelor's, master's, doctoral).

• The structure of the EP should include various types of activities to ensure the achievement of students' planned learning outcomes.

• An important factor is the correspondence of the content of the EP and the learning outcomes of the EP implemented by higher and (or) postgraduate education organizations in the EHEA.

#### Evidence

The development and approval of educational programs at the university is carried out in accordance with the provisions of regulations in the field of higher and postgraduate education, as well as documentation developed by the university to ensure the implementation of the Strategic Development Plan of NJSC "KariU" for 2020-2029.

The procedures for assessing the quality of the educational program are determined by the internal regulatory documents of the university. Educational programs are annually reviewed and updated in terms of the content of curricula, the composition and content of work programs of disciplines, educational and practical training programs. Review and updating of working curricula occurs once at the end of the academic year and is approved for the next academic year. The analysis of working curricula is carried out during the academic year by the heads of departments together with teachers.

Assessment of the quality of educational programs is carried out on the basis of an analysis of curricula, a catalog of elective disciplines, schedules, individual plans of students, internal regulatory documents regulating the implementation of educational programs.

The management of accredited EP determines the influence of disciplines and all types of practices on the formation of master's students' learning outcomes. The content of the EP, as well as the sequence of its implementation, meets both regulatory requirements and modern demands of the labor market. Since the passage of teaching and research practices is an integral part of EP 7M07101 TPNSM, their organization and completion is carried out in accordance with QMS P 4-54-2022 Regulations on the procedure for organizing and conducting teaching practice for undergraduates and doctoral students, as well as QMS STO II.8-02.04-2023 "Management of scientific processes". Also, master's students studying in a specialized area undergo practical training, which is regulated by QMS P 4-28-2021 "Regulations on the procedure for organizing and conducting professional internships and identifying organizations as bases of practice." To successfully complete all types of internships, the University has concluded agreements with leading universities, enterprises and companies.

The topic of master's theses and projects within the framework of accredited EP are individual for each master's student and unique in terms of scientific novelty and practical significance.

The curricula provide for a modular study of disciplines in compliance with the logical sequence of studying disciplines and contain a complete list of academic disciplines for both compulsory and elective components. The labor intensity of cycle disciplines in Kazakhstan and ECTS credits, as well as in hours, all types of professional practice, intermediate certification are indicated.

The university strives to introduce joint educational programs, but does not pay enough attention to providing undergraduates with the opportunity to obtain professional certification in the field of nanotechnology, which would correspond to the level of activity of the university.

#### Analytical part

Analyzing the standard "Development and approval of an educational program," members of the EEC came to the conclusion that consideration and discussion of EP takes place at department meetings and is approved at a meeting of the University Academic Council.

The university pays the necessary attention to the design of educational programs; a number of documented procedures have been developed and approved that have an effective impact on the quality of the educational process. In particular, the procedure for forming a graduate model has been developed and implemented at a good level.

The current procedures for the design and implementation of educational programs provide a solution to a number of problems, including ensuring the influence of disciplines and professional practices on the formation of learning outcomes (professional standards developed by industry associations of employers).

Members of the EEC note that educational programs are provided with WTP, syllabuses, EMCD, which are drawn up in accordance with regulatory documents and meet the specifics of accredited EP. A set of QED disciplines and the choice of enterprises for practical training contribute to the formation of professional competencies of students.

A graduate model has been developed. The graduate model is reflected in the objectives of the EP 7M07101/7M07104 – TPNSM, 7M07109 – MSNM, 7M07204 – MFNFM, the competencies being formed, and the qualification characteristics of a graduate of all levels of training.

Accredited EP are developed on the basis of the TTP of specialties, taking into account the needs of potential employers. The developers of the EP are the teaching staff of the department - leading experts in the fields of science and education in the EP profile.

To assess the quality of educational programs, the university has documented mechanisms for internal quality assessment and examination.

Competency models of graduates have been developed for all accredited EP, representing a set of professional, personal and meta-subject learning outcomes. Analysis of the planned learning outcomes indicates their compliance with the goals and objectives of the EP.

However, the educational program7M07109 – MSNM did not demonstrate the existence of mechanisms for revising the content and structure of the OP taking into account market changeslabor, the demands of employers and the social demand of society. According to this EP 7M07109 - MSNM 2021, enrollment in master's programs has not been carried out.

No evidence of work under professional certification programs for students has been identified. Although the management of OP 7M07101/7M07104 – TPNSM, 7M07109 – MSNM, 7M07204 – MFNFM has potential interaction with enterprises to prepare students for professional certification.

Despite the fact that the university has entered into cooperation agreements with foreign educational organizations and research centers, for accredited EP there is no joint EP actually implemented with foreign universities.

#### EEC recommendations:

- Develop an action plan for the creation of joint educational programs with the identification of potential partners among national and foreign universities, coordination of the structure of the educational program, preparation of elements of the educational program for approval and the start of admission from 2025.

- Preview and approve the content and structure of the EP, taking into account changes in the labor market, the requirements of employers and the social demands of society (deadline until October 1, 2024).

-Develop and include in the EP development plan measures to prepare students for the professional certification procedure in the field of nanotechnology in the areas of application (deadline until January 1, 2025)

*Strengths/Best Practices:* Not identified.

# EEC conclusions based on the criteria:

According to the "Development and approval of an educational program" standard, educational programs have 11 satisfactory positions and 1 requiring improvement.



#### 6.4. Standard "Continuous monitoring and periodic evaluationeducational programs"

• The educational institution must determine mechanisms for monitoring and periodically evaluating the educational program to ensure the achievement of the goal and meet the needs of students and society and show the focus of the mechanisms on the continuous improvement of the educational program.

• Monitoring and periodic evaluation of the EP should include:

• the content of programs in the light of the latest scientific achievements in a specific discipline to ensure the relevance of the taught discipline;

• changes in the needs of society and the professional environment;

• workload, academic performance and graduationstudents;

• the effectiveness of student assessment procedures;

• expectations, needs and satisfactionstudents studying in EP;

• educational environment and support services and their compliance with the goals of the EP.

• The management of the EP must demonstrate a systematic approach to monitoring and periodically assessing the quality of the EP.

• OT, EP management must determine a mechanism for informing all interested parties about any planned or taken actions in relation to the OT.

• All changes made to the EP must be published.

#### Evidence

The university ensures a revision of the structure and content of the EP, taking into account changes in the labor market, the requirements of employers and the social demands of society. Revision of the objectives of the EP inKarIU is carried out at the stage of processing or updating through discussion at a department meeting. This procedure is based on QMS P 4-25-1-2023 "Regulations on the development of modular educational programs".

Familiarization with all interested parties (graduates, students, teaching staff of the department) is carried out at department meetings, during seminars, and when signing educational programs. During the meetings, employers confirm their participation in the development and subsequent analysis of the EP.

The results of monitoring the quality of EP implementation are presented in the form of analytical reports, reports and are considered at meetings of the university's academic council. The organization of monitoring procedures as part of the evaluation of the EP is planned. The results of quality monitoring are considered in the context of taking preventive and corrective actions.

In KarIU traces the participation of students, employers and other stakeholders in the revision of EP 7M07101/7M07104 - TPNSM, 7M07109 - MSNM, 7M07204 - MFNFM based on satisfaction surveys, involvement of collegial bodies and other forms and types of activities.

Examples of informationany planned or taken actions regarding the OP are mainly limited to the use of PPP email. Wide informing of all interested parties and publication of changes to the OP are not provided.

In its activities, the university strives to take into account changes in the labor market, the requirements of employers and the social demands of society, including for the revision of the EP.

# Analytical part

The EEC notes that the university ensures a review of the content and structure of educational programs with the participation of employers. This was confirmed during visits to departments EP 7M07101/7M07104 – TPNSM, 7M07109 – MSNM, 7M07204 – MFNFM and analysis of submitted documents.

The content of the EP is developed in the light of the latest scientific achievements, which meets the expectations and needs of students.

Also, members of the EEC note that during regular monitoring and periodic evaluation of accredited EP, the university evaluates the workload, academic performance and graduation of students, which is confirmed by the content.

To obtain an objective assessment in the learning process, teaching staff use various methods of monitoring the knowledge of teachers.

The OT strives to ensure the participation of students, employers and other stakeholders in the revision of the EP based on satisfaction surveys, involvement of collegial bodies and other forms and types of activities.

Information about any planned or taken actions in relation to the OP is of a limited nature; widespread information is not provided.

At the same time, the EEC notes that it is necessary to ensure constant and timely informing of students, teaching staff, and employers through various communication channels about all changes made in the EP. Ensure accessibility to all development-related materialsOP 7M07101/7M07104 – TPNSM, 7M07109 – MSNM, 7M07204 – MFNFM.

EEC notes that the laboratory and technical base of OP 7M07101/7M07104 – TPNSM, 7M07109 – MSNM, 7M07204 – MFNFM is satisfactory. At the time of the visit of the EEC for OP OP 7M07101/7M07104 - TPNSM, 7M07109 - MSNM, 7M07204 - MFNFM, the available equipment in the laboratory was demonstrated. However, it is necessary to expand the base with modern equipment for conducting scientific research of undergraduates in the areas: Nanomaterials and nanotechnologies.

*Strengths/Best Practices:* Not identified.

# EEC recommendations:

- Develop regulationsposting information on the university website about any changes made to educational programs with the establishment of procedures and deadlines until October 1, 2024, also aboutensure openness of planned or taken actions in relation to the EP, wide informing of all interested parties using modern and traditional means of communication.

# EEC conclusions based on the criteria:

According to the standard "Continuous monitoring and periodic evaluation of educational programs," educational programs have 9 satisfactory positions and 1 requiring improvement.

#### 6.5. Standard "Student-centered learning, teaching and assessment"

• The management of the educational program must ensure respect and attention to different groups of students and their needs, providing them with flexible learning paths.

• The management of the educational program must ensure the use of various forms and methods of teaching and learning.

• An important factor is the presence of own research in the field of teaching methods of EP academic disciplines.

• The management of the educational program must demonstrate the presence of a feedback system on the use of various teaching methods and evaluation of learning outcomes.

• EP management must demonstrate support for autonomystudents with simultaneous guidance and assistance from the teacher.

• The management of the EP must demonstrate the existence of a procedure for responding to complaintsstudents.

• The educational institution must ensure consistency, transparency and objectivity in the learning outcome assessment mechanism for each educational institution, including appeals.

• The educational organization must ensure that the procedures for assessing the learning outcomes of EP students comply with the planned results and goals of the program, and publish criteria and assessment methods in advance.

• The educational institution must define mechanisms to ensure that each graduate of the educational program achieves learning outcomes and ensure the completeness of their formation.

• Evaluators must be proficient in modern methods of assessing learning outcomes and regularly improve their skills in this area.

#### Evidence

Student-centered learning helps students develop key and professional competencies and be competitive in the labor market, and become active and responsible citizens.

The participation of students in the creation of EP that would reflect their expectations has become a trend in educational and professional areas in the development of EP. Based on this, students are actively involved in the process of developing EP.

This activity is regulated by the internal documents of the university:

- <u>*Policyequality, diversity and inclusion KarIU,*</u>
- <u>Position</u>on the organization of inclusive education for persons with disabilities in the NJSC KarIU,

• <u>Position</u> about the university educational grant, university scholarship and benefits for studying at NJSC "Kariu",

<u>Position</u> "Organization of current and milestone controls, intermediate certification and assessment of students' knowledge."

Rumanagement OPprovides undergraduates with equal opportunities to create an individual educational program aimed at developing professional competencies. Students receive information about the possibilities of building an individual educational trajectory, and also receive assistance in its implementation through the university website, as well as with the help of a supervisor. Academic disciplines are provided with methodological instructions and teaching materials. Students are given the opportunity to independently build an educational trajectory and make a choice from several proposed disciplines for the next academic year.

Students have free access to information resources and library collections, educational and scientific literature, information databases, including international data sources located in electronic libraries.

The university has created conditions for educational and research activities in all academic courses. The support system includes consultations with teachers on the individual work program of the disciplines being studied. Scientific supervisors of master's students supervise the adaptation process of students admitted to the university; conduct conversations aimed at supporting, assisting and consulting in the development of features of credit technology, features of education in universities, and the choice of elective disciplines.

Self-learner:

- viewing and downloading an individual curriculum (IUP);
- view and download the educational and methodological complex (UMKD);
- keeping records of current, rating and final assessments in an electronic journal;
- the possibility of filing an appeal for passed disciplines;
- view and download the transcript.

The assessment mechanism includes current control, midterm control, intermediate and final certification. The assessment of knowledge, skills and professional competencies of students using credit education technology is carried out on a 100-point scale with the final result being converted into a letter and digital equivalent. During the examination period, an appeal commission is created at the university. All educational achievements of students are reflected in the transcript.

Student-centered learning plays a great role in increasing the motivation and involvement of students in the educational process and the development of educational programs.

In accordance with paragraph 1 of Article 37 of the Law of the Republic of Kazakhstan "On social protection of people with disabilities in the Republic of Kazakhstan" approved by order of the Minister of Health and Social Development of the Republic of Kazakhstan dated December 9, 2016 No. 1050, the university has created a barrier-free environment to ensure conditions of accessibility of buildings and structures for students with special needs.

The academic buildings of the university have ramps, doorways, sanitary and hygienic premises for training and accommodation of students with disabilities.

The policy of the department is based on showing respect towards students within the framework of student-centered learning.

From the point of view of methods, student-centered teaching methods are practiced at KariU - "flipped learning", problem-based lecture, lecture-discussion, distance lecture, brainstorming method, casestudy, business games, etc. using interactive whiteboards and digital projectors.

#### Analytical part

An analysis of the standard "Student-centered learning, teaching and performance assessment" showed that the accredited EP uses fairly modern information and pedagogical learning technologies.

The EEC confirms that the university carries out constant monitoring, periodic evaluation and revision of educational programs for the effective implementation of the educational process and works to create a favorable learning environment for students. Practical teachers are involved in the process of designing, developing and implementing EP to conduct classes. The university management has demonstrated its openness and accessibility to students, teaching staff, and employers: reception hours for personal matters have been determined, and meetings with the university management are held on a systematic basis.

For students to successfully master EP disciplines, university teachers use both traditional and innovative teaching methods when conducting classes.

At the same time, the commission believes that improving the quality of the educational process will be facilitated by its own research both in the field of methods of teaching EP disciplines and in the field of developing methodological recommendations for these disciplines. In this regard, the EEC considers it necessary for teaching staff of accredited EPs to conduct their own research in the field of teaching methods, study and pass on positive experience in the use of innovative technologies in the educational process to young teachers.

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

- teaching methods in general – 91.7%-

- quality of teaching in general -100%;

- level of accessibility of library resources – 83%.

Members of the EEC note that the university has developed a mechanism for the management of the EP to respond to student complaints.

The assessment of knowledge, skills and professional competencies of students using credit learning technologies is carried out on a 100-point scale with the final result being converted into an alphabetical and digital equivalent. When assigning a grade, we take into account attendance, the level of lesson activity, timely and independent completion of all types of tasks, the ability to correctly formulate a problem, and find an answer.

# Strengths/Best Practices:

Not identified.

# EEC recommendations:

- EP leaders need to systematically analyze and disseminate modern experience and methods of teaching and assessing learning outcomes, both their own and other domestic and foreign universities.

# EEC conclusions based on the criteria:

By "Student-centered learning, teaching and assessment" educational programs have 10 satisfactory positions.



# 6.6. Standard "Students"

• The educational organization must demonstrate the existence of a policy for the formation of the student population in the context of educational programs, ensure transparency and publication of its procedures regulating the life cycle of students (from admission to completion).

- The leadership of the EP must determine the procedure for forming the contingentstudents based on:
- minimum requirements for applicants;
- maximum group size when conducting seminars, practical, laboratory and studio classes;
- forecasting the number of government grants;
- analysis of available material, technical, information resources, human resources;
- analysis of potential social conditions for students, inincl. provision of places in a hostel.

• The management of the EP must demonstrate readiness to conduct special adaptation and support programsfor newly admitted and foreign students.

• The public organization must demonstrate compliance of its actions with the Lisbon Recognition Convention, the presence of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and informal learning.

• The OT 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 educational institution must provide the opportunity for external and internal mobility of students of educational programs, as well as readiness to assist them in obtaining external grants for training.

• The management of the educational program must demonstrate its readiness to provide students with places of practice, facilitate the employment of graduates, and maintain contact with them.

• The educational institution must provide for the possibility of providing graduates of the educational program with documents confirming the qualifications obtained, including the achieved learning outcomes, as well as the context, content and status of the education received and evidence of its completion.

#### Evidence

The educational policy of the University is implemented in accordance with the legal and regulatory acts of international and national legislation in the field of higher and postgraduate education.

The main corporate documents regulating the life cycle of training at KarIU are:

- Academic policy,
- Rules for admission to KarIU,
- *Position*Rules for the transfer and reinstatement of students,

<u>Positionabout the university educational grant, university scholarship and benefits for studying in the</u> Nenets Autonomous OkrugKarIU".

The formation of the student population at the University is carried out by placing a state educational order (educational grants), as well as paying for tuition at the expense of citizens' own funds and other sources.

Coordination of activitiesThe acceptance of documents is carried out by the University Admissions Committee. Admission of citizens to the University is carried out based on the results of the Unified National Testing (UNT) or Comprehensive Testing (CT), conducted according to the rules and procedures developed by the National Testing Center of the Ministry of Science and Higher Education of the Republic of Kazakhstan (NTC).

To attract applicants, the department annually holds the following events: open dayat the faculty and university level, conducting presentations, distributing advertising booklets of educational programs at enterprises of relevant industries in Temirtau, Karaganda region and other cities of Kazakhstan.

Analysis of admission of applicants for the educational program 7M07101 Technology of processing of new structural materials (TPNSM (scientific)); 7M07104 Technology for processing new structural materials (TPNSM (prof)); 7M07109 Materials science and nanotechnology of materials (MSNM (prof.)); 7M07204 Metallurgy of ferrous and non-ferrous metals (MFNFM (prof)) shows that career guidance work on these OPs is carried out at an insufficient level due to the lack of positive dynamics in the number of students in the 1st year.

KarIU hasDepartment of Science, Innovation and International Cooperation(DSIC), which coordinates international academic mobility and deals with the comparison and mutual recognition of learning outcomes and qualifications.

Every year, student sports competitions, student initiations, international student day, debate tournaments, creative competitions, scientific conferences, intellectual games, round tables, meetings, etc. are held throughout the University.

#### Analytical part

Analyzing the "Students" standard, members of the EEC came to the conclusion that the university demonstrated its policy of forming a student population and the transparency of its procedures, and the compliance of its actions with the Lisbon Recognition Convention.

The management of the EP demonstrated the implementation of special adaptation and support programs for foreign students and first-year students.

The university cooperates with other educational organizations on academic mobility, provides students with internships, and promotes the employment of graduates.

To attract applicants, graduating departments annually hold the following events: open doors day, visits to schools in the city of Temirtau, distribution of advertising booklets of educational programs, etc.

The cost of student education includes wages, expenses for educational and practical training, student accommodation in a dormitory, services for using the library and the Internet, social tax, social contributions, travel expenses, expenses for the purchase of material and technical means, utility costs, and repairs.

It is noted that students are involved in carrying out research work together with the teaching staff.

A motivation system has been formed to attract students to research work. Students who have won intra-university research competitions, conferences, Olympiads, round tables, etc. are awarded diplomas, certificates, letters of gratitude and valuable gifts.

In order to implement academic mobility, bilateral cooperation agreements have been concluded with partner universities, but the management of the EP is working on its implementation. There is no information on the implementation of academic mobility of students.

According to the survey results, students express "complete satisfaction":

- availability of academic counseling 75%;
- accessibility of healthcare services 50%;
- existing educational resources 83%;
- quality of teaching 100%;
- providing students with hostel accommodation 66.7%.

# Strengths/Best Practices:

Not identified.

# EEC recommendations:

- EP management to develop an action planto promote external and internal mobility of students and begin to implement it. (Deadline - until 01/01/2025).

#### EEC conclusions based on the criteria:

According to the "Learners" standard, educational programs have 11 satisfactory positions and 1 position suggesting improvement.

#### 6.7. Standard "Faculty and teaching staff"

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

• The educational organization must demonstrate compliance of the staff potential of the teaching staff with the specifics of the educational program.

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

The leadership of the EP must demonstrate a change in the role of the teacher in connection with the transition tostudent-centered learning.
The PA must determine the contribution of the teaching staff of the EP to the implementation of the development strategy of the PA and other

strategic documents.

 The educational organization should provide opportunities for career growth and professional development of teaching staff of the EP.

The educational organization should provide opportunities for career grown and projessional development of reacting staff of me Li

• The management of the educational program must demonstrate a readiness to involve practitioners from relevant industries in teaching.

• The educational organization must demonstrate the motivation for the professional and personal development of teachers of the educational

program, including encouragement for the integration of scientific activities and education, and the use of innovative teaching methods.

An important factor is readiness to develop academic mobility within the EP and attract the best foreign and domestic teachers.

#### Evidence

One of the key subjects of the educational process of accredited EP is the teaching staff. He is responsible for the quality of the educational services provided, ensuring the development of students' life skills, competencies, independence, creativity, etc. The University bears primary responsibility for the quality of its employees and providing favorable conditions for their effective work, in connection with which, the University has developed clear, transparent and objective criteria for employee recruitment, appointment, promotion and dismissal.

KarIU has a prepared regulatory framework for implementing the personnel policy of teaching staff:

• Positionon the qualification characteristics of positions of scientific and pedagogical workers,

• Positionon competitive filling of positions of teaching staff and research staff of the university,

• Regulations on the rating assessment of the activities of teaching staff and employees of NJSC "KarIU" and the competitions "Best Department", "Best Faculty", "Best Division",

• <u>Position</u>about the orderattracting qualified specialists in higher, postgraduate and additional education programs to scientific and pedagogical activities at the university,

• Regulations on the system of remuneration, material incentives and bonuses for KarIU employees,

• *Position*on ensuring academic integrity at NJSC "KarIU",

Job descriptions of university teaching and research workers.

In order to improve the quality of the educational services provided, teachers implementing the EP improve their qualifications by taking advanced training courses, participating in international and national scientific, scientific-practical, scientific-methodological conferences and seminars.

Advanced training is an integral part of the development of the innovative potential of the EP department. Advanced training of teaching staff is planned at departments based on individual plans of teachers.

It follows from the Report that the ratio of the number of employees with academic degrees to the total number of teacherssedatenessdepartments of KarIU usually exceed the qualification requirements established Order No. 4Minister of Science and Higher Education of the Republic of Kazakhstan dated 01/05/2024

#### Analytical part

Based on the results of the analysis of the "Faculty and Teaching Staff" standard, the EEC notes the presence of an objective personnel policy, the creation of conditions for career growth and professional development of teaching staff, and social support for employees.

Teachers involved in the implementation of accredited educational programs take an active part in various public, scientific, methodological and research, cultural and other events of the region and the Republic. An analysis of human resources shows that the department is working at a sufficient level to attract teachers with an academic degree in the profile of the EP being implemented.

As part of the examination, the EEC did not find confirmation of the presence of the developed methodology as planned, advanced training and development of teaching staff competencies are organized and directed based on the plans and priorities of the university.

#### Strengths/Best Practices:

Not identified.

# EEC recommendations:

-To the management of the EP develop an action planto improve the qualifications and develop the competencies of teaching staff based on the plans and priorities of the university.

# EEC conclusions based on the criteria:

According to the "Teaching Staff" standard, educational programs have 8 satisfactory positions and 1 position suggesting improvement.



#### 6.8. Standard "Educational Resources and Student Support Systems"

• The educational organization must guarantee a sufficient number of training resources and student support services to ensure the achievement of the educational objectives.

• The educational institution must demonstrate the sufficiency of material and technical resources and infrastructure, taking into account the needs of various groups studying within the educational institution (adults, working people, foreign students, and students with disabilities).

• The management of the educational program must demonstrate the existence of procedures for supporting various groups of students, including information and consultation.

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

technological support for students and teaching staff (for example, online learning, modeling, databases, data analysis programs);
 library resources, including a collection of educational, methodological and scientific literature on general education, basic and major

disciplines on paper and electronic media, periodicals, access to scientific databases;

• examination of research results, graduation works, dissertations for plagiarism;

access to educational Internet resources;

• functioning of WI-FI on the territory of the educational organization.

• The OO demonstrates planning for providing EP with educational equipment and software similar to those used in the relevant sectors of the economy.

#### Evidence

To achieve the goals and objectives set before it, the university has all the necessary educational and material assets. The University buildings and structures comply with current sanitary standards and fire safety requirements. The areas owned by the University - classrooms and laboratory facilities, classrooms, workshops and other premises, sports facilities - comply with established norms and rules. The university has a modern social infrastructure. There is a canteen and first aid stations in the educational buildings. Nonresident students are provided with a hostel.

The university has sufficient material, technical, information and library resources used to organize the process of teaching and educating students.

The university has 6 educational and laboratory buildings with a total area of 44.01 thousand square meters, where classrooms, specialized classrooms and laboratories, and a university museum are located. University sports complex with a total area of 2300 sq. m., includes 6 game rooms and 2 open areas.

The fleet of modern computer equipment is more than 400 units. The computer park is regularly modernized. The volume of annual expenses for the purchase of computers and other information training tools is growing.

The university has free Internet access for students, teachers and staff, Wi-Fi zones, and a university website -https://tttu.edu.kz/.

The auditorium fund of the departments fully satisfies the design capacity of the cluster of accredited educational institutions. The department has a material and technical base (classroom fund, computer classes, computer programs, stock materials) that meets current sanitary and technical standards and ensures all types of theoretical and practical training provided for by the curriculum, as well as the effective implementation of undergraduate research work.

The total area of the premises of the departments of MF and MM is 1102.4 sq.m. These premises include: teaching, classrooms, computer classes, as well as pilot industrial sites for metallurgical production and material processing by pressure.

#### Analytical part

As a result of viewing the material base, members of the EEC note that the university has all the necessary conditions to ensure the educational process. The university buildings and structures comply with current sanitary standards and fire safety requirements.

There is a positive dynamics of resources and learning environment, library support for the educational process, activities aimed at improving the educational process by the leadership of the educational program are highlighted resource support for the implementation of the EP.

For example, students of accredited EP have the opportunity to work in an engineering laboratory, at 2 pilot industrial sites, including 7 melting furnaces, rolling and drawing equipment.

All types of written work are checked for plagiarism. At the same time, members of the EEC note that it is necessary to provide for the possibility of developing the university infrastructure taking into account the needs of students with disabilities.

During the analysis of the materials submitted for the work of the EEC, the working group did not establish the fact of the development and adoption of plans for further improvement of procedures for supporting various groups of students, including information and consultation.

According to the results of the student survey:

- 83% of students are "completely satisfied" with the availability and quality of Internet resources, 16.7% are "partially satisfied";

- 57.8% are "completely satisfied" with student lounges, 20.3% are "partially satisfied";

- 100% "completely satisfied" with the availability of computer classes;

- 100% "completely satisfied" with classrooms, classrooms for large groups;

- 50% are "completely satisfied" with the quality of medical care at the university, 25% are "partially dissatisfied", 25% found it difficult to answer.

#### Strengths/Best Practices:

Universitydemonstrates planning for providing EP with educational equipment and software similar to those used in the relevant sectors of the economy, for this purpose within the framework of the implementation of accredited EP The university has 2 pilot industrial sites (7 melting furnaces, rolling and drawing equipment).

# EEC recommendations:

The management of the EP should develop a long-term plan to further improve procedures for supporting various groups of students, including information and counseling (Deadline - until 01/01/2025).

# EEC conclusions based on the criteria:

According to the standard "Educational resources and student support systems" educational programs have 1 strong and 8 satisfactory positions.

#### 6.9. Public Information Standard

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

- expected learning outcomes of the educational program being implemented;
- qualifications and (or) qualifications that will be awarded upon completion of the educational program;
- approaches to teaching, learning, as well as the system (procedures, methods and forms) of assessment;
- information about passing scores and educational opportunities provided students;
- information about employment opportunities for graduates.

• The management of the OP should provide for a variety of ways to disseminate information, including the media, information networks to inform the general public and interested parties.

• Public information should include support and explanation of the country's national development programs and the system of higher and postgraduate education.

• The educational organization must demonstrate the reflection on the web resource of information characterizing it in general and in the context of educational programs.

- An important factor is the availability of adequate and objective information about the teaching staff of the EP.
- An important factor is informing the public about cooperation and interaction with partners within the framework of the OP.

#### Evidence

The University is constantly working to ensure the collection, analysis and dissemination of basic information for the effective management of educational programs and other activities. The procedure for publication about the activities of the university is regulated by the internal document QMS P-4-27-2022 "Regulations on informing the public."

The University's web resources are a means of supporting the educational process and a channel for exchanging information. Official information posted on the websites concerns the main areas of the University's activities and is intended for both external and internal use. The official representation of the university on the Internet is the website (https://tttu.edu.kz/). The principles of construction and structure of information materials posted on the official information website of the university are determined by the internal document QMS STO II.7-04.02-2021 "Internal information", "Regulations on the official website of KariU", which also regulates the technology for the creation and operation of the university website.

The website contains official information about the main areas of the university's activities (educational, scientific, educational, social); about faculties, college, departments, laboratories, departments, centers, divisions and other divisions; about news and events happening at the university. The website implements information services, such as "News and Announcements", "Rector's Blog" (https://tttu.edu.kz/ru/blog-rektora/), "History of the University", "Mission and Strategy of the University", "Faculties and other structural divisions of the University. The site contains links to significant information resources of the university, full-text electronic information systems and other resources useful for the educational and scientific process. Information on the website is posted in three languages: state - Kazakh, Russian and English.

The results of the external assessment of the University are published on the official website of the university: certificates of accredited EP of the University are presented.

In order to provide information about science, the scientific activities of the University, as well as about planned and held conferences, competitions, olympiads and other scientific events held by the University, the Department of Scientific Work and Commercialization maintains an active information support on the official website of the University.

Information posted on the official website of the University, as well as on the pages of faculties, is used in the preparation of information booklets about the University and in the admissions campaign, when interacting with partners and employers.

The site contains the following sections: "University", "Applicant", "IT school", "Science", "Education", "Corporate management".

The management of the University, teaching staff of the department speak on central and local television, in newspapers and magazines, in the media on current problems of economics, management and the role of the university in solving these problems. For these purposes, the resources and capabilities of the university are used.

The University and all its structural divisions maintain an open dialogue with suppliers and consumers of educational services on an ongoing basis. All information about the activities of the University and the department, the conditions for admission, training, and development opportunities are posted on the University website. In addition, the University teaching staff and its employees systematically appear in the media, communicating the results of their activities to the public and stakeholders.

#### Analytical part

The EEC notes that in the field of information dissemination policy, the NJSC KarIU demonstrates a policy of openness and involvement in informing the public of applicants, employers, participants in the educational process and all interested parties, continuous development and adaptability to the changing realities of society. The management of the EP uses the media and social networks to disseminate information. The website publishes information about the activities of the university and financial statements. The university and its accredited educational programs take part in national and international rankings.

Based on an analysis of the available information regarding OT and EP, the commission notes that the information on the university website is available to interested parties in the educational process (students, teachers, employers, the public), but it is not complete enough, and a mechanism for its timely updating has not been defined. There are no examples of how the satisfaction of stakeholders in the quality of the information received and its completeness is studied. It is necessary to refine and supplement the website information in the main sections: in relation to EP, teaching staff, university partners and EP.

According to the results of the student survey, "completely satisfied"-Availability and quality of Internet resources – 83%;

*Strengths/Best Practices* Not identified.

#### EEC recommendations:

-The management of the educational institution, in order to obtain objective and up-to-date information about the educational programs being implemented, should determine the frequency of updating information on the university website, in particular, data on the positioning of the university and the educational program in the market of educational services (Deadline - until 01/01/2025).

-The management of the educational institution should determine the list of necessary actions for the prompt and timely updating of information posted on the university website on the content of educational programs, the development plan for educational programs, and the personnel of teachers implementing accredited educational programs (Deadline - until 01/01/2025).

#### EEC conclusions based on the criteria:

According to the standard "Informing the public" educational programs have 10 satisfactory positions.

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

According to the "Educational Program Management" standard: *Not identified.* 

According to the "Information Management and Reporting Standard": *Not identified.* 

According to the standard "Development and approval of an educational program": *Not identified.* 

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

Not identified.

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

Not identified.

According to the "Students" standard: *Not identified.* 

According to the "Faculty and Teaching Staff" standard: *Not identified.* 

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

University demonstrates planning for providing EP with educational equipment and software similar to those used in the relevant sectors of the economy, for this purpose within the framework of the implementation of accredited EP The university has 2 pilot industrial sites (7 melting furnaces, rolling and drawing equipment).

According to the "Public Information" standard: *Not identified.* 

# (VIII) OVERVIEW OF RECOMMENDATIONS FOR IMPROVING QUALITY FOR EACH STANDARD

# According to the "Educational Program Management" standard:

- Concretize and update the development plan for accredited EPs in order to determine their uniqueness and taking into account the priority areas for the development of scientific research for industries and in the fieldnanotechnology, in accordance with the University Development Strategy and changes in regulations in the higher education system (until January 1, 2025).

# According to the "Information Management and Reporting Standard":

- To provide participants in the educational process with the necessary information, improve the information content of the websites of structural divisions presented on the university website according to the levels of study implemented by the EP, expand the personal pages of teaching staff and heads of educational programs (until January 1, 2025).

-Develop, document and include clear quantitative criteria in the information collection and analysis systemassessment of the effectiveness and efficiency of activities for the implementation of the EP (duration until January 1, 2025).

#### According to the standard "Development and approval of an educational program":

- Develop an action plan for the creation of joint educational programs with the identification of potential partners among national and foreign universities, coordination of the structure of the educational program, preparation of elements of the educational program for approval and the start of admission from 2025.

- Preview and approve the contents and structures of 7M07109 – MSNM, taking into account changes in the labor market, employers' requirements and social demands of society (deadline until October 1, 2024).

-Develop and include in the EP development plan measures to prepare students for the professional certification procedure in the field of nanotechnology in the areas of application (duration until January 1, 2025) (for EP 7M07109 - MSNM).

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

Develop regulations establishing the procedure and timing for posting information on the university website of any changes made to educational programs by October 1, 2024, alsoensure openness of planned or taken actions in relation to the EP, wide informing of all interested parties using modern and traditional means of communication.

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

- EP leaders need to systematically analyze and disseminate modern experience and methods of teaching and assessing learning outcomes, both their own and other domestic and foreign universities.

# According to the "Students" standard:

- The management of the EP should develop an action plan to promote external and internal mobility of students and begin to implement it. (Deadline - until 01/01/2025).

#### According to the "Faculty and Teaching Staff" standard:

-The management of the EP needs to systematically strengthen efforts to improve the qualifications and develop the competencies of teaching staff based on the plans and priorities of the university.

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

The management of the EP should develop a long-term plan to further improve procedures for supporting various groups of students, including information and counseling (Deadline - until 01/01/2025).

#### According to the "Public Information" standard:

-The management of the educational institution, in order to obtain objective and up-to-date information about the educational programs being implemented, should determine the frequency of updating information on the university website, in particular, data on the positioning of the university and the educational program in the market of educational services (Deadline - until 01/01/2025).

-The management of the educational institution should determine the list of necessary actions for the prompt and timely updating of information posted on the university website on the content of educational programs, the development plan for educational programs, and the personnel of teachers implementing accredited educational programs (Deadline - until 01/01/2025).



# (IX) <u>OVERVIEW OF RECOMMENDATIONS FOR THE DEVELOPMENT OF</u> <u>EDUCATIONAL ORGANIZATIONS</u>

None.

# (X) RECOMMENDATION TO THE ACCREDITATION BOARD

Members of the EEC came to the unanimous opinion that the OP7M07101 Technology for processing new structural materials (TPNSM (scientific)); 7M07104 Technology for processing new structural materials (TPNSM (prof)); 7M07109 Materials science and nanotechnology of materials (MSNM (prof.)); 7M07204 Metallurgy of ferrous and non-ferrous metals (MFNFM (prof.)recommended for accreditation for a period of 5 years.



# Appendix 1. Evaluation table "Conclusion of the external expert commission"

No.	No.	Evaluation criteria	]	•		
			Strong	Satisfactory	Suggests improvement	Unsatisfactory
Stan	dard 1 ''	Educational program management"				
1	1.	The higher and/or postgraduate education organization must have a published quality assurance policy that reflects the relationship between research, teaching and learning		+		
2	2.	The organization of higher and (or) postgraduate education must demonstrate the development of a culture of quality assurance, including in the context of EP		+		
3	3.	A commitment to quality assurance must apply to any activity carried out by contractors and partners (outsourcing), including joint/double degree education and academic mobility.	1	+		
4	4.	The management of the EP demonstrates transparency in the development of a development plan for the EP, containing the start date for implementation, based on an analysis of its functioning, the real positioning of the EP and the focus of its activities on meeting the needs of the state, employers, students and other interested parties			*	
5	5.	The leadership of the EP demonstrates the presence of mechanisms for the formation and regular review of the EP development plan and monitoring its implementation, assessing the achievement of learning goals, compliance with the needs of students, employers and society, making decisions aimed at continuous improvement of the EP		+	2	
6	6.	The management of the EP should involve representatives of stakeholder groups, including employers, students and teaching staff in the formation of a development plan for the EP		+		
7	7.	The management of the EP must demonstrate the individuality and uniqueness of the EP development plan, its consistency with national priorities and the development strategy of the organization of higher and (or) postgraduate education			Ż	
8	8.	The organization of higher and (or) postgraduate education must demonstrate a clear definition of those responsible for business processes within the EP, an unambiguous distribution of job responsibilities of staff, and delimitation of the functions of collegial bodies		÷		
9	9.	The management of the educational program must provide evidence of the transparency of the educational program management system	/	+		
10	10.	The management of the EP must demonstrate the existence of an internal quality assurance system for the EP, including its design, management and monitoring, their improvement, decision-making based on facts		+		
11	11.	The management of the educational institution must manage risks, including within the framework of the educational institution undergoing initial accreditation, and also demonstrate a system of measures aimed at reducing the degree of risk		+		
12	12.	The management of the educational program must ensure the participation of representatives of employers, teaching staff, students and other interested parties in the collegial bodies governing the educational program, as well as their representativeness when making decisions on issues of managing the educational program		+		
13	13.	The OT must demonstrate innovation management within the EP,		+		

33	2.	The management of the EP must ensure that the content of the EP corresponds to the established goals, including the intended learning		+		
22	2	approval at the institutional level				
32	1.	The PA must define and document procedures for developing EP and their		+		
Stan	dard 3	"Development and approval of an educational program"		10		
	I	Total according to standard	0	16	0	0
		for processing personal data of students, employees and teaching staff based on their documented consent				
31	16.	The public organization must confirm the implementation of procedures		+		
30	15.	Availability of educational resources and support systems for students		+		
		education at the university				
29	14.	student satisfaction with the implementation of the EP and the quality of		+		
28	13.	grade level, student achievement and dropout	1	+		
27	12.	dynamics of the student population in terms of forms and types		+		
26	11.	should take into account:         key performance indicators		+		
		Information to be collected and analyzed within the framework of the OT should take into account:				
		of activities, including in the context of EP			1	
25	10.	The OT must provide for an assessment of the effectiveness and efficiency		/+	1	
		teaching staff, staff and students within the educational program				
		mechanisms for measuring the degree of satisfaction of the needs of	-			
24	9.	The educational organization must demonstrate the presence of		+		
		communication mechanism with students, employees and other interested parties, as well as mechanisms for resolving conflicts				
23	8.	The management of the EP must demonstrate the existence of a communication mechanism with students employees and other interested		+		
02	0	information, as well as making decisions based on them				
		employees and teaching staff in the processes of collecting and analyzing			1	
22	7.	An important factor is the presence of mechanisms for involving students,		+		
		provision				
		persons for the accuracy and timeliness of information analysis and data				
21	0.	the protection of information, including the identification of responsible		F		
21	6.	projects           The PA must demonstrate the determination of the procedure and ensuring		+		
		divisions, senior management, and the implementation of scientific				
		management of the EP, the activities of collegial bodies and structural				
20	5.	The PA must establish the frequency, forms and methods of assessing the		+		
		research				
		efficiency of the activities of departments and departments, scientific				
17	''	levels of the structure, including assessment of the effectiveness and		2		
18	3. 4.	The EP should provide for a system of regular reporting, reflecting all		+		
18	3.	improve the internal quality assurance system         OT management must demonstrate fact-based decision making		+		
		mechanism for the systematic use of processed, adequate information to				
17	2.	The management of the EP must demonstrate the existence of a		+		
		the organization				
		a variety of methods to collect and analyze information in the context of				
		information and communication technologies and software, and that it uses				
10	1.	analyzing and managing information based on the use of modern				
Stan 16	dard 2	"Information Management and Reporting" The organization must demonstrate that it has a system for collecting,		+		
<u>C</u>	1 1 0	Total according to standard	0	13	2	0
		programs				
15	15.	EP management must undergo training in educational management		+		
		interested parties				
14	14.	The management of the EP must demonstrate evidence of readiness for openness and accessibility for students, teaching staff, employers and other		+		
		The monogement of the ED must demonstrate exidence of modiness for				

56	3.			+		
		various forms and methods of teaching and learning An important factor is the presence of your own research in the field of		+		
55	2.	attention to different groups of students and their needs, provide them with flexible learning paths The management of the educational program should provide for the use of		+		
<b>Stan</b> 54	<b>dard 5 "</b> 1.	Student-centered learning, teaching and assessment" The management of the educational program must ensure respect and		+		
a	_	Total according to standard	0	9	1	0
53	10.	All changes made to the OP must be published			+	
52	9.	OT, EP management must determine a mechanism for informing all interested parties about any planned or taken actions regarding the EP		+		
51	8.	The management of the EP must demonstrate a systematic approach to monitoring and periodically assessing the quality of the EP		+		
50	7.	educational environment and support services, and their compliance with the goals of the EP		+		
49	6.	expectations, needs and satisfaction of students with EP training		/ +		
48	5.	effectiveness of student assessment procedures		+		
47	4.	workload, performance and graduation of students		+		<u> </u>
46	3.	in a specific discipline to ensure the relevance of the taught discipline changes in the needs of society and the professional environment		+	/	
45	2.	the content of the program in the light of the latest scientific achievements		+		
		Monitoring and periodic evaluation of the EP should include:				
		of the mechanisms on the continuous improvement of the educational program.				
		periodically evaluating the educational program to ensure the achievement of the goal and meet the needs of students and society and show the focus				
	<b>rams''</b>	The educational institution must determine mechanisms for monitoring and		+		
Stan	dard 4	"Continuous monitoring and periodic evaluation of educational	0	11	1	0
		(or) postgraduate education in the EHEA Total according to standard	0	11	1	0
		learning outcomes of the EP implemented by organizations of higher and				
43	12.	An important factor is the correspondence of the content of the EP and the		+		
42	11.	The structure of the EP should provide for various types of activities to ensure that students achieve the planned learning outcomes		+		
r 1	10.	disciplines and planned results correspond to the level of study (bachelor's, master's, doctoral)				
41	10.	the EP and ensuring its quality The management of the EP must ensure that the content of academic		+		
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		+		
39	8.	An important factor is the possibility of preparing students for professional certification (IC)			+	
		of disciplines and professional practices on the formation of learning outcomes				
38	7.	defined and correspond to a certain level of the NQF and QF-EHEA The management of the educational program must determine the influence		+		
37	6.	examinations of the content of the EP and the planned results of its implementation The qualification awarded upon completion of the EP must be clearly		+		
36	5.	personal qualities The management of the EP must demonstrate the conduct of external		+		
35	4.	The management of the EP must ensure the availability of developed models of the EP graduate that describe the learning outcomes and		+		
		changes in the labor market, the requirements of employers and the social demands of society				
		The management of the EP must demonstrate the existence of mechanisms for revising the content and structure of the EP, taking into account		+		

					1	
57	4.	The management of the educational program must demonstrate the		+		
		presence of feedback mechanisms on the use of various teaching methods				
	_	and evaluation of learning outcomes				
58	5.	The leadership of the educational program must demonstrate the presence		+		
		of mechanisms to support student autonomy with simultaneous guidance				
		and assistance from the teacher				
59	6.	The management of the educational program must demonstrate the		+		
		existence of a procedure for responding to student complaints				
60	7.	The educational institution must ensure consistency, transparency and		+		
		objectivity of the mechanism for assessing learning outcomes for each				
		educational program, including appeal				
61	8.	The educational organization must ensure that the procedures for assessing		+		
		the learning outcomes of EP students comply with the planned results and				
		goals of the program, publishing criteria and assessment methods in				
		advance				
62	9.	The educational institution must define mechanisms to ensure that each	-	+		
		graduate of the educational program achieves learning outcomes and				
		ensure the completeness of their formation				
63	10.	Evaluators must be proficient in modern methods of assessing learning		+		
		outcomes and regularly improve their skills in this area				
		Total according to standard	0	10	0	0
Stan	dard 6 '	'Students''				
64	1.	The educational organization must demonstrate the existence of a policy		+		
		for the formation of a contingent of students in the context of the		1		
		educational program, ensure transparency and publication of its procedures				
		regulating the life cycle of students (from admission to completion)				
		The management of the EP must determine the procedure for forming the				
		student population based on:			-	8
65	2.	minimum requirements for applicants		+		
66	3.	maximum group size when conducting seminars, practical, laboratory and		+		
00	5.	studio classes			1	
67	4.	forecasting the number of government grants		+		
68	5.	analysis of available material, technical, information resources, human		+	-	
00	5.	resources		'		
69	6.	analysis of potential social conditions for students, incl. provision of places		-		
09	0.	in a hostel		+		
70	7.	The management of the educational program must demonstrate readiness				
70	7.	to conduct special adaptation and support programs for newly admitted and		+		
71	8.	foreign students The public organization must demonstrate compliance of its actions with		<u></u>	-	
/1	8.			+		
		the Lisbon Recognition Convention, the presence of a mechanism for recognizing the results of academic mobility of students, as well as the	1			
				1		
72	0	results of additional, formal and informal training				
12	9.	The PA should cooperate with other educational organizations and national	1	+		
		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				
72	10	recognition of qualifications				
73	10.	The educational institution must provide the opportunity for external and			+	
		internal mobility of students of educational programs, as well as readiness				
74	11	to assist them in obtaining external grants for training				
74	11.	The management of the educational program must demonstrate its		+		
		readiness to provide students with places of practice, promote the				
		employment of graduates, and maintain contact with them				
75	12.	The educational institution must provide for the possibility of providing		+		
		graduates of the educational program with documents confirming the				
		qualifications obtained, including the achieved learning outcomes, as well				
		as the context, content and status of the education received and evidence of				
		its completion				

C1	1 17	Total according to standard	0	11	1	0
<u>Stan</u> 76	1.	"Teaching staff" The OT must have an objective and transparent personnel policy, including in the context of EP, including recruitment, professional growth and development of personnel, ensuring the professional competence of all staff		+		
77	2.	The OT must demonstrate compliance of the staff potential of the teaching staff with the specifics of the EP		+		
78	3.	The management of the EP must demonstrate awareness of responsibility for its employees and providing them with favorable working conditions		+		
79	4.	The management of the educational program must demonstrate a change in the role of the teacher in connection with the transition to student-centered learning		+		
80	5.	The PA must determine the contribution of the teaching staff of the EP to the implementation of the development strategy of the OT and other strategic documents		+		
81	6.	The educational institution should provide opportunities for career growth and professional development of teaching staff of the EP		+		
82	7.	The management of the EP must demonstrate its readiness to involve practitioners from relevant sectors of the economy in teaching.		+		
83	8.	The educational organization must demonstrate the motivation for the professional and personal development of teachers of the educational program, including encouragement for the integration of scientific activities and education, the use of innovative teaching methods		+		
84	9.	An important factor is readiness to develop academic mobility within the EP and attract the best foreign and domestic teachers		+		
		Total according to standard	0	8	1	0
	dard 8	"Educational resources and student support systems"				
85	1.	The educational institution must guarantee a sufficient number of educational resources and student support services to ensure the achievement of the objectives of the educational institution.		+		
86	2.	The educational institution 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 people, foreign students, as well as students with disabilities)		+	7	
87	3.	The management of the educational program must demonstrate the availability of procedures for supporting various groups of students, including information and consultation The management of the EP must demonstrate the compliance of	•	+	7	
88	4.	<i>information resources with the specifics of the EP, including:</i> technological support for students and teaching staff (for example, online learning, modeling, databases, data analysis programs)		+		
89	5.	library resources, including a fund of educational, methodological and scientific literature on general education, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases		+		
90	6.	examination of research results, graduation works, dissertations for plagiarism		+		
91	7.	access to educational Internet resources		+		
92	8.	functioning of Wi-Fi on the territory of the educational organization		+		
93	9.	The OT demonstrates planning for providing EP with educational equipment and software similar to those used in the relevant sectors of the economy	+			
		Total according to standard	1	8	0	0
Stan	dard 9	"Public Information"				
		The public organization must publish reliable, objective, up-to-date information about the educational program and its specifics, which should include:				
94	1.	expected learning outcomes of the educational program being implemented		+		
95	2.	qualifications and (or) qualifications that will be awarded upon completion		+		

		of the educational program				
96	3.	approaches to teaching, learning, 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 employment opportunities for graduates		+		
99	6.	The management of the EP should provide for a variety of ways to disseminate information, including the media, information networks to inform the general public and interested parties		+		
100	7.	Public information should include support and explanation of the country's national development programs and the system of higher and postgraduate education		+		
101	8.	The educational organization must demonstrate the reflection on the web resource of information characterizing 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 teaching staff of the EP		+		
103	10.	An important factor is informing the public about cooperation and interaction with partners within the framework of the EP		+		
		Total according to standard	0	10	0	0
		TOTAL	1	96	6	

