«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING

REPORT

on the results of the work of the external expert commission for evaluation for compliance with the requirements of standards for international specialized (program) accreditation of a joint educational program of higher and (or) postgraduate education (based on ESG, a European approach to quality assurance in joint programmes, 2015)

7M07203 Metallurgy of ferrous and non-ferrous metals (joint OP with the Ukrainian State University of Science and Technology)

KARAGANDA INDUSTRIAL UNIVERSITY

in the period from March 25 to March 27, 2024.

INDEPENDENT ACCREDITATION AND RATING AGENCY
External Expert Commission

Addressed to
Accreditation
to the NAAR Council

«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ
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2024 year

CONTENT

(I) LIST OF SYMBOLS AND ABBREVIATIONS

AC – Attestation Commission
SCSH PR – State Compulsory Standard of Higher and Postgraduate Education
DAP – Department of Academic Policy
DSIIC– Department of Science, Innovation and International Cooperation
DDT – Department of Digital Transformation
ICT – Information and Communication Technologies
IUP – Individual Educational Plan
KED – Catalog of Elective Disciplines
MiM – Metallurgy and Materials Science
MEP – Modular educational program
MSHE RK – Ministry of Science and Higher Education of the Republic of Kazakhstan
MPS UVD – Local Police Service of the Internal Affairs Directorate
MTB – Material technical base
MFNFM – Metallurgy of ferrous and non-ferrous metals
NAO – Non-profit joint-stock company
SW – Scientific research work
NTC – Scientific and Technical Council
NCHRVO – National Center for Higher Education Development
OHPE – Organization of Higher and Postgraduate Education
EP – Educational Organization
GED – General Education Disciplines
EP – Educational programs
TS – Teaching staff
RK – Republic of Kazakhstan
LO – Learning Outcomes

Walorking Curriculum
– Internal Quality Assurance System
JEP – Joint Educational Program
USUNT – Ukrainian State University of Science and Technology
EMD – Educational and Methodological Department
UMS – Educational and Methodological Council
SSC – Student Service Center
DER – Digital educational resources
TsOU UVD – Operational Control Center of the Internal Affairs Directorate

(II) INTRODUCTION

In accordance with order No. 31-24-OD dated 31.01.2024 Independent Accreditation and Rating Agency from March 25 to 27, 2024, an external expert commission conducted assessment of compliance of educational programs 7M07203 Metallurgy of ferrous and non-ferrous metals (joint EP with the Ukrainian State University of Science and Technology) of the Karaganda Industrial University with the standards for international specialized (program) accreditation of a joint educational program of higher and (or) postgraduate education (based on ESG, the European approach to quality assurance of joint programs, 2015) (dated June 16, 2020 No. 57-20-OD, sixth edition) in a hybrid format.

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

Composition of the EEC::

1) ***Chairman of the IAAR Commission*** – Shcherbina Aleksey Vladimirovich, 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 Natalia Vladimirovna, professor, Doctor of Economics, head of the department of technology, organization and management of construction, FGAOU VO "V.I. Vernadsky Crimean Federal University" (Russian Federation) *On-line participation*

3) ***IAAR Expert –*** Natalia Valentinovna Ryvkina, Master, Senior Lecturer **,** Department of Construction, L.N. Gumilyov Eurasian National University (Astana) *Off-line participation*

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

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

6) ***IAAR Expert*** – Nazhipkyzy Meruert, PhD, Associate Professor, Department of Chemical Physics and Materials Science, Al-Farabi Kazakh National University (Republic of Kazakhstan) *Off - line participation*

7) ***IAAR Expert*** – Mazdubai Asylkhan Vladimirovich, PhD , Associate Professor, Head of the Department of Mechanics and Oil and Gas Engineering, Toraighyrov University (Republic of Kazakhstan) *Op-line participation*

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

9) ***IAAR Expert –*** Kilibayev Erkebulan Omirlievich, Ph.D., Senior Lecturer, Department of Non-Ferrous Metallurgy, Corresponding Member of the International Academy of Informatization, L.N. Gumilyov Eurasian National University (Republic of Kazakhstan) *Offline participation*

10) ***IAAR Expert, Employer*** - Turebekova Zhanar Meiramovna, Head of the Department of Human Capital Development of the Chamber of Entrepreneurs of Almaty (Republic of Kazakhstan) *Op-line participation*

11) ***IAAR Expert, employer*** - Temirlan Khaleluly Madiyev, leading expert of the investment projects support department of the Chamber of Entrepreneurs of Almaty (Republic of Kazakhstan) *Op-line participation*

12) ***IAAR Expert , with student*** – Amanbaev Chingis Anasovich, 1st year master's student of the OP "Construction ", member of the Alliance of Students of Kazakhstan, Eurasian National University named after L.N. Gumilyov (Astana) *Op-line participation*

13) ***IAAR Expert, student*** – Yamaltdinov Bogdan Maratovich, 1st year master's student of the program "Chemical Technology of Organic Substances", member of the Alliance of Students of Kazakhstan, Toraighyrov University (Republic of Kazakhstan) *Op-line participation*

14) ***IAAR Expert, student*** - Tynymbaeva Aruzhan Muratkyzy, master's student of the educational program "Materials Science and Technology of New Materials", Kazakh National Research Technical University named after K.I. Satpayev (Republic of Kazakhstan) *Op-line participation*

15) ***IAAR Expert, student*** - Yerzhan Kulkubayev, 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) *Op-line participation*

16) ***IAAR Coordinator*** - Saidulaeva Malika Akh'yadovna, project manager of the Independent Agency for Accreditation and Rating (Republic of Kazakhstan) *O ff - line participation*

(III) PRESENTATION OF THE EDUCATIONAL ORGANIZATION

Non-profit Joint-Stock Company "Karaganda Industrial University" (hereinafter NJSC "KaRIU") is the leading university in Kazakhstan for the training of highly qualified personnel with higher and postgraduate education in metallurgy, mechanical engineering, chemical, construction and other related metallurgy areas, which are a priority for the mining and metallurgical industry of the Republic of Kazakhstan.

NAO "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 on the right of economic management "Karaganda State Industrial University" (formerly the Plant-Higher Technical University 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 degree programs, and 2 Applied Bachelor's degree programs.

The university consists of 3 faculties, 11 departments and 1 scientific structural unit – DNIiMS.

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

In the General Ranking of the TOP-20 Universities of the Republic of Kazakhstan of 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 of the Independent Agency for Quality Assurance in Education in 2022 – 7th position.

The number of students at the University at the time of accreditation. The number of full-time students as of January 1, 2024 is only 2,323 people, of which: on the basis of a state educational grant - 1,144. Master's students - 38, of which 30 by state order, doctoral students - 17, of which 17 by state order.

University staff: The number of full-time teachers at the university is 125 people; of which 8 are doctors of science, 36 are candidates of science, 17 are PhDs, and 54 are masters. The average age of the teaching staff at the university is 49 years. The number of full-time teachers with a degree is 50%.

Currently, the training of master's students in accredited educational programs is carried out on the basis of license No. KZ 86 LAA 00019217 dated October 30, 2020, issued by the Committee for Control in the Sphere of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan dated October 29, 2020 No. 426.

The mission of the university: High-quality training of technical personnel based on advanced scientific achievements and high professional standards in the field of education.

The employment rate of graduates of the last three years in accredited institutions is 100%.

Research and business projects by departments in the context of accredited educational programs:

Implementation of research and development work financed from the state budget:

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

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

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

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

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

6. Study of the process of selective reduction of iron by 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 semi-finished product (AP19175779);

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

Performance of contractual work during the accredited period:

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

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

3. "Development of optimal modes for obtaining agglomerate with increased strength characteristics from a batch based on phosphorite raw materials of fraction 0-10 mm of Kazphosphate LLC and determination of preliminary technical and economic indicators" for Kazphosphate LLC;

4. "Testing of technology for smelting rich titanium slag (RTS) from pelletized mono-batch based on titanium raw materials produced by Obukhov Mining and Processing Plant LLC for Modernization, Innovation and Development LLC."

(IV) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE

International specialized accreditation of OP 7M07203 Metallurgy of ferrous and non-ferrous metals (joint OP with the Ukrainian State University of Science and Technology) of Karaganda Industrial University according to IAAR standards is being carried out for the first time.

(V) DESCRIPTION OF THE VISIT OF THE EEC

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

order to coordinate the work of the EEC 24.03.2024 An online introductory meeting was held, during which powers were distributed among the commission members, the schedule of the visit was clarified, and agreement was reached on the selection of examination methods.

In order to obtain objective information on the quality of educational programs and the entire infrastructure of the university, 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, employers. A total of 44 people took part in the meetings. representative (table 1).

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

Participant category	Quantity
Rector	1

Vice-Rector's building	3
Heads of structural divisions	15
Deans	3
Heads of Departments	7
Teachers	5
Students, master's students, doctoral students	6
Graduates	-
Employers	4
Total	44

During the visual inspection, the members of the EEC got acquainted with the state of the material and technical base, visited the metallurgy and materials science laboratories, the smelting hall B building, 1-134 LIP "EMiN", the assembly hall, the museum, 1-247 Subscription hall.

At the meetings of the NAAR EEC with the university's target groups, the mechanisms for implementing the university's policy were clarified and individual data presented in the university's self-assessment report were specified.

The members of the EEC visited the practice bases of the accredited programs: JSC " Qarmet ".

According to the program of the visit, classes on the accredited educational programs were not held according to the approved schedule.

In accordance with the accreditation procedure, a survey was conducted among 20 teachers and 6 students, including junior and senior students.

In order to confirm the information presented in the Self-Assessment Report, external experts requested and analyzed the university's working documentation. Along with this, the experts studied the university's online positioning through the official website of the university https://tttu.edu.kz/.

As part of the planned program, recommendations for improving the accredited educational programs of the Karaganda Industrial University, developed by the EEC based on the results of the examination, were presented at a meeting with the management on 27.03.2024.

(VI) COMPLIANCE WITH SPECIALISED ACCREDITATION STANDARDS

6.1. Standard "Right to Participate. Acceptability"

✓ *Educational organizations planning to implement a joint educational program must be recognized by the relevant authorities of the country in which they are located.*

✓ *Participation in the implementation of a joint educational program and the assignment of a joint academic degree must comply with national regulations.*

✓ *The academic degree(s) awarded must correspond to the national qualification system of the countries in which the educational institutions are located.*

✓ *A joint educational program must be developed and implemented with the involvement of all partner educational organizations.*

✓ *The conditions for the development and implementation of a joint educational program must be clearly set out in the cooperation agreement between the educational organizations – partners.*

✓ *The cooperation document must set out the following:*

✓ *information on the academic degree (qualification, degrees) awarded upon mastering (completion) of a joint educational program*

✓ *coordination and responsibility of the involved partner educational organizations with regard to management and financial organization (including funding, sharing of costs and revenues, etc.)*

✓ *rules for admission and selection of students*

✓ *mobility of students and teachers*

✓ *rules for conducting examinations, methods for assessing the achievements of students, recognition of ECTS credits and procedures for awarding joint academic degrees*

Evidential part

Non-profit Joint-Stock Company "Karaganda Industrial University" (NAO "KaRIU") operates on the basis of license KZ86LAA00019217 dated October 30, 2020. Appendix to license No. 014 7M072 "Production and processing industries" issued on October 29, 2020. Place of issue: Astana.

Institutional accreditation is valid from 30 May 2019 to 29 May 2024. Registration number

HE-IA-00004/01. Issued on 2 December 2020. ARQA Independent agency for accreditation and examination of the quality of education.

Specialized accreditation of OP 7M07203 "Metallurgy of ferrous and non-ferrous metals" ("MChICM"), valid from May 30, 2019 to May 29, 2024. Registration number HE-SA-000077. ARQA Independent agency for accreditation and examination of the quality of education.

The accredited educational program is registered in the Register of educational programs of the Ministry of Health and Higher Education of the Republic of Kazakhstan: 7M07203 MChCM – 19.08.2019.

Ukrainian State University of Science and Technology. Location: 49010, Dnipropetrovsk region, Dnipro city, Lazaryan street 2, operates on the basis of a license (Registration number No. 56-l. Date of license granting: March 29, 2022. Ministry of Education and Science of Ukraine), State accreditation. Certificate No. 04016501 dated May 04, 2022.

Participation in the implementation of the joint educational program is carried out on the basis of the following documents:

1. Agreement on the implementation of a joint educational program between NAO "Kariu" and USTU.

2. Licenses for the right to carry out educational activities (NAO "KarIU" and USTU).

3. Permission to implement the educational program issued by the competent authority.

4. Constituent documents of the educational organization: Charter of NAO "KarIU"; Charter of USTU.

5. Academic policy of the university.

A graduate of the educational program 7M07203 MChIM (scientific and pedagogical direction) is awarded the academic degree of Master of Engineering in the educational program 7M07203 "MChIM", which corresponds to the national qualification system of the Republic of Kazakhstan. A graduate of USTU is awarded the qualification of Master.

The development and implementation of a joint educational program is carried out by partner universities jointly on the basis of an Agreement on the joint implementation of an educational program in accordance with the following documents:

- Regulation on the development of modular educational programs of NAO "KarIU" QMS P 4-25-1-2021.

- Regulations on the organization of the educational process at USTU.

The conditions for the development and implementation of the joint EP are set out in the Cooperation Agreements between the partner universities, and substantiate: the status of students, financial support for the implementation of the EP, the conditions and procedure for implementing educational activities during the implementation of the EP for students at USTU and for students at NAO "Kariu", the obligations of the Parties, and the responsibility of the Parties. Upon mastering (completion) of the SOP, USTU, based on the results of mastering the EP and passing the final certification, issues students a Master's Diploma in the direction of 136 Metallurgy of the EP "Metalurgical Processes for the Maintenance and Processing of Metals and Alloys". NAO "Kariu", based on the results of mastering the educational program and passing the final certification, issues students a Master's Diploma 7M07203 - Metallurgy of Ferrous and Non-Ferrous Metals, in the field of education 7M072 "Production and Processing Industries".

The Parties implement the EP in relation to students accepted for training in accordance with the procedure established by law: at USTU, students are master's students; at NAO "Kariu", students are master's students. Every semester, in accordance with the academic calendar, the Parties send each other a certificate of the results of the midterm assessment of students, including credit (examination) reports, on the basis of which the Parties carry out the crediting of the results of the students' mastery of disciplines (modules).

An individual educational plan (IEP) is drawn up for the student, which includes a list of academic disciplines, their workload (in credits and hours), distribution by semesters, partner universities where they will be mastered, and the procedure for transferring credits.

Conducting examinations, assessing the students' achievements, recognising ECTS credits

and awarding joint academic degrees is carried out in accordance with the Academic Policy of the University.

Analytical part

Based on the analysis of the quality assurance policy published on the university website, it can be concluded that this document reflects the relationship between scientific research, teaching and learning (implementation acts, certificates, publications) .

Having studied the content of the presented regulatory documents, the commission concludes that there is a sufficiently high quality assurance culture, which is supported by a system of internal standards and a monitoring mechanism. The quality assurance system covers all areas of the university's activities and is supported by the necessary regulatory documentation.

The position of the university and the educational program in various international and national rankings, the results of the survey of students and employers, their questionnaires, the study of educational program development plans, reports, and minutes of the meeting of the Department of "MiM" confirm the transparency of the educational program development, indicate the successful functioning of the mechanism for developing, approving and monitoring and making adjustments to educational program development plans, their compliance with the expectations of students and employers, state programs of Kazakhstan and the Ministry of Higher Education of the Republic of Kazakhstan in the field of education.

The existing mechanism for developing a development plan for the educational program allows interested parties from among the teaching staff, students and employers to participate in its creation, ensuring its individuality through the use of original courses, constant updating of the material and technical base, and unique laboratory equipment. Results of interviews among students on satisfaction with the level of accessibility The share of existing scientific laboratories is 83.3%.

Those responsible for business processes within the EP and the distribution of personnel responsibilities are defined by the regulations on structural divisions and job descriptions. The results of interviews and questionnaires of deans, heads of departments, and teaching staff showed a good understanding of their responsibilities and the ability to perform them, and navigate the EP management.

High results (100%) of graduate distribution, employer feedback, satisfaction of students and graduates, determined on the basis of surveys and questionnaires, allow us to conclude that quality assurance in the management of the educational program is successfully functioning.

It is necessary to evaluate the activity of the EP management in ensuring the participation of representatives of interested parties in the collegial bodies of the educational program management, as well as their representativeness in decision-making on issues of educational program management. At the university, the EP management is carried out by a number of collegial bodies: the Academic Council, faculty quality assurance commissions, the department of academic policy, working groups with the participation of employers, the activities and composition of which are regulated by internal regulatory documents. They include university teachers, representatives of students, employers, who, as shown by the minutes, including department meetings, directly participate in the development and management of the EP.

When studying the documents of the academic commission of the faculty, the composition of the working group of the EP developers, the minutes of the department meeting, it was noted that they include representatives of the teaching staff, students and employers who are directly involved in coordinating the necessary development plans, KEDs, RUPs, etc. Transparency is ensured by posting these documents on the website of the university, faculty and department.

Particularly noteworthy is the organization of openness and accessibility for the stakeholders of the OP. 100% of survey participants are satisfied with the level of accessibility of the management.

Based on the submitted documents, it was established that the head of the Department of MiM – the head of the educational program – completed training in educational management.

TheEEC Commission notes that the university has procedures for admission and selection of students, but the above procedure has not been developed for the joint educational program 7M07203 “Metallurgy of Ferrous and Non-Ferrous Metals” and the partner university USTU.

Strengths/best practices for OP 7M07203 – “Metallurgy of ferrous and non-ferrous metals”:

Not identified.

Recommendations for OP 7M07203 – “Metallurgy of ferrous and non-ferrous metals”:

The management of the OP shall develop and approve the procedures, rules for admission and selection of students for the joint educational program 7M07203 "Metallurgy of ferrous and non-ferrous metals" and ensure updating . Deadline until 01.01.2025 .

Conclusions of theEEC based on the criteria:

According to the standard "Right to Participate. Acceptability" the educational program 7M07203 "Metallurgy of Ferrous and Non-Ferrous Metals" has 0 strong, 9 satisfactory, 1 position suggests improvement.

6. 2 . Standard "Learning Outcomes"

✓*The joint educational program must be developed in accordance with the established objectives, including the intended learning outcomes.*

✓*The qualification obtained as a result of the joint study programme must be clearly defined, explained and correspond to a certain level of the national framework of qualifications in higher education and, consequently, to the framework of qualifications in the European Higher Education Area (FQ-EHEA)*

✓*The disciplines of the joint educational program must ensure the achievement of the planned learning outcomes, including knowledge, skills and competencies in the relevant area(s) of education.*

✓*The joint educational program must ensure that each student achieves the planned learning outcomes.*

✓*The joint educational programme, where relevant, must take into account the minimum harmonised conditions for learning as set out in the European Union Directive 2005/36/EC or the relevant common framework for learning established pursuant to the Directive.*

Evidential part

The goal of the EP is reflected in the Modular Educational Program. The goal of the EP "MChICM" in the scientific and pedagogical direction is the training of scientific and pedagogical personnel with in-depth scientific, pedagogical and research training, capable of innovative activities in the field of science, education, management and metallurgy. The results of the training are given in the Diploma Supplement.

OP 7M07203 "MChICM" is innovative and has a special profile - a joint OP, which is reflected in the registration in the Register of educational programs of the Ministry of Health and Higher Education of the Republic of Kazakhstan.

During the training process, in addition to the requirements in accordance with professional standards, master's students acquire methodological competencies that affect the efficiency and quality of professional activity, i.e. they acquire a level of education sufficient for independent creative solutions to ideological and research problems of a theoretical or applied nature in various spheres of life. These competencies are acquired both during classroom studies and during teaching and research practices, as well as when performing research work.

Upon successful completion of the program, graduates receive a Master's degree 7M07203 - MChCM, in the field of education 7M072 "Production and manufacturing industries", which provides students with academic knowledge, professional skills, intercultural competencies, communication skills that can influence their personal development and be applicable in their future careers.

The internal quality assurance system, based on the Quality Policy of KarIU, QMS documents and management decisions, functions successfully and is effectively managed (including design, development, monitoring, improvement). Successful functioning of the internal

quality assurance system of the EP is achieved through decision-making (by collegial bodies, the EP management, the dean of the faculty) based on the analysis of facts. Analysis and study of the change processes implemented in the program is carried out through monitoring the goal, content of the EP, form and technology of the educational process, methods for assessing educational results and characteristics of the interaction of teachers and students.

Based on the results of the specialized accreditation of the EP 7M07203 MChIM by the Independent Agency for Accreditation and Expertise of Education Quality ARQA, recommendations were given for the development of the EP, which were implemented in full.

Post-accreditation monitoring is an important part of the external quality assurance process. The EP management has developed and implemented an Action Plan for Post-accreditation Monitoring. During the academic year, data is collected and analyzed for the purpose of improvement; at the end of each academic year, a final analysis of the monitoring results and assessment of the policy effectiveness is carried out to achieve confidence that the Quality Policy is being implemented. The analysis results are considered at meetings of the department, the Faculty Council, the Educational and Methodological Council, the Scientific and Technical Council and the Academic Council of KarIU to develop proposals. For approval, the EP is considered at a department meeting and submitted for consideration to the Faculty Council. Based on the discussion results, a protocol is drawn up indicating all the proposals and comments considered, recommendations of employers, the level of compliance of the content of the educational programs with the requirements of external and internal regulatory documents, and the professional standard. The Faculty Council gives an opinion on the EP for the Educational and Methodological Council. If the Faculty Council recommends positively, the EP undergoes an external assessment and examination with a review of the EP.

According to QMS P 4-25-1-2021 "Regulations on the development of modular educational programs", the OP developed and implemented in the educational process are subject to annual examination and updating. For this purpose, in March-April of the current academic year, an extended meeting of the department is held with the participation of employers, representatives of the DAP and students, at which an assessment of the current OP is given, based on the results of which a conclusion is made on the effectiveness of the program, and a decision is made on the further use of the OP in the educational process, making changes to the OP or closing it.

The participation of representatives of interested parties in the development of the content and approval of the EP is carried out through extended meetings of the department, the UC, the Faculty Council, and round tables. Interested parties with their comments and innovative proposals for improving the EP can contact us through any convenient communication channel. All proposals received are carefully considered by the relevant structural units in the shortest possible time.

KarIU provides for external examination of the EP. At the development stage, employers are involved in the external examination. Leading specialists of organizations and enterprises corresponding to the profile of the EP preparation are involved as external experts from employers. The passport of the EP underwent external examination at the National Center for Higher Education Development of the Ministry of Health and Higher Education of the Republic of Kazakhstan when they were included in the Register of Educational Programs of Higher and Postgraduate Education.

Requirements for the level of training of students are determined on the basis of the Dublin descriptors of the second level of higher education (master's degree) and reflect the acquired competencies expressed in the achieved learning outcomes. The learning outcomes are formed both at the level of the entire educational program of the master's degree and at the level of individual modules or an academic discipline. The relevance and modernity of the content of the academic disciplines of OP 7M07203 MCHICM, fundamentality and compliance with new scientific directions are ensured on the basis of monitoring the current state and prospects for technical development of specialized industries, achievements of science and technology, and advanced experience in the industry. Every year, the staff of the department together with employers monitors educational programs for the relevance of the disciplines taught. The content

of the disciplines and practices of OP 7M07203 MCHICM are aimed at forming the competence of graduates described in the IOP.

Analytical part

Based on the presented regulatory documents, KarIU EEC notes that the university has created and is implementing a documented procedure for the development, evaluation and approval of educational programs, approved at the institutional level, which ensures compliance with the necessary requirements of the standard and the achievement of the planned level of quality.

The EP regulates the goals, results, content, conditions and technologies of implementation of the educational process, assessment of the quality of training of graduates under the accredited EP and includes materials ensuring the quality of training of students and implementation of the corresponding educational technology. Implementation of the EP of the master's degree is aimed at forming the key competencies of future specialists and meeting the needs of the labor market. The EP provides for the possibility of building an individual educational trajectory, taking into account the personal needs and capabilities of students.

Strengths/best practices for OP 7M07203 "Metallurgy of ferrous and non-ferrous metals":

Not identified.

Recommendations for OP 7M07203 "Metallurgy of ferrous and non-ferrous metals":

None.

Conclusions of theEEC based on the criteria:

According to the standard "Learning Outcomes" of the educational program 7M07203 "Metallurgy of Ferrous and Non-Ferrous Metals" there are 0 strong, 5 satisfactory positions.

6. 3 . Standard "Development and approval of the program"

✓ *The structure and content of the joint educational program should be defined and developed on the basis of a student-centered approach to learning to ensure the achievement of planned results.*

✓ *The joint educational program should be developed with the participation of students and other stakeholders.*

✓ *The European Credit Transfer System (ECTS) must be applied correctly and the allocation of credits must be clear*

✓ *The joint degree programme covers the required workload. The Bachelor's programme comprises at least 180-240 ECTS credits; the joint Master's programme comprises at least 90-120 ECTS credits and must not be less than 60 ECTS credits at the second level of the cycle (credit ranges according to FQ-EHEA); no credit range is specified for joint PhD programmes*

✓ *The joint educational program has mechanisms for monitoring the study load and the average time for completion of the program.*

Evidential part

OP 7M07203 "MChICM" was developed on the basis of regulatory documents of the Ministry of Health and Higher Education of the Republic of Kazakhstan and complies with the national qualifications framework and professional standards, agreed with the Dublin descriptors and the European Qualifications Framework. In addition, the SOP was developed taking into account the requirements of the regulatory documents of the partner university in accordance with the Law of Ukraine "On Education" dated September 5, 2017 No. 2145-VIII.

Joint procedures for developing the structure and content of the SOP are reflected on the part of KSU in the Academic Policy of the University, the Regulation on Postgraduate Education, the Regulation on the Development of Modular Educational Programs of NAO KSU QMS P 4-25-1-2021. On the part of USUNT on the basis of the Regulation on the Organization of the Educational Process at the Ukrainian State University of Science and Technology.

According to the regulatory documents of all educational institutions, the approval of a joint educational program for the above specialties is considered at department meetings (minutes No. 9 dated 01/08/2024.

In KarIU and USTU, external examination of the EP is provided. At the stage of development

and subsequent assessment, employers and foreign partners with higher and postgraduate education; practical experience in the relevant field of at least 10-15 years; experience in participating in the development and implementation of the EP in the relevant field; interest in the introduction of modern technologies and innovations are involved in the external examination.

The EP management ensures the participation of the faculty and other stakeholders in the development of the EP and ensuring its quality. The participation of stakeholders in the development and quality assurance of the EP is reflected in the minutes of department meetings with the participation of employers, employers' feedback on the EP, in a survey of students, faculty and employers. The mechanism for involving students in the formation of the EP consists in including senior master's students in the graduating departments in the Working Group. As a rule, the most active students engaged in scientific activities are included in the Working Group.

The Guide ensures that the content of the academic disciplines and learning outcomes of the EP correspond to the Dublin descriptors, taking into account the requirements of internal and external stakeholders, level 7 of the National Qualifications Framework, the Framework of Qualifications in the European Higher Education Area. The structure of the EP involves the use of credit-modular technology. Each module is formed in such a way that it is focused on achieving certain learning outcomes expressed in acquired competencies. At the same time, a logical relationship is ensured between the learning outcomes for the educational program, for each module and for each discipline. The content of the disciplines and all types of practices are aimed at developing the competence of graduates described in the IEP.

ECTS credits are used as a criterion for determining the workload of the educational program. They are linked to the profile degree, learning outcomes, competence, and the students' workload, and also include the achievements of learning outcomes in the assessment procedure. The educational program of the master's degree program contains: theoretical training, including the study of cycles of basic (BD) and major (PD) disciplines; practical training of master's students: various types of practices, scientific or professional internships; research work, including the completion of a master's dissertation for a scientific and pedagogical master's degree program; final certification.

Thus, the total volume of the master's program is 120 credits (3600 hours), half of which is allocated for theoretical training, 20 credits for practical training and 36 credits for conducting research and final certification, which meets the requirements of the State Educational Institution of Higher Professional Education: the full academic load of one academic year corresponds to at least 60 academic credits and corresponds to at least 1800 academic hours per academic year. At the same time, during one semester, a student acquires at least 30 academic credits.

OP 7M07203 "MChICM" is harmonious in terms of expected learning outcomes (ELO). Each module of the OP is focused on achieving a certain learning outcome. At the same time, modules based on the substantive unity of disciplines can be built according to a "horizontal" or "vertical" scheme. The educational and methodological documentation of the OP fully ensures the implementation of the corresponding educational technology. The work program and syllabus of each discipline clearly formulate the final ELOs in organic connection with the acquired knowledge, skills and competencies. The contribution of a particular discipline to the formation of the main ELOs is determined by the Working Group in the course of developing the OP, which is reflected in the number of credits allocated for studying the discipline. When determining the contribution of disciplines to the process of determining the ELOs, recommendations and proposals of employers are taken into account.

The system of assessing students' knowledge according to the accredited SOP fully correlates with the ECTS system. Thus, according to the Academic Policy of KarIU (pp. 16-20), the assessment of the knowledge system is carried out according to the following scale (see Table 3.3). The criteria for assigning grades for each discipline, by types of work are prescribed in the discipline syllabus and communicated to the student.

The workload for all types of academic work is specified in the SOP, RUP and KED. When developing the OP, employers as part of the Working Group participate in determining the

workload of academic disciplines, since they can propose to increase/decrease the number of hours per discipline or propose to expand the discipline with certain topics depending on the competencies that graduates must acquire. The workload of OP 7M07203 "MChICM" is based on the total number of assignments that a master's student must complete when completing the full training program. These assignments are defined in order to obtain learning outcomes and taking into account the time costs (working hours) required for a master's student to achieve them. The workload, expressed in time, coincides with the number of credits per course unit. The teachers of the department make their proposals to the Working Group on the formation of modules in accordance with the goals and objectives of the disciplines and the program as a whole, indicating the learning outcomes of the module, volume and duration.

The workload is checked by assessing the student through a survey of master's students after the end of each semester. The results of the survey are communicated to each teacher and discussed at a department meeting. Based on the results of the analysis, it is possible to adjust the academic workload both within a separate discipline and within a module.

The name of the module summarizes the content of the disciplines included in it, ensuring clarity, logical sequence and proper understanding of the essence of this module. For example, in OP 7M07203 MChCM in the module "Modern Research Methods in Metallurgy" the following disciplines are studied: Thermodynamic Calculations of Equilibrium of Metallurgical Reactions, Mathematical Modeling and Computational Experiment, Modern Physicochemical Methods of Research and Analysis in Metallurgy, Special Chapters of the Theory of Metallurgical Processes. Similarly, the name of the discipline reveals the content of the topics and is consistent with the set goals and objectives of studying the discipline, supporting the logic and structure of the educational process.

The description of the modules is contained in the EP and the catalogue of elective disciplines. The description of the module includes the following information: module code and name, module disciplines, module type, module level, semester of study, number of credits, form and types of classes, module prerequisites, module study objectives, module content, knowledge and skills, learning outcomes (key competencies), final assessment form, conditions for receiving credits.

Reflection of modern scientific achievements in the SOP is an important aspect that ensures the relevance and quality of education. Inclusion of modern scientific achievements in the program guarantees that master's students will receive up-to-date and relevant knowledge that meets the modern requirements of the labor market and the scientific community. At KarIU, this aspect is implemented in the following areas:

1. Continuous updating of teaching material: incorporating the latest research, technology and practical applications into teaching materials; using modern teaching methods such as online lectures, virtual laboratories and interactive cases to improve the educational process.

2. Involvement of experts from science and industry: inviting academics, scientists and industry representatives as lecturers and teachers.

3. Conducting research projects: involving students in research projects related to current issues and topics, which promotes their active participation in the scientific process.

4. Participation of master's students in events and scientific conferences.

6. Support for scientific research of master's students in the form of establishing connections with leading scientific institutes in the field.

7. Establishing cooperation with companies and enterprises to adapt the program to modern business requirements.

The ratio between classroom studies and independent study time meets the requirements of the State Educational Institution of Higher Professional Education (GOSVPO). The SOP management strives to balance classroom studies and independent study time, facilitating a more complete and profound assimilation of the material by master's students.

Analytical part

Based on the analysis of the content of the EP, KED and RUP, it was established that the structure of the accredited EP consists of modules, the totality of which is determined by the set and content of competencies declared in the models of graduates by levels of training and is based on the European Credit Transfer and Accumulation System (ECTS). The modules of academic disciplines contained in the program, their content, as well as the content of practices, correspond to the expectations and declared competencies. The presented graduate models sufficiently disclose the learning outcomes and personal qualities that graduates should receive upon completion of the programs. The qualifications awarded correspond to the eighth level of the NSC.

Based on the documents presented, it can be concluded that the educational program was subject to external examination, and that during its development, proposals from the teaching staff, students and employers who were involved in its development were taken into account. The uniqueness of the EP is ensured by a set of elective disciplines, determined by the stated requirements of representatives of employers and students.

The EEC Commission notes that when developing and approving the joint educational program 7M07203 "Metallurgy of ferrous and non-ferrous metals", the management of the joint educational program did not involve students (Development plan of the educational program, minutes of the department meeting No. 9 dated 08.01.2024).

Strengths/best practices for OP 7M07203 "Metallurgy of ferrous and non-ferrous metals":

Not identified.

Recommendations for OP 7M07203 "Metallurgy of ferrous and non-ferrous metals":

The management of the SOP shall make the following amendments and additions to the development plan of OP 7M07203 "Metallurgy of ferrous and non-ferrous metals": "Development and approval of a joint educational program is mandatory with the involvement of students." Deadline until 01.01.2025.

Conclusions of theEEC based on the criteria:

According to the standard "Development and approval of the program", educational programs 7M07203 "Metallurgy of ferrous and non-ferrous metals" have 0 strong, 4 satisfactory, 1 position suggests improvement.

6. 4 . Standard "Admission, academic performance, recognition and certification of students"

✓*Partner educational institutions must have pre-defined, published and consistently applied admissions policies and corresponding requirements for applicants*

✓*Selection procedures must be appropriate to the level of the joint educational program, and must regulate all periods of the "life cycle" of education, i.e. admission, academic performance, recognition and certification.*

✓*The recognition of qualifications and periods of study (including recognition of prior learning) shall be applied in accordance with the Lisbon Recognition Convention and its supporting instruments.*

Evidential part

The formation of the contingent of students is carried out by placing a state educational order for the training of specialists with postgraduate education, as well as paying for tuition at the expense of citizens' own funds and other sources. Applicants can obtain information about educational programs on the university website. When entering postgraduate education programs, in the event of a discrepancy between the profile of the educational program of the master's degree and the educational program of higher education, the master's student is given prerequisites for mastering them on a paid basis. The list of necessary prerequisites is approved by a decision of the Academic Council of the University.

The university is constantly working to attract foreign students. Admission of foreign citizens to study on a fee-paying basis is carried out in the form of an interview conducted by the

admissions committee.

In order to form the university contingent, the press center of KarIU cooperates with both traditional mass media (MSM) and media relations on the Internet. Admission rules, the procedure for continuing education at a partner university, transfer from one course to another, from other universities, credit transfer from other universities, expulsion and other necessary information for applicants and students are posted on the university website. Systematic career guidance work is carried out on the basis of the Career Guidance Work Plans annually approved by the rector.

After admission, the university evaluates the compliance between the admission process and subsequent progress of students by means of surveying master's students, monitoring knowledge, starting with the results of passing the comprehensive testing and up to the graduation of students, is reflected in the AIS Platonus. In the process of training throughout the academic year and during the entire period of training, conditions are created for feedback on the results of the achievements of master's students. The career growth of graduates after completion of master's programs is monitored.

KarIU has a practice of recognizing higher and postgraduate education qualifications, periods of study and prior learning, including recognition of non-formal and informal learning, which is based on ensuring actions in accordance with the Lisbon Convention on the Recognition of Qualifications and is reflected in the academic policy of the university.

The training requirements are transparent for all target groups of KAIU. The procedures regulating the life cycle of students (from admission to completion) are defined, approved, and published in the internal documents of the Academic Policy of KAIU, QMS StO II.8-02.02-2021 "Management of the educational process", QMS StO II.8-02.03-2021 "Management of the educational process", QMS P 4-53-2022 Regulation on the internal quality assurance system of NJSC "Karaganda Industrial University". Informing all target groups about the requirements of the educational program and the specifics of its implementation is ensured through career guidance work. The management of the O VP O uses a variety of ways to disseminate information, including the media, information networks to inform the general public and stakeholders. printed materials (brochures, booklets, bulletins, etc.); reports; posters, stands; letters; thematic articles in the media; press releases in the media; advertising in the media; surveys; excursions; seminars, conferences; exhibitions, fairs, expositions; interviews in the media, on radio or television; presentations; personal contacts with stakeholders, etc. The university holds an Open Day every year. Information tools also include: the university website; social networks.

The management of the university and accredited educational institutions has a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and informal education, enshrined and published in the academic policy of the university, QMS P4-42-2021 Regulation on the recognition of learning outcomes in informal education.

To transfer credits, the graduating department establishes the equivalence of the content of courses studied at a foreign university to the content of disciplines studied by students at KarIU. If the content of disciplines coincides by at least 70%, the discipline is transferred to the student.

The mechanism for recognizing learning outcomes achieved during academic mobility is prescribed in QMS P 4-24-2021 “Regulations on Academic Mobility”.

Students can undergo professional certification by passing an exam at certification centers. According to the register of certification centers for specialists of the NCE RK "Atameken", in the Karaganda region there are no professional certification centers for the professional sphere corresponding to the accredited educational programs.

Analytical part

Based on the analysis of the provided data and the resources used, the EEC concludes that the university has an information management system that, through the use of modern ICT, educational portals, websites and platforms, allows for the systematization and successful collection, storage and analysis of information, ensuring its adequacy in terms of admission, academic performance, recognition and certification of students.

The examination of the provided documentation demonstrated that the university has pre-defined, published and consistently applied admission rules and corresponding requirements for applicants to master's degree programs. The reporting system used by the university ensures sufficient periodicity, monitoring and control of the adequacy and reliability of the results reflected in them, allows for their assessment and evaluation of activities in key areas of the university's work. The document management system and automated information system used are widely used by the university and ensure timely receipt of data. The selection procedures correspond to the level of the educational program, which also regulate the periods of the "life cycle" of training.

The university uses mechanisms of communication with applicants and their parents, involving them in career guidance work, which are common in most universities. Based on the analysis of the provided documents, compliance with the standard was established for the structure and content of the measured indicators: admission, dynamics of the contingent of students in terms of forms and types; level of academic performance, achievements of master's students and expulsion; satisfaction of students with the implementation of the EP and the quality of education at the university; availability of educational resources and support systems for students; employment and career growth of graduates.

The University has a practice of recognizing higher and postgraduate education qualifications, periods of study and prior learning, including recognition of non-formal and informal learning, which is based on ensuring actions in accordance with the Lisbon Convention on the Recognition of Qualifications and is reflected in the academic policy of the University.

The EEC Commission notes that the KarIU website does not contain information on the admission rules and relevant requirements for applicants participating in the implementation of the joint educational program 7M07203 “Metallurgy of Ferrous and Non-Ferrous Metals”.

Strengths/best practices for OP 7M07203 “Metallurgy of ferrous and non-ferrous metals”:

Not identified.

Recommendations for OP 7M07203 "Metallurgy of ferrous and non-ferrous metals":

The management of the joint educational program (JEP) must post the admission rules and relevant requirements for applicants participating in the implementation of the JEP on the website of KarIU and USUNT. Deadline: 01.01.2025.

Conclusions of theEEC based on the criteria:

According to the standard "Admission, academic performance, recognition and certification of students" educational program 7M07203 "Metallurgy of ferrous and non-ferrous metals" have 0 strong, 2 satisfactory, 1 position suggests improvement.

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

✓ The joint educational program should be developed in accordance with the planned learning outcomes.

✓ The approaches to learning and teaching used must be adequate to achieve the intended learning outcomes.

✓ The joint educational program should take into account the diversity of learners, respect their needs, including potentially different cultural characteristics of learners

✓ The rules for conducting examinations and assessing the learning outcomes achieved must be consistent with the expected learning outcomes

✓ Examinations and assessment of the results achieved by students must be carried out by partner educational organizations in accordance with established rules.

Evidential part

The management of OP 7M07203 MChCM ensures respect and attention to various groups of students and their needs, providing them with flexible learning paths.

When forming the IUPM, needs are identified when master's students contact the head of the department, the dean's office, during meetings, and conversations with students. During the

training process at KarIU, surveys and meetings with the management are conducted to identify the needs of students.

During the development of the EP, students independently form an individual learning path based on the RUP and KED by compiling an individual master's student curriculum (ISS). The student composes an ISS, choosing the required number of compulsory disciplines, university component disciplines and elective disciplines. To assist in choosing an individual learning path, a presentation of elective disciplines is held.

KarIU takes into account the needs of different groups of students regardless of the language of instruction. For example, an individual study schedule for health reasons, the possibility of early completion of an examination session, or its extension for a valid reason, etc. KarIU provides for inclusive education, for this purpose the teaching staff undergoes appropriate training.

Every two years, the Republican Scientific and Methodological Conference is held at KarIU, where teachers share their experience and the results of their own scientific and methodological research. The collection of papers from the conference, which took place in November 2022, published the relevant reports of the teachers of the MiM department.

The feedback system on the use of various teaching methods, teaching and assessment of learning outcomes is carried out through various seminars and trainings with teaching staff, as well as through sociological surveys of master's students in the form of an online questionnaire.

The academic freedom of students is ensured through the freedom of choice of the master's student within the framework of generally accepted academic (lectures, practical classes, exams) and extracurricular (all kinds of written work, master's dissertation, practice, etc.) classes.

KSU also ensures consistency, transparency and objectivity of the learning outcomes assessment mechanism for each EP, including appeals. Assessment of the academic achievements of KSU students is carried out on the basis of a point-rating system, according to which the student's final grade for the semester for each discipline is derived from the summation of the rating points received by him in all control events for this discipline during the semester (current and midterm control) and upon passing the final control (exam). The knowledge assessment mechanism is reflected in the Regulation "Organization of current and midterm controls, midterm assessment and assessment of students' knowledge" QMS P 4-34-2021, as well as in the university's academic policy.

A student who does not agree with the exam result has the right to appeal no later than the next day after the exam. For this purpose, for the period of the examination session (midterm assessment), an appeal commission is created by order of the rector from among teachers whose qualifications correspond to the profile of the disciplines being appealed (Regulations on the organization of current and midterm assessments, midterm assessment and assessment of students' knowledge QMS P 4-34-2021). The results of the appeal are recorded in a protocol and, based on its decision, an individual examination report is drawn up for the student, which is attached to the main examination report.

The management of OP 7M07203 MChICM ensures the use of various forms and methods of teaching and learning. For successful mastering of the OP by students, the university teachers use innovative teaching methods in the educational process in the form of business and role-playing games, simulation trainings, discussions, brainstorming methods, situational games, slide show design. The university teachers successfully practice conducting presentations of educational courses using interactive whiteboards, multimedia projectors, using language laboratory equipment in classes (discipline - foreign language), etc. Modern software products and IT technologies are actively used in the training of future specialists.

To monitor the effectiveness and efficiency of the application of innovations and the use of active teaching methods, opening classes are used, the conduct of which is regulated by the internal document QMS P 4-26-2021 "Regulations on the planning and conduct of open classes". KarIU holds methodological weeks of departments, during which the teaching staff makes innovative proposals, exchanges experience and demonstrates personal implementation of innovative proposals in the educational process.

The development of career-oriented competencies among students is carried out throughout the entire period of study. The MOP provides a list of qualifications and positions according to the Qualification Handbook of Positions of Managers, Specialists and Other Employees, approved by the order of the Ministry of Labor and Social Protection dated December 30, 2020 No. 553, which can be occupied by graduates of these EPs. The requirements for the competencies of graduates are given in accordance with the Professional Standards.

The tools for assessing educational achievements are competence-oriented, since the criteria for assessing students' knowledge are the level of mastery of competencies expressed in the achieved learning outcomes based on the Dublin descriptors. The tools for assessing educational achievements are also module-oriented. Combined tools for assessing educational achievements are used (problem solving, surveys, essays, written exams).

Types of examinations, the procedure for conducting and appealing, and assessment criteria are set out in the Academic Policy of KAIU. Regulatory documents on conducting examinations take into account the conditions for students with disabilities. The implementation is described in the Regulation on the organization of inclusive education for individuals with disabilities in NAO "Karaganda Industrial University" and in the Plan for organizing psychological and pedagogical support for inclusive education.

The teaching staff of the accredited educational institution are fully proficient in modern methods of assessing learning outcomes and regularly improve their qualifications in this area. All teachers are proficient in the methodology of developing and using digital educational resources. The teaching staff completed advanced training courses "Computer technologies in education" and "Digital competence of a teacher. Effective online lesson", according to the results of which they received certificates.

In January 2022, corporate training courses "Professional Activity of a Higher Education Teacher in the Context of Modern Education" were organized. In June 2023, trainings were also held, including on assessing learning outcomes. To improve the qualifications of assessors, seminars are held on conducting exams in the AIS "Platonus", on compiling test assignments. didactics and pedagogical competencies, etc.

The university has a procedure for responding to student complaints. The university's regulatory documents (Regulations on handling student complaints) set out the procedure for filing applications expressing requests and complaints on various issues. Student complaints are accepted by deans, considered at meetings, conferences at various levels, and at meetings of students with the university administration. In order to identify possible shortcomings in the organization of the educational process, surveys and questionnaires are conducted; if necessary, students receive academic assistance.

Analytical part

As the results of the survey of master's students during the EEC visit show, the overwhelming majority of them are satisfied with the mechanism for supporting student-centered learning at the university and the existing practices for this in the area of choice, the quality of educational and assessment materials and methods, the relationship with the teaching staff and management, which confirms the creation of basically equal opportunities for different groups of students.

Based on the study of regulatory documents, interviews with teachers and postgraduates, and attendance at classes, it can be concluded that the university uses modern educational technologies, well mastered by all teachers, innovative technologies using interactive methods and tools, modern laboratory equipment and computer programs. The teaching staff and services of the university use objective criteria and methods for assessing learning outcomes.

The content and structure of the RUP and IUP allows us to conclude that the mechanism for distributing the workload in the presented EPs adopted at the university ensured compliance with the normative relationship between theory and practice and is aimed at achieving the goals of the EP by all graduates.

The content of the curricula and reports of the teaching staff, plans and reports of the

Department of Mathematics and Mechanics, the number of published textbooks and teaching aids show that when implementing the educational program, original developments and courses are introduced into the educational process.

The level of competence of teachers is confirmed by the efficiency and quality of teaching, assessed by holding open classes, mutual visits to classes, as well as by conducting a survey "Teacher through the eyes of a student" on the quality and efficiency of the organization of the educational process, determining the level of professional standards and ethics, competence, oratory and communication skills of teachers. The results of these events serve as the basis for extending employment contracts of teaching staff, career advancement.

The professional potential of a teacher is also assessed based on scientific and scientific-methodological publications, publications in the media, public recognition and creative activity.

The above-described procedures for assessing learning outcomes correspond to the goals and learning outcomes of the EP. This is confirmed by employers' feedback, both during the university survey and according to the results of the survey during the EEC visit.

The documented mechanism for assessing learning outcomes shows that the university ensures transparency and objectivity, the assessment criteria are known in advance to the participants in the process, in which trained assessors are involved. The absolute majority of students are satisfied with the feedback forms for determining the degree of satisfaction with the teaching methods and knowledge assessment.

The EEC Commission notes that the Modular Educational Program (https://tttu.edu.kz/ru/obrazovanie/modulnie-obrazovatelnie-programmi/) does not provide rules for conducting examinations and criteria for assessing learning outcomes in the disciplines of the joint educational program 7M07203 “Metallurgy of Ferrous and Non-Ferrous Metals”.

Strengths/best practices for OP 7M07203 “Metallurgy of ferrous and non-ferrous metals”:

Not identified.

Recommendations for OP 7M07203 "Metallurgy of ferrous and non-ferrous metals":

The management of the OP in the modular educational program 7M07203 "Metallurgy of ferrous and non-ferrous metals" shall make changes and additions to the rules for conducting examinations and the criteria for assessing the achieved learning outcomes in the disciplines of the joint educational program. Deadline until 01.01.2025.

Conclusions of theEEC based on the criteria:

According to the standard "Student-centered learning, teaching and assessment of academic performance" of the educational program OP 7M07203 "Metallurgy of ferrous and non-ferrous metals" has 0 strong, 4 satisfactory, 1 position suggests improvement.

6. 6 . Standard "Support for learners"

✓*Partner educational organisations must ensure that appropriate learner support services are in place to support the achievement of intended learning outcomes.*

✓*Learner support services should support the achievement of intended learning outcomes*

✓*Student support services should take into account possible specific student mobility issues*

✓*Support services should take into account the needs of different groups of learners (mobile learners, adults, workers, distance learners, and learners with disabilities) when allocating, planning and providing educational resources and take into account the principles of a student-centred approach to learning and teaching.*

Evidential part

The management of the university and the accredited educational institution conduct adaptation and support programs for newly admitted and foreign students. In order to organize assistance in the adaptation of first-year master's students to the educational process, the University holds a Freshman's Week at the beginning of each academic year, during which curators, deans, and heads of departments provide explanations about the educational programs provided by the

University, the rules for organizing the educational process at the University, the requirements of the internal regulations, the operating hours of various services, contact information about the administration, deans' offices and other structural divisions, teaching staff, information about the location of academic buildings, the University website, etc. For master's students studying on a fee-paying basis, information is provided on the procedure for paying for tuition. To assist students, a Student Handbook has been developed, which includes: basic concepts, a brief historical background and structure of the university, the location of all services and a telephone directory, a student honor code (the rights and obligations of students), general provisions on credit technology of education, a method for calculating the assessment of student knowledge and calculating GPA, the procedure for conducting an appeal and the summer academic semester, and rules for using the university library. Master's students are provided with assistance in finding housing (there is a dormitory), as well as in internships, and semesters abroad.

KarIU provides the educational process for each EP with adequate and accessible resources. The University has a material and technical base that ensures all types of laboratory, disciplinary and interdisciplinary training, practical and research work of students, provided for by the working curriculum and corresponding to the current sanitary and fire safety rules and regulations. Along with free communication of students with teachers, KarIU provides them with free access to all resources necessary in the educational process: information (literature in the library, computers with the Internet), material (copying equipment, laboratory equipment) and human (advisers, curators, consultants). Students are provided with access to sets of the library fund.

The department is directly responsible for the content and quality of training specialists in the specialties of this cluster, for the implementation of scientific work carried out at the department, and the state of educational work with students. In order to assist students in mastering educational programs, the necessary assistance is provided by qualified advisers and curators who introduce master's students to the educational program, provide consultations on choosing a learning path, and assist students in the formation of professional ethics. Individual work of the teacher with master's students is carried out during consultations. In addition, master's students can contact any teacher with questions outside of class time. To find an answer to a question related to the educational process, a student can contact both the head of the department and the teacher directly. Contact information and reception hours for students of the dean and the head of the department are available on the university website. The schedule of consultations for all disciplines is provided in the master's student's personal account in Moodle.

One of the main activities of the university management and the EP management is to provide students with internships, facilitate the employment of master's students and maintain contact with them. The basis for pedagogical internship is the university itself, and master's students undergo research internships at other universities or research institutes that meet all the criteria for the training profile, for example.

In addition, the university has concluded agreements with foreign universities.

KariU ensures that its infrastructure complies with safety requirements. All dormitories and buildings are equipped with a modern video surveillance system, security and automatic fire alarms. In the dormitories, video cameras with the ability to record and store information for 30 days are installed on the floors, entrances and common areas. Video cameras are also installed in the university buildings and along the perimeter of the university territory. A total of 170 cameras are installed. The dormitories and university buildings are equipped with turnstiles. In addition, the university buildings are equipped with a Face ID facial recognition system and an electronic access control system: by electronic key or fingerprint. The movement of students, faculty and university employees through the turnstile is recorded in a separate database.

The dormitories and buildings have "panic buttons" that are serviced by a security agency. In both dormitories and at the entrances to the buildings, the entrance cameras are connected to the Central Control Center of the Internal Affairs Directorate of the city of Temirtau.

The entrance to the dormitories of KarIU for students is open until 22:00. Visiting the dormitories by guests is limited to 21:00. From Monday to Saturday, from 18:00 to 20:00, the

university dormitories are on duty for employees and faculty. Every day at 22:00, the dormitories of the University are visited by district police inspectors of the local police service department of the Eastern police department of the city of Temirtau. Also, external patrols of the Ministry of Railways of the Internal Affairs Directorate of the city of Temirtau are carried out daily in the adjacent territories of the dormitories and the university and the nearby territory of the Metallurg stadium.

Training of master's students in safety requirements is carried out in accordance with regulatory documents: Instructions on safety engineering and electrical safety when working with electrical equipment, Instructions on fire safety measures in the divisions of KarIU, Instructions on safety engineering when working with computing equipment. An entry about the briefings is made in the registration log of briefings on safety engineering and fire safety at the workplace with the mandatory signature of the person being briefed and the person giving the briefing.

All the department's classrooms are certified and equipped with fire extinguishing equipment. Undergraduates and staff undergo primary and repeated safety training when working in the laboratory, and the completion of the training is recorded in a special journal. The condition of communications and equipment in the classrooms is regularly monitored. All rooms have natural and artificial lighting.

The university has created a unified information network, including all computers, information resources (web portals, file servers), which allow for effective management of the educational process and all information resources. All university buildings have access to a wireless Wi-Fi network with Internet access. Provision of effective information support for the management processes of the education system, as well as management of the educational process of the university is carried out by the Platonus systems, and as the main learning management system (Learning management system, LMS) starting from the 2021-2022 academic year - Moodle.

Analytical part

Based on the analysis of the university's regulatory documents, the EEC notes that the policy and mechanism for forming the contingent of students are documented and aimed at its preservation and growth, support for master's students at all stages of education from admission to completion. All materials are published and available to participants in the process, which ensures transparency throughout the entire educational cycle.

The university develops both external (international) and internal (national) academic mobility, and concludes memorandums of cooperation with leading universities in Kazakhstan, near and far abroad.

The university has mechanisms for continuous support of talented and active youth. To ensure employment of young people and their job placement, annual graduate fairs are held with invitations to potential employers.

The materials presented by the university and the achievements of students allow us to conclude that the university has conditions for self-education and development outside the curriculum and incentive mechanism. KarIU has a mechanism for monitoring the employment and professional activities of graduates. The university and the management of the EP provide students with internships and promote the employment of graduates.

Experts note that the university provides graduates with documents confirming the qualifications received, taking into account the achieved learning outcomes, status and content of the education received.

Strengths/best practices for OP 7M07203 “Metallurgy of ferrous and non-ferrous metals”:

Not identified.

Recommendations for OP 7M07203 "Metallurgy of ferrous and non-ferrous metals" :

None.

Conclusions of theEEC based on the criteria:

According to the “Support for students” standard, the educational program “Metallurgy of ferrous and non-ferrous metals” has 0 strong and 4 satisfactory positions.

6. 7 . Standard "Resources"

✓*The teaching staff must be sufficient and adequate (qualifications, professional and international experience) to implement the joint educational program.*

✓*The conditions provided must be sufficient and adequate in view of the expected learning outcomes.*

✓*Educational partner organizations are responsible for the quality of their staff and the provision of favorable conditions for their effective work. Therefore, educational organizations, recognizing the importance of teaching, should:*

✓*develop clear, transparent and objective criteria for hiring, assigning, promoting, and dismissing employees and adhere to them in your activities*

✓*provide opportunities for career growth and professional development for teachers*

✓*encourage scientific activity to strengthen the link between education and scientific research*

✓*encourage the use of innovative teaching and learning methods and advanced technologies*

✓*The educational institution should strive to ensure that the educational equipment and software used to ensure that students achieve the planned results of the joint educational program are similar in the relevant sectors.*

Evidential part

The University has an objective and transparent personnel policy, including in the context of the OP, including hiring, professional growth and development of personnel, ensuring the professional competence of the entire University staff.

The university's personnel policy is reflected in the Regulation on the qualification characteristics of the positions of scientific and pedagogical workers of KarIU, QMS II.4-20-2022.

The main goal of the personnel policy is to develop personnel potential that would professionally enable the implementation of the University Mission and the Policy and Goals in the field of quality.

The quantitative composition of the faculty of the MiM department is presented on the university website. Currently, 18 teachers work at the MiM department, including 2 doctors of science, 14 candidates of science/PhD, 2 masters.

The human resources of the Department of MiM correspond to the directions of the strategic development plan of KarIU until 2025. Improving the working conditions of the teaching staff and employees to increase their motivation to improve the quality of education and research activities is one of the main tasks of achieving the strategic goals of the university.

Teachers of the OP 7M07203 MChCM are implementing 9 scientific projects with grant funding, the topics of the projects are related to the development and research of innovative technologies for the processing of industrial waste, as well as significant optimization of existing technological solutions.

Also, by order of industrial enterprises, teachers of the "MiM" department with the involvement of students, including master's students, conduct scientific research with the conclusion of relevant agreements. For example, we can cite the research work on the topic "Study of the possibility of preserving and more rational use of quartz resources of the Aktas deposit. Testing the technology of smelting technical silicon in a large-scale laboratory electric arc furnace using briquetted raw materials based on silica-containing materials and screenings of carbonaceous reducing agent in the composition of the charge", in which the master's student of the MChICM-21pn group Ergazy Aibolat took an active part.

The teaching and examination workload of the teaching staff is balanced, which is reflected in the Academic Policy of the University. The University implements an interdisciplinary approach to teaching, which promotes a deeper understanding of the material, the development of critical thinking and the application of knowledge in various contexts. The interdisciplinary approach allows master's students to see the connections between different areas of knowledge and develops their skills in research, communication, creative thinking and problem solving.

The university provides ample opportunities for professional development for the teaching

staff of the EP - internships, seminars, an internal system of advanced training, English courses, the opportunity to improve and develop pedagogical skills. Advanced training of teachers is planned for each year based on the needs of both departments (within the framework of mastering innovative teaching technologies) and the personal needs of teachers. The university provides opportunities for career growth and professional development of the teaching staff of the EP. The results of advanced training of teachers are confirmed by certificates, reports on completed advanced training.

The university has a system for diagnosing and motivating the quality of teaching by the faculty, their educational, methodological and scientific achievements. The system for diagnosing the quality of teaching is formed on the basis of the results of monitoring by the department, the rector's office and a survey of students. The university has created a system for rating the activities of departments and assessing the activities of the faculty, which ensures a competitive environment and activates channels for vertical mobility of personnel. The rating reflects the results of the educational, methodological, research and educational activities of the teacher. (Regulations on the rating assessment of the activities of the faculty and employees of NAO "Karaganda Industrial University" and the competitions "Best Department", "Best Faculty", "Best Division").

Non-financial motivation of the teaching staff includes a system of recognition and awards related to the results of labor activity and social activity of employees. The award system includes corporate awards and university distinctions, as well as state and departmental awards.

An important factor for high-quality education is the active use of information and communication technologies by the teaching staff of the EP in the educational process. Requirements for IT competencies of the teaching staff at KarIU are regulated by the Regulation "On the qualification characteristics of the positions of scientific and pedagogical workers". The teaching staff of the university constantly improves their IT skills by taking various advanced training courses.

The library has access to international and national information resources "RMEB", "Scopus", "Web of Science", which has expanded the range of use of electronic research resources by faculty and graduate students.

KarIU has a Cisco competence center, an information and communication center "SOTSBI-U" (communication networks, an open system interaction model, information security), and a 3D engineering laboratory and factory. In 2023, the Center for Digital Engineering in Technology and Engineering was opened, which has equipment for studying additive technologies, as well as programs for digital product design and production process management using SCADA systems.

The teachers of the MiM department successfully practice conducting presentations of training courses using interactive whiteboards, multimedia projectors, etc. Modern software products and IT technologies are used in the training of future specialists. In the educational process, the university's teaching staff actively use open educational resources of various platforms EPAM, Cisco, OpenU, Intuit. Coursera. Statistics for training in 2023 are provided at the link.

In order to improve the quality of teaching and ensure close interaction with production, the university invites practical specialists from production as teachers. The Department of MiM also has teachers with production experience: Smailov S.A., Zobnin N.N., Kuatbay E.K. Also, the Department of MiM has three part-time teachers who work in production: Ulieva G.A. (materials science), Makhambetov E.N. (metallurgy), Kutzhanova A.M. (mineral processing). Practical teachers, using their practical experience, introduce it into the educational process in the form of business games, situational tasks, thereby improving the assimilation of the discipline program, and developing the professional skills of the future specialist.

The following employers are included in the working group of the Department of Metallurgy and Materials Science in the development of the accredited educational program: Candidate of Technical Sciences, Head of the Laboratory of Metallurgy and Materials Science of the Central Institute of Metallurgy and Materials Science of Qarmet JSC (formerly ArcelorMittal Temirtau JSC) Reshotkina E.N., Deputy General Director for Production of Tau-Ken Temir LLP Korobko S.V., Leading Technologist of Nurkazgan-Kazakhmys R.T. Mynbayev, Chief Engineer of

KurylysMet LLP A.A. Ershteyn.

Within the framework of the accredited educational program, foreign teachers Professor A. Figus (2020-2021 academic year), Professor V.K. Tytyuk (2021-2022 academic year) have been invited to teach in recent years. In 2023-2024, in the 2023-2024 academic year, within the framework of the MNiVO program for attracting foreign experts to teaching activities and the Memorandum between NAO Karaganda Industrial University and Istanbul Technical University (Istanbul, Turkey), two Turkish professors from Istanbul Technical University - Mehmet Seref Sonmez (PhD, Associate Professor) and Kagan Benzesik (PhD, Research Assistant) were invited to the Department of Metallurgy and Materials Science for a period of one month .

The management of the educational institution, together with the management of the university, constantly creates conditions to ensure the sufficiency of material resources and infrastructure for conducting scientific research, providing practice bases, integrating science into the educational process, and publishing the results of scientific research work of employees and students.

The university has 6 educational and laboratory buildings with a total area of 44.01 thousand square meters, where classrooms, specialized rooms and laboratories, the university museum are located. The university sports complex, with a total area of 2300 square meters, includes 6 game halls and 2 open areas. The park of modern computing equipment is more than 400 units, it is regularly modernized. The volume of annual expenses for the purchase of computers and other means of information training is growing. The university has free Internet access for students, teachers and staff, Wi-Fi zones, and a website for the university. The classroom fund of the departments fully meets the design capacity of the accredited educational institution. The department has a material and technical base (classroom fund, computer classes, computer programs) that meets the 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 the research work of the graduate student. The Department of MiM has at its disposal the Laboratory of Engineering Profile (LEP) “Electron Microscopy and Nanotechnology” and the Educational Scientific and Production Center “Metallurgy”.

The Department has developed the Development Plans for the EP. KarIU constantly strives to ensure that the educational equipment and software used for mastering educational programs are similar to those used in the relevant sectors of the economy. When mastering the accredited EP 7M07203 - MChICM, master's students use semi-industrial and industrial equipment in the LIP and on the industrial site.

The infrastructure of KIU is being updated according to the following algorithm: in October of the current year, the university's structural divisions form an application for the purchase of materials, equipment, and furniture for the next year. All applications are combined into a single state procurement plan, according to which tenders are announced in the next calendar year for the purchase of the necessary plan items in accordance with current legislation. Each application is preliminarily reviewed by the budget commission, which analyzes the availability of the necessary budget and the feasibility of purchases. Once every six months, the plan is clarified and adjusted, if necessary. Also, within the amount of allocated funds, it is possible to make changes to the Development Plan at the end of each month.

The information systems used at the university are based on the use of the intra-university corporate information network, which includes 447 computers and has access to the global Internet. Physical environment: fiber-optic line of the association of users of the scientific and educational computer network of Kazakhstan Kazrena, with a dedicated IP address at speeds of 300 Mbps - incoming and 300 Mbps - outgoing. Currently, there are 4 servers operating in the central server room, which are used to ensure the operation of the AIS "Platonus", "Moodle", control of Internet traffic and replication of valuable data.

An important factor is the availability of the AIS "Platonus" at the university. Due to its placement on its own server, the operation of the AIS "Platonus" does not depend on the availability of an Internet connection at the university. For users connected to the local network of

the university, the AIS "Platonus" is always available at the corresponding IP address. An applicant, having become a student at the university, gets access to the AIS "Platonus", where he gets access to the academic calendar, the curriculum of his specialty, to information resources and databases of the university library, educational materials, IPRM. LMS "Moodle" is used as the main learning management system.

The official website of KarIU is located at and is the main public source of information about the university. The website Information about the Department of MiM is available.

The university also has accounts on social networks Instagram, Facebook, Odnoklassniki, YouTube video hosting and TikTok. These accounts allow the public to be informed about the development of the university, as well as to receive feedback from its representatives.

KarIU carries out an examination of research results, graduation papers, dissertations for plagiarism based on the use of licensed programs. The university has a regulation on academic integrity, which states that plagiarism is unacceptable when performing any academic and scientific work. All written works, publications in a scientific journal, graduation papers are subject to mandatory plagiarism check. Currently, the check is carried out using the Polish academic anti-plagiarism system "StrikePlagiarism". Based on the results of the examination, a document is issued, which is attached to the work being checked.

The total book collection of the library as of 01.01.2024 is 296,520 copies, of which 115,409 copies are in the state language; 1,348 copies are in English. Educational literature on electronic media makes up 23% of the total collection - 67,441 copies. The provision of educational and scientific literature of the accredited educational programs is 2,386 copies of storage units. Of these, 1,430 copies are in the state language, 395 copies are in English, which 100% covers all academic disciplines of the educational program. The scientific library of KarIU has access to such international information resources as Scopus, Web of Science, Wiley. The digital library provides electronic textbooks on the disciplines of the educational program.

The Moodle automated information system (AIS) is used as the main learning management system (LMS) for the implementation of accredited educational programs starting from the 2021-2022 academic year. The Moodle automated information system provides a space for teachers and students to work together. Moodle offers various options for tracking students' academic performance. For each taught discipline, an online course has been created in the Moodle automated information system, to which the teacher of the discipline and students are connected. Each online course contains the necessary educational materials for studying the discipline (course annotation, syllabus, lecture notes, guidelines for completing practical assignments, materials for preparing for examination control, etc.).

The university uses corporate email in the domain. Each employee and each student at the university has their own corporate email address, for example, a . yerzhanov @tttu.edu.kz. Each structural unit also has its own corporate email address, for example, mms @tttu.edu.kz (corporate email of the Department of MiM). Corporate email allows for online classes to be held in the format of video conferences using the Google Meet platform.

Ensuring security at the university is described above, in the standard "Support for students". The university strives to take into account the needs of various groups of students in the context of the EP. For more successful implementation of student-centered learning, active participation of students in the educational process, the university implements a policy of flexible support for students of different categories, such as working students; foreign students; students with disabilities. The feedback system with students to identify their needs is carried out through an advisor, a subject teacher, a head of department and a dean of the faculty.

The Student Service Center (SSC) of KarIU was created to ensure timely and high-quality provision of services to students on the "one-stop shop" principle. The SSC allows for fast and high-quality assistance in submitting, receiving, and reviewing various certificates and applications from students, thereby reducing the time spent on receiving such services. The operation of the SSC will also reduce paperwork, the "human factor" and errors associated with them (risk of losing applications, documents, etc.), and create conditions for information openness

and transparency of the educational process.

Conditions have been created for international students to promptly receive information and advice on any questions they may have. The university website has information on the admission procedure for international students in the "Applicant" section. WhatsApp groups have been created for international students. The university has 2 dormitories with 890 beds. Accommodation in the dormitory is free for students, while utility bills are 4,000 tenge per month.

Analytical part

Based on the results of the analysis of the submitted materials, the EEC notes the presence of an objective personnel policy at the university, which allows staffing the implemented educational program with qualified teachers in accordance with the strategy of the university and the specifics of the EP. All procedures of the university's personnel policy are transparent and accessible, strictly documented and meet current legislative requirements.

The teaching staff meets the qualification requirements. All teachers serving the accredited educational institution in the core disciplines have advanced training, including in modern educational technologies using ICT.

The educational process is carried out in accordance with the principles of student-centered learning, which is confirmed by the high level of student satisfaction revealed during their survey during theEEC visit.

When analyzing the presented data, it was established and during the interviews with the teaching staff it was confirmed that the university provides opportunities for career growth and professional development of the teaching staff of the EP, including young teachers who are given the opportunity to study in master's and doctoral programs. The university promotes various forms of advanced training for teachers, including abroad and online in accordance with the approved plan, a school of pedagogical excellence for young teachers and mentoring operates.

The university has a system of motivation and incentives for staff, which allows for the stimulation of research and other types of activities of the teaching staff.

The results of the visits of the EEC members to the teachers' classes confirmed their high professional skills and ability to use modern technical teaching aids. The availability of the university's own educational platform AIS PLATONUS and LMS Moodle, well-organized teaching of the teaching staff under the Erasmus+ program contribute to their wide use of information and communication technologies and software in the educational process.

The members of the EEC note that the leadership of the OP created conditions with industrial partners JSC Qarmet (formerly JSC ArcelorMittal Temirtau), Tau-Ken Temir LLP, KurylysMet LLP, which are secured and carried out in 9 grant financing projects, and in one financed research project, in which master's students of the corresponding OP participated.

The university's teaching staff contributes to the development of the economy, education, science and culture of the region and the country. This is facilitated by the research projects conducted, the results of which are used to prepare graduates who are distributed to enterprises of the republic. The university's teaching staff contributes to the development of the region and the republic through participation in professional societies, associations, and academies.

Strengths/best practices for OP 7M07203 “Metallurgy of ferrous and non-ferrous metals”:

- The conditions provided by the management of the educational institution have sufficient resources (implementation of projects and agreements with partners in the field of industrial and innovative development of the region), which are adequate and correspond to the expected learning outcomes.

Recommendations for OP 7M07203 "Metallurgy of ferrous and non-ferrous metals":

Absent.

Conclusions of theEEC based on the criteria:

According to the “Resources” standard, the educational program OP 7M07203 “Metallurgy of ferrous and non-ferrous metals” has 1 strong, 6 satisfactory positions.

6. 8 . Standard "Transparency and Documentation"

✓*Relevant information on the joint educational programme should be documented and published, taking into account the specific needs of the mobility students.*

✓*Information about the joint degree program should include admission requirements and procedures, course/discipline catalog, examination and assessment procedures, etc.*

✓*Partner educational organizations must have and implement mechanisms for collecting and analyzing information about their activities, about the activities of the partner within the framework of the joint educational program, and use the information obtained in the work of the internal quality assurance system*

✓*The educational institution must ensure the involvement of students and staff in collecting, analyzing information and planning subsequent procedures.*

✓*When collecting information, the OO should take into account the following:*

✓*Key performance indicators*

✓*information about the contingent of students*

✓*academic performance, student achievement and dropout rates*

✓*satisfaction of students with the quality of implementation of the joint educational program*

✓*availability of educational resources and student support services*

✓*employment of graduates*

Evidential part

KarIU carries out targeted work to inform the public about the activities of the university, the conditions and features of the implementation of the EP. The procedure for publishing about the activities of the university is regulated by the internal document QMS P-4-27-2022 "Regulations on informing the public".

The frequency of informing depends on: the need and relevance of information about people, events, facts, phenomena, processes; public interest; social value of information; changes in the university development strategy; innovations in the organizational structure of the university and changes in the management system; changes in the process of providing educational services; changes in the documentation of the quality management system, etc.

Informing the public involves supporting and explaining the country's national development programs and the system of higher and postgraduate education. For example, the anti-corruption strategy of the Republic of Kazakhstan for 2015-2025 is explained.

The official representative of the university on the Internet is the website. The principles of construction and structure of information materials posted on the official information website of the university are determined by the internal document of the QMS StO II.7-04.02-2021 "Internal informing", "Regulations on the official website of KarIU", which also regulates the technology of creation and functioning 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, departments and other divisions; about news and events taking place at the university. The website implements information services such as "News and announcements", "Rector's blog", "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 site is posted in three languages: the official language – Kazakh, Russian and English.

The website contains information regarding the formation and implementation of the development plan of the EP. The management of KAIU uses various methods of disseminating information. The following are the tools for disseminating information: the Republican journal "Bulletin of the Karaganda Industrial University"; the university website ; social networks; printed materials (brochures, booklets, bulletins, etc.); reports; posters, stands; letters; thematic articles in the media; press releases in the media; advertising in the media; surveys; "Open Doors" days; excursions; seminars, conferences; exhibitions, fairs, expositions; interviews in the media, on radio or television; presentations; personal contacts with stakeholders, etc.

As part of the career guidance and explanatory work, the university involves the media to explain the technology for awarding educational grants. Articles about KAIU are published in the regional and city newspapers "Evening Newspaper", "Industrial Karaganda", "Egemen Kazakhstan", "Ortalyk Kazakhstan", "Kazakhstanskaya Pravda". For example, the newspaper "Kazakhstanskaya Pravda" published an article dated June 2, 2021 "A New Stage in the Development of Universities"; in August 2022, the project "A Look into the Future" was released on the TTK TV channel - Temirtau News.

Monitoring the level of satisfaction of internal and external stakeholders is based on conducting a survey among students, faculty and employees of the university, interviewing employers. The results of the survey are discussed at departments, faculties, the Academic Council of the university. Annual ratings of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" are conducted. Information on the disciplines of the joint educational program, teachers is presented in the MEP on the university website, about teachers, about employment opportunities and other useful information.

The satisfaction of stakeholders with the quality of information received and its completeness is studied by conducting an online survey.

Provision of effective information support for the management processes of the education system, as well as management of the educational process of the university is carried out by the Platonus systems, and as the main learning management system (Learning management system, LMS) starting from the 2021-2022 academic year - Moodle. The management of the EP demonstrates the systematic use of processed, adequate information to improve the internal quality assurance system. Data analysis for the purpose of improvement is carried out by the heads of departments of KarIU in their area of competence systematically throughout the year.

The effectiveness and efficiency of the departments' activities within the framework of the EP implementation are reflected in annual reports on the main types of activities: educational and methodological work, research, educational work, etc., considered at meetings of the department, the Faculty Council and the Academic Council. External experts are also involved in assessing the effectiveness and efficiency of the EP, for example, participation in ratings.

Every year, at the meeting of the Educational and Methodological Council, in accordance with QMS P 4-57-2022 "Regulations on the procedure for developing a plan for the development of an educational program and the procedure for assessing the effectiveness of the implementation of an educational program", an assessment of the effectiveness of the implementation of the EP is carried out. The effectiveness of the EP is assessed based on 20 indicators, including: the number of students, employment of graduates, participation in academic mobility, participation of students in research activities, the number of winners of various competitions, multilingual education, the availability of developed MOOCs for the EP, etc. Based on an analysis of the current situation of the EP, the graduating departments develop plans for the development of the EP or make adjustments taking into account the further development of the EP.

Information management processes within the framework of the KarIU are regulated by the standard of the organization QMS StO II.7-04.02-2021 "Internal information". Internal information processes are provided by management documentation, the composition of which 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.

Vice-rectors, heads of departments, deans, and heads of departments are responsible for the functioning of information management processes and the reliability of information, depending on the level of information.

The main information flows of KariU, in the form of an electronic or paper document, are divided into: external (MNiVO, partners, employers, applicants, graduates, labor market analysis, analysis of educational needs); internal (KariU divisions, students, employees, questionnaires); horizontal (between deans' offices, between departments); vertical (dissemination of information from the dean's office to departments, management orders). The level of access to information is established depending on the functions performed by the employee.

The university has created a unified information network, including all computers, information resources (web portals, file servers), which allow for effective management of the educational process and all information resources. All university buildings have access to a wireless Wi-Fi network with Internet access.

Students, employees and the faculty are involved in the processes of collecting and analyzing information, as well as making decisions based on them. The main method of collecting information is the results of external communication and interviews, questionnaires of all the above-mentioned stakeholders. In addition, all students, faculty and employees have the opportunity to come to a personal meeting with the university management. Based on the results of a systematic analysis of the information received, the management plans and implements improvement measures. Students are part of the collegial governing bodies of the university and participate in decision-making.

The systematic use of processed, adequate information for improving the internal quality assurance system and its continuous improvement is described in detail in the Regulation on the Internal Quality Assurance System (hereinafter ICS). A weekly operational meeting is held at KarIU with the participation of heads of departments and deans of faculties, a survey is conducted twice a year with the participation of employers and students, an annual assessment of the effectiveness of the EP is carried out, where it is constantly discussed, analyzed, and results are summarized for improving the internal quality assurance system.

The University systematically conducts risk analysis, identifying potential threats. The Development Program presents risk analysis and risk management activities. To improve the internal quality assurance system, external and internal risks are identified and predicted at KSU based on the information collected. The analysis methods used at KSU to identify and predict risks include surveys of students and faculty, and the results of the work of the working group to identify corruption risks. Based on the identified risks, decisions are made and activities are carried out to prevent them (meetings and discussions with students, seminars and webinars for teachers, etc.).

Within the framework of OP 7M07203 - "MChICM" the following risks are identified and predicted. External risks include: high level of competition in the regional educational services market; reduction in the number of potential applicants due to departure to other countries; change in the psychological climate in society. Changes in regulatory documents governing the activities of the university are also an external factor that determines changes in the management of the university. The change in the Law "On Education" of the Republic of Kazakhstan determined the inclusion in the University Strategic Plan of tasks related to the expansion of the academic independence of the university, the development of collegial forms of management. Internal risks include: rising prices for educational services, personnel policy (the level of degrees in the department, advanced training of teachers, teacher exchange programs, attracting third-party specialists, etc.).

There is a regular reporting system in KSU, which allows to evaluate the performance and effectiveness of each division, EP, research and their interaction. The reporting system includes various indicators that reflect the results of the divisions, the quality of educational and research processes, the level of student achievement, etc. Reports are submitted on a regular basis, for example, reports on the IP of the teaching staff - 2 times a year, reports of structural divisions - 1 time per year, and are used for analysis and comparison with previous periods. Thus, the Academic Council of the University hears reports from the chairmen of the Attestation Committee on the final certification, EMC, STC of KSU, on the results of the examination session and measures to improve academic work, on the results of the implementation of the Comprehensive University Development Program, on the state and development of research activities of KSU, on international cooperation of the university and academic mobility of the teaching staff and students, on the implementation of the personnel policy of the university, on the results of economic activity, etc.

The mechanisms for informing about the implementation of the SOP plan and changes in them are meetings with stakeholders, conferences, meetings, personal conversations, round tables,

the university website, e-mail, social networks, the AIS "PLATONUS", the AIS "Moodle", telephones, and the media (newspapers, magazines, television).

Analytical part

KarIU has defined the procedure for ensuring information and its protection, including identifying persons responsible for the accuracy and timeliness of information analysis and data provision. Documented information security management measures to ensure stakeholder trust, as well as the storage, use and protection of personal data of students and university employees, are defined in the QMS P4-27-2022 document "Regulations on informing the public". The information security policy defines the requirements in the following areas of information security: network security policy; password policy; server protection policy; antivirus policy; Internet access rules. The safety of information is ensured by a structural unit of the university - the Digital Transformation Department (DDT) and its sectors, which are responsible for the operability and continuous improvement of servers intended for storing and processing information. To ensure the safety of information, the university uses a virtualization environment for critical software; access of individuals to the server room is limited; the server room is equipped with technical means to ensure safety of work; periodic personnel training is carried out on the basics of document security; system administration of servers is carried out; Software and operating systems are updated in a timely manner.

TheEEC Commission notes that the Regulation on the Internal Quality Assurance System does not establish or define mechanisms for the activities of the joint educational program 7M07203 “Metallurgy of Ferrous and Non-Ferrous Metals” with a partner university and posting on the university website.

Strengths/best practices for OP 7M07203 " Metallurgy of ferrous and non-ferrous metals ":

Not identified.

Recommendations for OP 7M07203 " Metallurgy of ferrous and non-ferrous metals ":

The OP management shall develop and approve a documented procedure “Report on the activities of the joint educational program 7M07203 “Metallurgy of ferrous and non-ferrous metals” with a partner university” and post it on the university website. Deadline: 31.12.2025.

Conclusions of theEEC based on the criteria:

According to the standard "Transparency and documentation" the educational program 7M07203 " Metallurgy of ferrous and non-ferrous metals " has 0 strong, 9 satisfactory, 1 position suggests improvement.

6. 9 . Quality Assurance Standard

- ✓ *Partner educational organisations must have a published quality assurance policy that forms part of their strategic management*
- ✓ *Quality assurance policies are more effective when they reflect the links between learning, teaching and research and take into account the national contexts in which partner educational organisations operate.*
- ✓ *Internal stakeholders should develop and implement this policy through appropriate structures and processes with the involvement of external stakeholders.*
- ✓ *Partner education organisations should implement joint internal quality assurance processes in accordance with Part One of the ESG*
- ✓ *The quality assurance policy supports*
- ✓ *organization of a quality assurance system that provides for joint internal quality assurance processes of partner educational organizations*
- ✓ *to departments, schools, faculties, institutes and other divisions, as well as the management of the educational organization, employees and students performing duties to ensure quality*
- ✓ *academic honesty and freedom, as well as intolerance to manifestations of various types of academic dishonesty*
- ✓ *processes that provide intolerance of any kind or discrimination against students and teachers*
- ✓ *participation of external stakeholders in quality assurance*

Evidential part

The quality assurance policy of KarIU is based on the mission, vision and values of the

university, aimed at high-quality training of technical personnel based on advanced scientific achievements and high professional standards in the field of education.

The availability of the main documents of the quality assurance policy to the faculty, employees, students and the general public is ensured by posting them on the university website and on 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. The university's quality assurance policy is determined by documented quality objectives developed for each academic year. The university's quality objectives have been developed in accordance with QMS StO II.6-01.01-2023 "Development of quality objectives". The strategic development program of "USUNT" is located at the link.

The EP management ensures the participation of students, faculty and other stakeholders in the development of the EP and ensuring its quality. The participation of stakeholders in the development and quality assurance of the EP is reflected in the minutes of the department meetings with the participation of employers, employers' feedback on the EP, in the survey of students, faculty and employers. The composition of the Academic Committees for the Department of MiM: can be viewed at the link.

The quality assurance policy of OP 7M07203 MChIM is determined by the documented quality objectives of the Department of Metallurgy and Materials Science, developed for each academic year. The quality objectives of the departments are developed in accordance with the QMS StO II.6-01.01-2022 "Development of quality objectives and plans". The department annually defines quality objectives in the following areas: managerial, educational, methodological, scientific, and educational. During the academic year, the university management collects and analyzes data for the purpose of improvement and, at the end of each academic year, a final analysis of the monitoring results and evaluation of the policy effectiveness is carried out to achieve confidence that the Quality Policy is being implemented.

Monitoring the level of satisfaction of internal and external stakeholders is based on conducting a survey among students, faculty and university staff, and interviewing employers. The results of the employer survey conducted in the 2023-2024 academic year are presented at the link. The survey results show that, in general, employer representatives demonstrate a high level of satisfaction with the quality of training of KarIU graduates. The survey results are discussed at departments, faculties, and the University Academic Council. Employers and foreign experts also provide feedback on the OP MChCM.

The accredited SOP corresponds to the declared missions and development strategies of the universities participating in the implementation: KarIU and USTU. The quality assurance policy of KarIU reflects a close connection between scientific research, teaching and learning. When implementing the assessed EP, the task is set for the active participation of the teaching staff in scientific research and the application of their results in teaching.

In 2020-2023, the department carried out several research projects under contracts with enterprises. Based on the results of scientific research, scientific articles and reports were published in periodicals and collections of works.

The strategic plan of KSU provides for various mechanisms of interaction between the business community, the scientific community, the teaching staff and students. In particular, the content of educational programs, working curricula and the catalog of elective disciplines is agreed with employers, the development of students' competencies is carried out through real industrial practice at enterprises, conditions are created for the commercialization of the results of scientific research and technology by representatives of the business community, the scientific and technical infrastructure is improved through the development of the system of international relations of KSU with leading technical universities and industrial corporations.

The competencies and decision-making processes of the bodies cooperating with the educational institutions in the development of a joint educational program are defined in the Academic Policy, the Regulation on the development of modular educational programs of NAO "KarIU" QMS P 4-25-1-2021, and the Agreement on the implementation of a joint educational

program.

Information on the educational process for students (from admission to completion) is defined, approved, published in the internal documents of the Academic Policy of KarIU, QMS StO II.8-02.02-2021 "Management of the educational process", QMS StO II.8-02.03-2021 "Management of the educational process", QMS P 4 - 53 - 2022 Regulation on the internal quality assurance system of NAO "Karaganda Industrial University". Effective information support for master's students on the educational process is provided by the Platonus and Moodle systems.

Universities have procedures for revising the objectives of the SOP, the concept and its implementation based on internal regulatory documents, since the SOP is developed in accordance with the regulatory documents of partner universities. The content of the OP is determined and assessed in accordance with the requirements of QMS P 4-25-1-2021 - the Regulation on the development of modular educational programs of NAO "KarIU" QMS P 4-25-1-2021, the Regulation on the organization of the educational process at USUNT.

The internal quality assurance system, based on the Quality Policy of KarIU, QMS documents and management decisions, functions successfully and is effectively managed (including design, development, monitoring, improvement). Successful functioning of the internal quality assurance system of the EP is achieved through decision-making (by collegial bodies, the EP management, the dean of the faculty) based on fact analysis.

Within the framework of the accredited educational program, the department has a system of intra-departmental control and management of the quality of the educational process, which involves the following activities: holding open classes with their subsequent discussion within the framework of the methodological week; control visits to classes by the head of the department and senior teachers in accordance with the adopted schedule of mutual visits of the teaching staff, regular discussion and analysis of the educational, methodological, scientific and educational work of the teaching staff at department meetings, planning the process of improving the pedagogical and professional qualifications of teachers for compliance with the schedules of midterm controls in disciplines, discussion of the results of midterm control (held at 8 and 15 weeks) at department meetings. To maintain the quality level of the educational program, students are regularly surveyed.

According to the qualification requirements for the activities of educational organizations providing higher and postgraduate professional education, KarIU has student catering points (canteens), the activities of which are outsourced. Part of the repair work in KarIU is performed by contractors. KarIU maintains partnerships with specialized enterprises that provide their bases for industrial internships. The main requirement for the activities of contractors and partners is the high-quality performance of services and work. All requirements for contractors and partners for the services provided are stipulated in bilateral agreements. Work and services performed by contractors are accepted on the basis of a certificate of completion.

Analytical part

Based on the analysis, it follows that the university has a published quality assurance policy, which is part of strategic management. The Quality Assurance Policy reflects the links between learning, teaching, research and takes into account the national contexts in which the USTU partner universities operate. Internal stakeholders participate in the development and implementation of this policy through relevant structures and processes with the involvement of external stakeholders. The partner university has similar internal processes that are the basis for implementing the quality policy. The Quality Assurance Policy reflects issues related to academic honesty and freedom, as well as intolerance to manifestations of various types of corruption and discrimination.

Strengths/best practices for OP 7M07203 " Metallurgy of ferrous and non-ferrous metals ":

Not identified.

Recommendations for OP 7M07203 " Metallurgy of ferrous and non-ferrous metals ":
Absent.

Conclusions of theEEC based on the criteria:
According to the “Quality Assurance” standard, the educational program 7M07203 “Metallurgy of Ferrous and Non-Ferrous Metals” has 0 strong, 9 satisfactory positions.

6. 10 . Standard "Continuous monitoring and periodic evaluation of the joint educational program"

✓ Partner educational organizations should monitor and periodically evaluate the joint educational program to ensure that it achieves its purpose and is consistent with the needs of learners and society.
✓ The results of these processes should lead the educational organization to continuous improvement of the joint educational program.
✓ All stakeholders must be informed of any actions planned or taken in relation to the joint educational programme.
✓ The joint educational programme should be regularly evaluated and revised with the involvement of learners and other stakeholders.

Evidential part
According to QMS P 4-25-1-2023 "Regulations on the development of modular educational programs", the EPs developed and implemented in the educational process are subject to annual review and, if necessary, updating. The EP is updated taking into account changes in the regulatory legal acts of the Republic of Kazakhstan, updating professional standards, recommendations of employers, and surveys of students. Academic committees for the development/updating of the EP are formed annually.

In 2023, the OP MChCM was updated in the Register of the NCRO, the disciplines "Theory of Inventive Problem Solving", "Scientific Communication", "Project Management" were introduced. (Minutes of the UMS - question 5. "Discussion of proposals of the Academic Committees".

To assess the success of the EP implementation plan, external and internal audits, examination of methodological support, assessment of activities and consideration of issues in collegial bodies (Academic Council, Educational and Methodological Council, department meetings) are used. Every year, in accordance with QMS P 4-57-2022 "Regulations on the procedure for developing a plan for the development of an educational program and the procedure for assessing the effectiveness of the implementation of an educational program", an assessment of the effectiveness of the EP implementation is carried out. The effectiveness of the EP is assessed based on 20 indicators, including: the number of students, employment of graduates, participation in academic mobility, student participation in research activities, the number of winners of various competitions, multilingual education, the availability of developed MOOCs for the EP, etc.

The need to change the content of curricula and educational programs is identified by analyzing the requirements of the State Educational Institution of the Republic of Kazakhstan, professional standards, regulatory documents of the Ministry of Higher Education of the Republic of Kazakhstan, the labor market, marketing research, and consumer surveys (students, employers, graduates of schools, colleges, etc.).

The EP management ensures the participation of representatives of interested parties (employers, faculty, students) in the collegial governing bodies of the EP, as well as their representativeness in decision-making on issues of managing the educational program. The collegial governing bodies of the EP are the Board of Directors, the Academic Council, the Educational and Methodological Council, the Scientific and Technical Council, and the Faculty Council. The Board of Directors includes representatives of employers. Representatives of the faculty and students are included in the Academic Council, Academic Committees, and Quality Assurance Commissions.

Interaction with employers is also carried out within the framework of the work of certification commissions, reviewing master's dissertations. Employers are also invited to

department meetings to discuss the content of the educational program and its further improvement.

The management of the accredited EPs ensures the availability of a feedback system to determine students' satisfaction with the quality of the joint EP. Sociological surveys are conducted in the form of questionnaires. The questionnaires are posted on the university's website. The results of the questionnaires are provided to the university's management, which disseminates the information to the deans and heads of departments. The deans and heads hold discussions at department meetings.

Also, to determine the level of satisfaction, meetings of students with the heads of departments, deans' offices, the rector's office, and the rector are held periodically. The university's website has a rector's blog, through which graduate students and teachers can submit their opinions, wishes, and complaints about the EP and other problems. The results of the surveys are used by the management to make subsequent decisions on the development of the EP in accordance with the areas of activity.

Feedback with graduates is maintained through surveys, meetings, electronic correspondence, and by inviting them to participate in the educational process (conducting classes, working in the Academic Committee, participating in the Working Group for the development of the EP, etc.). The results of the surveys are taken into account in the assessment and revision of the joint EP.

Monitoring and periodic assessment of the EP at KaryIU considers: the content of the programs in the light of the latest scientific achievements and changes in the regulatory framework to ensure the relevance of the taught discipline; changes in the needs of society and the professional environment. Monitoring of the internship and tracking the quality of its organization is carried out by the internship supervisors from the departments, DAP and DNIiMS. Master's students undergo pedagogical internship at the university. The choice of the place for research internship is determined depending on the topic of the dissertation.

Based on the results of the teaching/research practice, the master's students submit a report to the graduating department, which is checked by the practice supervisor and defended before a commission created by the order of the head of the department. Monitoring of satisfaction with the quality of the practice is carried out during a conversation with the master's student. The choice of the place of practice is determined by the master's student together with his/her academic supervisor.

Achieving the goals and objectives of pedagogical and research internships of master's students is guaranteed by the fulfillment of the tasks established in the internship programs and the internal document QMS P 4-28-2021 "Regulations on the procedure for organizing and conducting professional internships and determining organizations as internship bases", QMS P 4-54-2022 Regulations "On the procedure for organizing and conducting pedagogical internships of master's and doctoral students".

The list of concluded agreements and memorandums with city-forming enterprises, representatives of large and medium-sized businesses for the internship of students of the Karaganda Industrial University is posted on the official website, concluded agreements and memorandums are in the sector of the organization of the educational process and professional development of the Department of Academic Policy of KIU.

The student's progress is tracked from the 1st year to the end of the training. To determine the student's progress, the Grade Point Average (GPA) is used - a weighted average assessment of the student's achievement level in the selected program (the ratio of the sum of the products of credits by the digital equivalent of the final grade points in the discipline to the number of credits for the current period of study). The GPA of students is determined at the end of the academic year. A master's student can find out his GPA and his history of academic achievements in the AIS "Platonus".

Students who have passed all types of work stipulated by the course program, with a rating score of at least 30, are admitted to the final assessment (examination). Students who have not

passed their coursework (projects) are not admitted to the exam for the corresponding course/module.

The personal development of master's students in the process of mastering the EP is monitored by creating and maintaining a master's portfolio throughout the entire period of study. The portfolio collects all scientific and educational achievements of master's students - publications of articles in scientific journals, participation in conferences of various levels, reports on practices, internship certificates, diplomas and other achievements. In 2024, the integral GPA system is being introduced at KarIU, which takes into account not only the academic achievements of students, but also the personal development of master's students.

Analytical part

Based on the analysis of the documents provided, it follows that the documentation of the university and the partner university provides for procedures for monitoring and periodically evaluating the joint educational program in order to achieve the objectives and confirm compliance with the needs of students. The results of these processes lead to continuous improvement of the joint educational program. All stakeholders have the opportunity to be informed of any actions planned or taken in relation to the joint educational program. There is a mechanism by which the joint educational program should be regularly evaluated and reviewed by stakeholders.

The EEC Commission notes that the development plan for OP 7M07203 “Metallurgy of Ferrous and Non-Ferrous Metals” by the management of the SOP does not include a section on periodic assessment and revision of the SOP with the involvement of students.

Strengths/best practices for OP 7M07203 " Metallurgy of ferrous and non-ferrous metals ":

Not identified.

Recommendations for OP 7M07203 " Metallurgy of ferrous and non-ferrous metals ":

The SOP management in the development plan of OP 7M07203 "Metallurgy of ferrous and non-ferrous metals" shall include the section "Periodic assessment and revision of the joint educational program is carried out with the involvement of students." Deadline until 01.01.2025.

Conclusions of theEEC based on the criteria:

According to the standard "Continuous monitoring and periodic assessment of the joint educational program", the educational program OP 7M07203 " Metallurgy of ferrous and non-ferrous metals " has 0 strong, 3 satisfactory, 1 position suggests improvement

6. 11 . Standard "Periodic procedures for external quality assurance"

✓ *Partner education organisations must undergo external quality assurance procedures in accordance with the European Standards and Guidelines (ESG) on a regular basis*

✓ *The educational organization should ensure that progress made since the last external quality assurance procedure is taken into account when preparing for the next procedure.*

Evidential part

KarIU and the accredited educational institutions participate in various external assessment procedures conducted by various organizations. The quality management system of KarIU is certified by the National Standard Certification Center for compliance with the requirements of ST RK ISO 9001–2016 (ISO 9001:2015) “Quality Management Systems. Requirements” as applied to educational activities for training personnel in the field of technical, vocational, post-secondary, higher and postgraduate professional education.

The University undergoes these external assessment procedures on a voluntary basis. The results of external assessments are published in open sources and are available at the links (https://iaar.agency/rating.

In 2019, Institutional accreditation was completed by the Independent Agency for Accreditation and Expertise in Education Quality ARQA.

Accreditation certificates are posted on the university website.

The university's achievements are recognized in the national and international educational space and are noted not only in national, but also in world university rankings. For example, Karaganda Industrial University entered the QS World University Rankings: Asia 2024, taking positions #601-650, and among Central Asian universities in the QS Asia University Rankings 2024: Central Asia it took position #30. In 2023, as the best technical university, KIU was awarded the IAAR EUR Technical University Award in the International Ranking "IAAR Eurasian University Ranking (IAAR-EUR)". In 2022, in the National (General) Ranking of the Best Universities in Kazakhstan, conducted by the Independent Agency for Quality Assurance in Education (NAOKO), KIU retained its position in the TOP-10, taking 7th place, among technical universities.

The accredited educational institution undergoes an external assessment annually. In 2019, Specialized Accreditation was passed by the Independent Agency for Accreditation and Expertise of Education Quality ARQA.

Based on the results of specialized accreditation of the Master's degree programs: 6M070900 - Metallurgy (now 7M07203 MCHICM) by the Independent Agency for Accreditation and Expertise of Education Quality ARQA, recommendations were given for the development of the EP. The EP management developed and implemented an Action Plan for post-accreditation monitoring for specialized accreditation of the EP 7M07203 - MCHICM (6M070900 Metallurgy).

Analytical part

Based on the analysis, it follows that the effectiveness of external assessment plays an important role in the development of the internal system for ensuring the quality of education and informing the public. It allows identifying weaknesses and problems in the work of the university, as well as determining the effectiveness of its activities, and is a catalyst for the development and implementation of new opportunities. The results of external assessment are used to improve the quality of education, plan further actions and determine priority areas for development, since quality assurance is a continuous process. In addition, the assessment results are used when making decisions on resource allocation, making changes to the educational program and teaching methods, improving the professional level of the teaching staff, as well as when forming the policy and strategy for the development of the university.

Strengths/best practices for OP 7M07203 " Metallurgy of ferrous and non-ferrous metals ":

Not identified.

Recommendations for OP 7M07203 " Metallurgy of ferrous and non-ferrous metals ":

Absent.

Conclusions of theEEC based on the criteria:

According to the standard "Periodic procedures of external quality assurance" of the educational program 7M07203 " Metallurgy of ferrous and non-ferrous metals " has 0 strong, 2 satisfactory positions.

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

According to the standard " Right to participate, eligibility ":
Not identified.

According to the standard " Learning Outcomes ":
Not identified.

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

According to the standard " Admission, academic performance, recognition and certification of students ":
Not identified.

According to the standard " Student-centred learning, teaching and assessment of academic performance ":
Not identified.

According to the standard " Student Support ":
Not identified.

According to the standard " Resources ":
- The conditions provided by the management of the educational institution have sufficient resources (implementation of projects and agreements with partners in the field of industrial and innovative development of the region), which are adequate and correspond to the expected learning outcomes.

According to the standard " Transparency and documentation ":
Not identified.

According to the " Quality Assurance " standard:
Not identified.

According to the standard " Continuous monitoring and periodic evaluation of the joint educational program ":
Not identified.

According to the standard " Periodic procedures of external quality assurance ":
Not identified.

(VIII) OVERVIEW OF QUALITY IMPROVEMENT RECOMMENDATIONS FOR EACH STANDARD

According to the standard " Right to participate, eligibility ":

The OP management shall develop and approve the procedures, rules for admission and selection of students for the joint educational program 7M07203 "Metallurgy of ferrous and non-ferrous metals" and ensure updating. Deadline until 01.01.2025.

According to the standard " Learning Outcomes ":

None .

According to the standard " Development and approval of the program ":

The management of the SOP shall make the following amendments and additions to the development plan of OP 7M07203 "Metallurgy of ferrous and non-ferrous metals": "Development and approval of a joint educational program is mandatory with the involvement of students." Deadline until 01.01.2025.

According to the standard " Admission, academic performance, recognition and certification of students ":

The management of the joint educational program (JEP) must post on the website of the partner educational organization the rules for admission and the corresponding requirements for applicants participating in the implementation of the JEP. Deadline until 01.01.2025.

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

The management of the OP in the modular educational program 7M07203 "Metallurgy of ferrous and non-ferrous metals" shall make changes and additions to the rules for conducting examinations and the criteria for assessing the achieved learning outcomes in the disciplines of the joint educational program. Deadline until 01.01.2025.

According to the standard " Student Support ":

None .

According to the standard " Resources ":

None .

Transparency and Documentation standard:

The OP management shall develop and approve a report describing the mechanism for collecting its activities and the partner's activities within the framework of the implementation of the joint educational program of OP 7M07203 "Metallurgy of Ferrous and Non-Ferrous Metals", with the aim of further using the experience for the internal quality assurance system. Deadline until 31.12.2025.

According to the " Quality Assurance " standard:

None .

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

The management of the SOP in the development plan of OP 7M07203 "Metallurgy of ferrous and non-ferrous metals" shall make changes and additions of the following nature: "Periodic assessment and revision of the joint educational program is carried out with the involvement of students." Deadline until 01.01.2025.

According to the standard " Periodic procedures of external quality assurance ":
Absent.

(IX) REVIEW OF RECOMMENDATIONS FOR THE DEVELOPMENT OF EDUCATIONAL ORGANIZATION

None.

(X) RECOMMENDATION TO THE ACCREDITATION COUNCIL

The members of the EEC came to the unanimous opinion that the OP 7M07203 "Metallurgy of ferrous and non-ferrous metals " recommended for accreditation for a period of 5 years.

Appendix 1. Evaluation table "Conclusion of the external expert commission" for OP 7M07203 "Metallurgy of ferrous and non-ferrous metals"

No.	No.	Standards and criteria for international specialized (program) accreditation of a joint educational program of higher and (or) postgraduate education	Position of the joint educational program			
			Strong	Satisfactory	Suggests improvement	Unsatisfactory
Standard 1. "Right to Participate. Acceptability"						
1.	**1.**	Educational organizations planning to implement a joint educational program must be recognized by the relevant authorities of the country in which they are located.		+		
2.	**2.**	Participation in the implementation of a joint educational program and the assignment of a joint academic degree must comply with national regulations.		+		
3.	**3.**	The academic degree(s) awarded must correspond to the national qualification system of the countries in which the educational institutions are located.		+		
4.	**4.**	A joint educational program must be developed and implemented with the involvement of all partner educational organizations.		+		
5.	**5.**	The conditions for the development and implementation of a joint educational program must be clearly set out in the cooperation agreement between the educational organizations – partners.		+		
The cooperation document must set out the following:						
6.	**6.**	information on the academic degree (qualification, degrees) awarded upon mastering (completion) of a joint educational program		+		
7.	**7.**	coordination and responsibility of the involved partner educational organizations with regard to management and financial organization (including funding, sharing of costs and revenues, etc.)		+		
8.	**8.**	rules for admission and selection of students			+	
9.	**9.**	mobility of students and teachers		+		
10.	**10.**	rules for conducting examinations, methods for assessing the achievements of students, recognition of ECTS credits and procedures for awarding joint academic degrees		+		
		Total by standard	0	9	1	0
Standard 2. "Learning Outcomes"						
11.	**1.**	The joint educational program must be developed in accordance with the established objectives, including the intended learning outcomes.		+		
12.	**2.**	The qualification obtained as a result of the joint study programme must be clearly defined, explained and correspond to a certain level of the national framework of qualifications in higher education and, consequently, to the framework of qualifications in the European Higher Education Area (FQ-EHEA)		+		
13.	**3.**	The disciplines of the joint educational program must ensure the achievement of the planned learning outcomes, including knowledge, skills and competencies in the relevant area(s) of education.		+		
14.	**4.**	The joint educational program must ensure that each student achieves the planned learning outcomes.		+		

15.	**5.**	The joint educational programme, where relevant, must take into account the minimum harmonized conditions for training referred to in the European Union Directive 2005/36/EC or the relevant common framework for training established in accordance with the Directive.		+		
		Total by standard	0	5	0	0
Standard 3. "Development and approval of the program"						
16.	**1.**	The structure and content of the joint educational program should be defined and developed on the basis of a student-centered approach to learning to ensure the achievement of planned results.		+		
17.	**2.**	The joint educational program should be developed with the participation of students and other stakeholders.			+	
18.	**3.**	The European Credit Transfer System (ECTS) must be applied correctly and the allocation of credits must be clear		+		
19.	**4.**	The joint degree programme covers the required workload. The Bachelor's programme comprises at least 180-240 ECTS credits; the joint Master's programme comprises at least 90-120 ECTS credits and must not be less than 60 ECTS credits at the second level of the cycle (credit ranges according to FQ-EHEA); no credit range is specified for joint PhD programmes		+		
20.	**5.**	The joint educational program has mechanisms for monitoring the study load and the average time for completing the program.		+		
		Total by standard	0	4	1	0
Standard 4. "Admission, Progress, Recognition and Certification of Learners"						
21.	**1.**	Partner educational institutions must have pre-defined, published and consistently applied admissions policies and corresponding requirements for applicants			+	
22.	**2.**	Selection procedures must be appropriate to the level of the joint educational program, regulating all periods of the "life cycle" of education, i.e. admission, academic performance, recognition and certification		+		
23.	**3.**	The recognition of qualifications and periods of study (including recognition of prior learning) should be applied in accordance with the Lisbon Recognition Convention and its supporting instruments		+		
		Total by standard	0	2	1	0
Standard 5. "Student-centered learning, teaching and assessment of academic performance"						
24.	**1.**	The joint educational program should be developed in accordance with the planned learning outcomes.		+		
25.	**2.**	The approaches to learning and teaching used must be adequate to achieve the intended learning outcomes.		+		
26.	**3.**	The joint educational program should take into account the diversity of learners, respect their needs, including potentially different cultural characteristics of learners		+		
27.	**4.**	The rules for conducting examinations and assessing the learning outcomes achieved must be consistent with the expected learning outcomes			+	
28.	**5.**	Examinations and assessment of the results achieved by students must be carried out by partner educational organizations in accordance with established rules.		+		
		Total by standard	0	4	1	0
Standard 6. "Support for learners "						
29.	**1.**	Educational partners must ensure that appropriate support services are in place to support learners to achieve the intended learning outcomes.		+		
30.	**2.**	Learner support services should support the achievement of intended learning outcomes		+		

31.	**3.**	Student support services should take into account possible specific student mobility issues		+		
32.	**4.**	Support services should take into account the needs of different groups of learners (mobile learners, adults, workers, distance learners, and learners with disabilities) when allocating, planning and providing educational resources and take into account the principles of a student-centred approach to learning and teaching.		+		
		Total by standard	0	4	0	0
Standard 7. "Resources"						
33.	**1.**	The teaching staff must be sufficient and adequate (qualifications, professional and international experience) to implement the joint educational program.		+		
34.	**2.**	The conditions provided must be sufficient and adequate in view of the expected learning outcomes.	+			
Educational partner organizations are responsible for the quality of their staff and the provision of favorable conditions for their effective work. Therefore, educational organizations, recognizing the importance of teaching, should:						
35.	**3.**	develop clear, transparent and objective criteria for hiring, assigning, promoting, and dismissing employees and adhere to them in your activities		+		
36.	**4.**	provide opportunities for career growth and professional development for teachers		+		
37.	**5.**	encourage scientific activity to strengthen the link between education and scientific research		+		
38.	**6.**	encourage the use of innovative teaching and learning methods and advanced technologies		+		
39.	**7.**	The educational institution should strive to ensure that the educational equipment and software used to ensure that students achieve the planned results of the joint educational program are similar in the relevant sectors.		+		
		Total by standard	1	6	0	0
Standard 8. "Transparency and documentation"						
40.	**1.**	Relevant information on the joint educational programme should be documented and published, taking into account the specific needs of the mobility students.		+		
41.	**2.**	Information about the joint degree program should include admission requirements and procedures, course/discipline catalog, examination and assessment procedures, etc.		+		
42.	**3.**	Partner educational organizations must have and implement mechanisms for collecting and analyzing information about their activities, about the activities of the partner within the framework of the joint educational program, and use the information obtained in the work of the internal quality assurance system			+	
43.	**4.**	The educational institution must ensure the involvement of students and staff in collecting, analyzing information and planning subsequent procedures.		+		
When collecting information, the OO should take into account the following:						
44.	**5.**	Key performance indicators		+		
45.	**6.**	information about the contingent of students		+		
46.	**7.**	academic performance, student achievement and dropout rates		+		
47.	**8.**	satisfaction of students with the quality of implementation of the joint educational program		+		
48.	**9.**	availability of educational resources and student support services		+		
49.	**10.**	employment of graduates		+		
		Total by standard	0	9	1	0

Standard 9. "Quality Assurance"						
50.	**1.**	Partner educational organisations must have a published quality assurance policy that forms part of their strategic management		+		
51.	**2.**	Quality assurance policies are more effective when they reflect the links between learning, teaching and research and take into account the national contexts in which partner educational organisations operate.		+		
52.	**3.**	Internal stakeholders should develop and implement this policy through appropriate structures and processes with the involvement of external stakeholders.		+		
53.	**4.**	education organisations should implement joint internal quality assurance processes in accordance with Part One of the ESG		+		
The quality assurance policy supports						
54.	**5.**	organization of a quality assurance system that provides for joint internal quality assurance processes of partner educational organizations		+		
55.	**6.**	to departments, schools, faculties, institutes and other divisions, as well as the management of the educational organization, employees and students performing duties to ensure quality		+		
56.	**7.**	academic honesty and freedom, as well as intolerance to manifestations of various types of academic dishonesty		+		
57.	**8.**	processes that provide intolerance of any kind or discrimination against students and teachers		+		
58.	**9.**	participation of external stakeholders in quality assurance		+		
		Total by standard	0	9	0	0
Standard 10. “Continuous monitoring and periodic evaluation of the joint educational program”						
59.	**1.**	Partner educational organizations should monitor and periodically evaluate the joint educational program to ensure that it achieves its purpose and is consistent with the needs of learners and society.		+		
60.	**2.**	The results of these processes should lead the educational organization to continuous improvement of the joint educational program.		+		
61.	**3.**	All stakeholders must be informed of any actions planned or taken in relation to the joint educational programme.		+		
62.	**4.**	The joint educational programme should be regularly evaluated and revised with the involvement of learners and other stakeholders.			+	
		Total by standard	0	3	1	0
Standard 11. "Periodic procedures for external quality assurance"						
63.	**1.**	Partner education organisations must undergo external quality assurance procedures in accordance with the European Standards and Guidelines (ESG) on a regular basis		+		
64.	**2.**	The educational organization should ensure that progress made since the last external quality assurance procedure is taken into account when preparing for the next procedure.		+		
		Total by standard	0	2	0	0
		TOTAL	1	57	6	0