



«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 evaluation commission
for compliance with the requirements of the standards of specialized
accreditation of educational programs

7M07103-Process Equipment Engineering
7M07301-Theory and technology of building and structure design

KARAGANDA INDUSTRIAL UNIVERSITY

during the period from 25 to 27 March 2024 г.

INDEPENDENT ACCREDITATION AND RATING AGENCY
External Expert Commission

*Addressed to
To the IAAR Accreditation
Council*



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(I) LIST OF DESIGNATIONS AND ABBREVIATIONS

AIS-Automated information system
 AC-Attestation Commission
 BD - Basic disciplines
 SMSHPE– State mandatory standards of higher and postgraduate education
 DAP – Department of Academic Policy
 DEWYP- Department for Educational Work and Youth Policy
 DSIIC– Department of Science, Innovation and International Cooperation
 DTD – Digital Transformation Department
 IP - Individual plan
 IT-Information Technology
 ETE - Engineering of technological equipment
 IC – Individual Curriculum
 KarIU-Karaganda Industrial University
 CED-Catalog of elective subjects
 EL - Engineering Laboratory
 MSHERK– Ministry of Science and Higher Education of the Republic of Kazakhstan
 MEP-Modular educational program
 NPJSC - Non-profit joint-stock company
 RDW– Research and development work
 RW– Research work
 RWU – Research work of undergraduates
 STC-Scientific and Technical Council
 GES - General education subjects
 EP-Educational program
 SD - Specialized disciplines
 FM – Faculty members
 RK – Republic of Kazakhstan
 WC – Working Curriculum
 DAS -Design automation system
 QMS-Quality Management System
 IWMS – Independent work of a master's student
 IWMSWT– Independent work of a master's student with a teacher
 TMT-Technological machines and transport
 TaTDBS-Theory and technology of designing buildings and structures
 UMK-Educational and methodical complex
 UMKD – educational and methodical complex of the discipline
 UMC-Educational and Methodical Council
 FEiC-Faculty of Economics and Construction
 FETaCS-Faculty of Energy, Transport and Control Systems

(II) INTRODUCTION

In accordance with Order No. 31-24-OD of 2024 of the Independent Accreditation and Rating Agency, from March 25 to March 27, 2024, an external expert commission assessed the compliance of educational programs 7M07103 Engineering of Technological equipment, 7M07301 Theory and Technology of Design of buildings and structures of Karaganda Industrial University with the standards of specialized accreditation of the NAAR (dated June 16, 2020, no. 57-20-OD, sixth edition) in hybrid format.

The report of the External Expert Commission (EC) contains an assessment of the submitted educational programs to the NAAR criteria, recommendations of the EC for further improvement of educational programs, and parameters of the profile of educational programs.

The composition of the EEC:

1) **Chairman of the IAAR Commission** - Alexey Shcherbina, Candidate of Economic Sciences, Doctor of Philosophy, Associate Professor, Southern Federal University (Russian Federation) *Off-line participation*

2) **IAAR Expert** Natalia V. Tsopa, Professor, Doctor of Economics, Head of the Department of Technology, Organization and Management of Construction, V. I. Vernadsky Crimean Federal University (Russian Federation) *On-line participation*

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

4) **IAAR expert-** Elubay Madeniyet Azamatuly, PhD, Professor, Dean of the Faculty of Natural Sciences, Toraighyrov University (Republic of Kazakhstan) *On-line participation*

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

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

7) **IAAR expert**-Mazdubay Asylkhan Vladimirovich, PhD, Associate Professor, Head of the Department of Mechanics and Oil and Gas Engineering Toraighyrov University (Republic of Kazakhstan) *On-line participation*

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

9) **IAAR expert**- Yerkebulan Kilibayev, PhD, Senior Lecturer of the Department of Non-Ferrous Metals Metallurgy, Corresponding member of the International Academy of Informatization, L. N. Gumilyov Eurasian National University (Republic of Kazakhstan) *Off-line participation*

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

11) **IAAR expert, employer**-Temirlan Khaleluly Madiev, Leading expert of the Investment Project Support Department of the Chamber of Entrepreneurs of Almaty (Republic of Kazakhstan) *On-line participation*

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

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

14) **IAAR expert, student**-Tynymbayeva Aruzhan Muratkyzy, Master's student of EP "Materials Science and technology of new materials", Kazakh National Research Technical University named after K. I. Satpayev (Republic of Kazakhstan) *On-line participation*

15) **IAAR expert, student** - Yerzhan Kulkubaev, 1st-year master's student of EP "Economics", member of the Alliance of Students of Kazakhstan, Almaty University of Humanities and Economics (Republic of Kazakhstan) *On-line participation*

16) **IAAR Coordinator** - Malika Saidulayeva, Project Manager of the Independent Accreditation and Rating Agency (Republic of Kazakhstan) *Off-line participation*



(III) REPRESENTATION OF THE EDUCATIONAL ORGANIZATION

Training of personnel in accredited educational programs is carried out on the basis of the license KZ86LAA00019217 dated 30.10.2020 for the implementation of educational activities in the field of higher and postgraduate education, issued by the Committee for Quality Assurance in the field of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan.

KarIU was established as a VTUZ Plant at the Karaganda Metallurgical Combine in 1963 on the basis of the Resolution of the Central Committee of the CPSU and the Council of Ministers of the USSR No. 533 of May 9, 1963 and the Resolution of the Central Committee of the CPC and the Council of Ministers of the Kazakh SSR No. 615 of August 1, 1963. The factory-VTUZ was transformed into KarMetI by the Resolution of the Cabinet of Ministers of the Republic of Kazakhstan dated 19.03.1993. In 2006, by the Decree of the Government of the Republic of Kazakhstan No. 705 dated July 25, 2006, the institute was transformed into Karaganda State Industrial University. In June 2020, Karaganda State Industrial University was renamed NPJSC "KarIU".

The university has 3 faculties and 11 departments: Faculty of Metallurgy and Mechanical Engineering (Departments of Metallurgy and Materials Science; Pressure Processing of Materials; Chemical Technology and Ecology); Faculty of Energy, Transport and Control Systems (Departments of Energy; Artificial Intelligence Technologies; Technological Machines and Transport; history of Kazakhstan, Social and Humanitarian Disciplines and Physical Education) Faculty of Economics and Construction (Departments of Economics and Business; Construction; general education disciplines; Assembly of People of Kazakhstan). The University has 13 branches of departments at leading enterprises and research institutes of the city and region. The University has a Metallurgy Center with 12 laboratories, a Research institute for Construction Production, and a Center for Energy-efficient Technologies and Energy Audit (<https://tttu.edu.kz/>)

The educational process is served by a teaching staff of 142 people, including 125 full-time employees: doctors of sciences, professors – 10 people; candidates of sciences, associate professors-36 people; PhD doctors-17 people. The university's graduation rate is 43%.

The number of students enrolled at KarIU is 2,378: 2,323 students for the 2023/2024 academic year (1,144 of them are on a grant); 38 undergraduates (30 of them are on a grant); 17 doctoral students, all of them are studying on a state grant.

The university has sufficient material and technical, information and library resources used to organize the process of teaching and educating students: 6 educational and laboratory buildings with a total area of 44.01 thousand square meters, a sports complex of the university with a total area of 2300 square meters. m. The total book fund of the library as of 01.01.2024 is 296,520 copies, including in the state language - 115,409 copies; in English-1,348 copies. Educational literature on electronic media accounts for 23 % of the total fund - 67,441 copies.

The educational program 7M07103-Engineering of Technological Equipment (IT) has been implemented at the Department of Technological Machines and Transport since 2020 (License number KZ86LAA00019217, license issue date October 30, 2020, Order No. 426 of the Chairman of the Committee for Quality Assurance in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan dated October 29, 2020, 7M071-Engineering and Engineering).

The educational program 7M07301-Theory and Technology of Building and Structure Design (TaTDBS) has been implemented at the Department of Construction since 2020 (License number KZ86LAA00019217, license issue date October 30, 2020, Order No. 426 of the Chairman of the Committee for Quality Assurance in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan dated October 29, 2020, 7M073-Architecture and Construction).

(IV) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE

Educational programs 7M07103 (6M072400) Engineering of technological equipment (Technological machines and equipment) and 7M07301 (6M072900) Theory and technology of design of buildings and structures (Construction) external assessment for compliance with the standards of specialized accreditation of educational programs of organizations of higher and (or) postgraduate education was conducted in the independent agency for accreditation and examination of the quality of education ARQA in 2019 year with an accreditation period of 5 years, valid from 30.05.2019 to 29.05.2024.

International specialized accreditation of educational programs 7M07103 - "Engineering of technological equipment" and 7M07301 "Theory and technology of designing buildings and structures" of Karaganda Industrial University according to IAAR standards is held for the first time.

(V) DESCRIPTION OF THE EC SESSION

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

In order to coordinate the work 24.03.2024 of the EEC, an on-line installation meeting was held on 24.03.2024, during which powers were distributed among the commission members, the visit schedule was clarified, and agreement was reached on the choice of examination methods.

To obtain objective information about the quality of educational programs and the entire infrastructure of the university, to clarify the content of self-assessment reports, meetings were held with the rector, vice-rectors of the university in their areas of activity, heads of structural divisions, heads of departments, teachers, students, graduates, employers. A total of 61 representatives participated in the meetings (table 1).

Table 1-Information about employees and trainees who participated in meetings with the IAAR EEC:

Category of participants	Number
of Rectors	1
Vice-rectors	4
Heads of structural divisions	15
Deans	3
Heads of departments	7
Teachers	9
Students, undergraduates, doctoral	students 8
Graduates	8
Employers	6
Total	61

During the visual inspection, the EEC members got acquainted with the state of the material and technical base, visited the Center for Digital Engineering in Engineering and Technology, the specialized auditorium "Design of building Structures", the specialized auditorium for the organization and technology of construction production, the specialized auditorium for design; the assembly hall, museum, subscription hall.

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

The EEC members visited the practice bases of accredited programs: Kaztemirstroy LLP, Inkarn-1 LLP.

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

In accordance with the accreditation procedure, 46 teachers and 12 students were interviewed.

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

Within the framework of the planned program, recommendations for improving the accredited educational programs of Karaganda Industrial University, developed by the EEC based on the results of the expert examination, were presented at a meeting with the management on 27.03.2024.03.



(VI) COMPLIANCE WITH SPECIALIZED ACCREDITATION STANDARDS

6.1. Educational Program Management Standard

- ✓ The university should demonstrate the development of the goal and strategy for the development of the EP based on the analysis of external and internal factors with a wide involvement of various stakeholders.
 - ✓ A quality assurance policy should reflect the relationship between research, teaching, and learning.
 - ✓ The university demonstrates the development of a quality assurance culture.
 - ✓ Commitment to quality assurance should apply to any activity performed by contractors and partners (outsourcing), including the implementation of joint/two-degree education and academic mobility.
 - ✓ The EP management ensures transparency in the development of the EP development plan based on an analysis of its functioning, the actual positioning of the university and the focus of its activities on meeting the needs of students, the state, employers and other interested parties.
 - ✓ The EP management demonstrates the functioning of mechanisms for forming and regularly reviewing the EP development plan and monitoring its implementation, evaluating the achievement of training goals, meeting the needs of students, employers and society, and making decisions aimed at continuous improvement of the EP.
 - ✓ The EP management should involve representatives of groups of stakeholders, including employers, trainees and teaching staff, in the formation of the EP development plan.
 - ✓ The EP management should demonstrate the individuality and uniqueness of the EP development plan, its consistency with national development priorities and the development strategy of the educational organization.
 - ✓ The university must demonstrate a clear definition of those responsible for business processes within the framework of the EP, the distribution of job responsibilities of personnel, and the division of functions of collegial bodies.
 - ✓ The management of the EP ensures coordination of the activities of all persons involved in the development and management of the EP and its continuous implementation, as well as involves all stakeholders in this process.
 - ✓ The EP management should ensure the transparency of the management system, the functioning of the internal quality assurance system, including its design, management and monitoring, and the adoption of appropriate decisions.
 - ✓ The management of the EP should manage risks.
 - ✓ The EP management should ensure the participation of representatives of interested parties (employers, teaching staff, students) in the collegial management bodies of the educational program, as well as their representativeness in making decisions on the management of the educational program.
 - ✓ The university must demonstrate innovation management within the framework of the EP, including the analysis and implementation of innovative proposals.
 - ✓ The EP management should demonstrate its openness and accessibility to students, teaching staff, employers, and other interested parties.
 - ✓ The EP management confirms the completion of training in educational management programs.
- The EP management should strive to ensure that progress made since the last external quality assurance procedure is taken into account when preparing for the next procedure.

Proof part

Karaganda Industrial University (KariU) has a logical and consistent quality assurance policy, which is part of its strategic management and is aimed at ensuring high quality of educational services provided to consumers and customers. KariU's quality assurance policy is based on the University's Mission Statement (<https://ttu.edu.kz/ru/missiya-universiteta/>), aimed at high-quality training of technical personnel based on advanced scientific achievements and high professional standards in the field of education and is reflected in the documents "Quality Policy" (<https://ttu.edu.kz/ru/politika-v-oblasti-kachestva/>), "Quality objectives" (<https://ttu.edu.kz/ru/celi-v-oblasti-kachestva/>), " Strategic Plan NPJSC "Karaganda Industrial University "for 2021-2025".

Quality assurance policy EP 7M07103-Engineering of technological equipment (IT) and 7M07301-Theory and Technology of design of buildings and structures (TaTDBS) is determined by the documented quality objectives of the graduate departments "Technological Machines and Transport" (TMT) (https://drive.google.com/file/d/1vCD7ZoVLNKAlebJfVPNwZ7XPCeoDYgy/view?usp=drive_link), "Construction", developed for each academic year (https://drive.google.com/file/d/1Yi_HAP7UIW7XQC56S5eIO3WD-7UdbELI/view?usp=sharing). Quality objectives of departments are developed in accordance with QMS StO II. 6-01. 01-2022 "Development of goals and plans in the field of quality", which sets out the procedure for developing quality goals and planning for improving the quality management system.

One of the most important changes in the development of a quality assurance culture was corporate governance in connection with the reorganization of KariU into a non-profit joint-stock company. KariU structure (<https://ttu.edu.kz/ru/struktura-universiteta/>) is aimed at improving the

management system and optimizing the distribution of functions and powers of structural divisions.

The quality assurance policy at KarIU is related to the functioning of the quality management system (QMS) within the framework of the certificate of compliance with the requirements of ST RK ISO 9001-2016 "Quality Management system. Requirements" and an internal quality assurance system in accordance with the QMS P 4 – 53 – 2022 "Regulations on the internal quality assurance system of NPJSC "Karaganda Industrial University". KarIU QMS (<https://tttu.edu.kz/ru/smk/>) documented, implemented and maintained in working order in relation to the current organizational structure of KarIU.

The positioning of the EP in KarIU is aimed both at traditional consumers of services – individuals (school graduates, employees of enterprises, etc.), and at an indirect consumer – organizations in which graduates of the university will find employment. KarIU regularly analyzes the actual positioning of the EP, which is regulated by the standard QMS StO II. 8-02. 01-2021 "Processes related to consumers".

KarIU has a database of internal regulatory acts that regulates all major business processes within the framework of the EP (<https://tttu.edu.kz/ru/polozheniya/>). All interested parties have access to the database of local regulatory documents.

The management of EP 7M07103-EET, 7M07301-TaTDBS ensures transparency in the development of the EP development plan based on an analysis of its functioning, the real positioning of the university and the focus of its activities on meeting the needs of the state, employers, stakeholders and students: EP 7M07103 – EET development plan https://drive.google.com/file/d/1iCSJkIEFiOaQkWOgGX-0YGznPjLMHAoN/view?usp=drive_link; EP 7M07301 development plan https://drive.google.com/file/d/14CX2ZjhxGU_2F47x6kaxLNUkbwOz6ZsJ/view?usp=sharing

Graduate departments develop plans for the development of educational programs in accordance with the Regulation of the QMS P 4-57-2022 "On the procedure for developing an educational program development plan and procedures for evaluating the effectiveness of the educational program implementation", based on the strategic directions of KarIU development.

The management of the EP 7M07103-EET, 7M07301-TaTDBS involves representatives of interested groups, including employers, students and teaching staff, in the formation of a development plan for the EP. So at the meeting of the department "Construction of 16.01.2024 (Protocol No. 6)" in the discussion of the Development Plan EP 7M07301 "Theory and technology of design of buildings and structures" was attended by: Director of LLP "LOGOS-Montazhstroy" Altaybaeva Z. A., Production Director of LLP "LOGOS-Montazhstroy" Ziganshin I. B., Director of LLP "LOGOS-Montazhstroy". "Absolute Smart Development Group", Master's degree Altaibaev A. A., Director of AKM-9 LLP Bychkov A. N.; undergraduates: Khafizov A. K., Belyanina E. A., teaching staff of the Department. The expanded meeting of the Department "Technological Machines and Transport", which implements EP 7M07103-EET, included the following employers: Senyuk L. I. - head of PTO of "Gordorservis-T" LLP, Konovalenko M. A. - head of LPC-1 of "Qarmet" JSC.

The distribution of responsibility for business processes within the framework of EP management is clearly described in the job descriptions developed in accordance with QMS StO II. 5-03. 01-2021 "Job descriptions". The division of functions of collegial bodies is regulated by the Regulations on the activities of the relevant bodies. The powers and responsibilities of all participants implementing the EP 7M07103-EET, 7M07301-TaTDBS are clearly defined in the document QMS P4-20-2022 "Regulations on the qualification characteristics of positions of scientific and pedagogical workers".

KarIU, in the course of implementing EP 7M07103 - EET, 7M07301 - TaTDBS, plans and applies monitoring, measurement, analysis and improvement processes in order to demonstrate the compliance of educational services with the requirements of the State Higher Professional education and consumer requirements, and ensure compliance with the QMS. Continuous improvement of the quality assurance system is regulated by the QMS organization standard StO

II. 10-01. 01-2021 "Data analysis, QMS improvement". Monitoring the degree of satisfaction of internal and external stakeholders is based on conducting questionnaires among students, teaching staff and employees of the university, interviewing employers (<https://tttu.edu.kz/ru/anketi-oprosniki-2/>). The results of the survey are discussed at departments, faculties, and the Academic Council of the University. A survey conducted in early March 2023 among students showed that 84 % are satisfied with the quality of education at KariU.

The management of EP 7M07103-ETE, 7M07301-TaTDBS performs risk management in accordance with QMS StO II. 6-01. 02-2022 "Risk actions". Identification of risks is carried out on the basis of analysis of documents, in accordance with the established procedure. The departments' work plans for all the above-mentioned possible risks have developed appropriate preventive measures. For example, in order to increase the number of applicants to the master's program at the final bachelor's courses, additional consultations are held in a foreign language and disciplines included in the comprehensive testing of the master's program, as well as informational letters are sent to enterprises about the possibility of studying in the KariU master's program (A letter to QARMET JSC, formerly ArcelorMittal Temirtau JSC). <https://drive.google.com/file/d/1jzq4nM5XJmCJLdmzziCbGWb84xZ6EssZ/view?usp=sharing>).

The EP management ensures the participation of representatives of interested parties (employers, teaching staff, students) in the collective management bodies of the EP, as well as their representativeness in making decisions on the management of the educational program. The collegial governing bodies 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 the following representatives of employers: N. V. Plokhikh-Head of the Department of Training, Recruitment and Leadership of QARMET JSC (<https://tttu.edu.kz/ru/korporativnoe-upravlenie/>), Bykov V. A. – Director of the Association for Promoting the Development of Private Entrepreneurship in the Republic of Kazakhstan; Kulpeisov E. D.-Director of the Chamber of Entrepreneurs "Atameken" of Karaganda region. In the KariU Academic Council (<https://tttu.edu.kz/ru/ucheniyy-sovety/>) students are represented by the President of the Student Parliament-Karzhau S. E. Also, the Academic Council includes the chairman of the KariU Trade Union Committee-Karipbayeva A. R., representing the interests of teaching staff.

KariU manages innovations within the framework of the EP, including the analysis and implementation of innovative proposals. Innovative proposals of teaching staff are considered during open lessons, seminars, trainings and other events within the framework of the annual methodological weeks of faculties, at scientific and methodological conferences. The results of the methodological weeks are considered at the meetings of the KariU UMC (Protocol No. 5 of 26.04.2023- "On the experience of conducting methodological weeks and open classes of faculties in the 2022-2023 academic year"), https://drive.google.com/file/d/1iXyZD_Wanz8okfOQTvzzaFeAInpq_rG2/view?usp=sharing . At the scientific and methodological conference "Innovative Approaches in Education", held on November 29-30, 2022 at KariU, 6 reports of the teaching staff of the TMT department, which trains masters in EP 7M07103-ETE, were presented (<https://drive.google.com/file/d/1KYrA2GqEMifBYThL-M-cZG9Ehub7HCXo/view>).

The EP manual is open and accessible to students, teaching staff, employers, and other interested parties. The university's website contains the rector's blog (<https://tttu.edu.kz/ru/blog-rektora/>), where all interested parties can apply via the Q & A system. The work schedule of university managers (rector and vice-rectors) defines the time for receiving visitors. Pre-registration for an appointment with the management is carried out by office managers of the rector's office (<https://tttu.edu.kz/grafik-priema-rektora-po-lichnim-voprosam/1>)

Managers of EP 7M07103-ETE, 7M07301-TaTDBS in 2021 completed advanced training courses on the topic "Management in education" in the amount of 72 hours. (https://drive.google.com/file/d/1Z4Wb2vVbgKRkh40IJx-jp_-yyqWEjdfy/view?usp=sharing; <https://drive.google.com/file/d/1WPYVxdiihvrekQrVwK7OvTJkXH3glVJT/view?usp=sharing>).

Analytical part

The content and semantic load of the evaluation criteria of the Standard "Educational Program Management" indicates the existence of measures taken by KarIU to improve quality in various types of activities. The University demonstrated a university-wide quality concept for each activity. It describes the main business processes and those responsible for them, on the basis of which the design, management and monitoring of improvements, and decision-making based on facts should be carried out.

The EP management engages representatives of various groups of stakeholders in the formation of the EP development plan. However, during the interviewing of focus groups, employers, in particular representatives of JSC "QARMET" Kalmyrzaev B. K., VET PC "STACK" Afanasenko O. I., expressed their desire to establish a closer partnership between the company and its enterprises in the process of discussing and updating plans for the development of educational programs in order to form real tasks and projects for students, develop practical skills and skills. skills and preparation for specific professional tasks, taking into account the specifics of individual areas of educational programs.

The survey of teaching staff conducted during the visit to the NAAR EEC showed that the involvement of teaching staff in the process of making managerial and strategic decisions is "very good" and "good" – 41.3% % and 54.3%%, respectively. 4.3% of teaching staff assess their involvement in the management and strategic decision-making process as "relatively poor".

Strengths/best practices in EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

Not detected.

EEC recommendations for EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

1. By the beginning of the 2024-2025 academic year, the EP management should determine the list of employers by the profile of the educational program, taking into account the specifics of individual areas within the EP to involve in the discussion and update Plans for the development of educational programs.

EEC's conclusions based on the following criteria:

According to the standard "Educational program management": accredited educational programs 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures" have 17-satisfactory positions.

6.2. Information Management and Reporting Standard

✓ The university must demonstrate the development of a goal and strategy for the development of EP based on the analysis of external and internal The university must ensure the functioning of a system for collecting, analyzing and managing information based on modern information and communication technologies and software tools.

✓ The EP management demonstrates the systematic use of processed, adequate information to improve the internal quality assurance system.

✓ The EP management demonstrates the existence of a reporting system that reflects the activities of all structural divisions and departments within the EP, including an assessment of their performance.

✓ The university should determine the frequency, forms and methods of evaluating the management of the EP, the activities of collegial bodies and structural divisions, and top management.

✓ The university must demonstrate a mechanism for ensuring information security, including identifying those responsible for the accuracy and timeliness of information analysis and data provision.

✓ The university demonstrates the involvement of students, employees and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them.

✓ The EP management should demonstrate the existence of mechanisms for communication with students, employees, and other stakeholders, including conflict resolution.

✓ The university should measure the degree of satisfaction with the needs of students, teaching staff and staff within the framework of the EP and demonstrate evidence of addressing the identified shortcomings.

✓ The university should evaluate the effectiveness and efficiency of its activities in the context of EP.

- ✓ Information collected and analyzed by the university within the framework of the EP should take into account:
 - ✓ key performance indicators;
 - ✓ dynamics of the number of students in the context of forms and types;
 - ✓ the level of academic performance, student achievements, and deductions.
 - ✓ 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 development of graduates.
- ✓ Students, teaching staff and staff must document their consent to the processing of personal data.
- ✓ The management of the EP should help to provide the necessary information in the relevant fields of science.

Proof part

Information management at KarIU is the activity of generating, processing, transmitting and using information within and outside the organization. Providing all interested parties with complete and objective information about the activities of KarIU is carried out in accordance with the QMS document.-4-27-2022 "Regulation on informing the public" (<https://drive.google.com/file/d/1kjwoSsFDgABsXc1FwLZGnXKs-16FQJ8h/view>). Information management processes within KarIU are regulated by the standard of the organization of QMS StO II. 7-04. 02-2021 "Internal informing".

General information about the university and EP is available in three languages (Kazakh, Russian and English) on the official website of the university <https://tttu.edu.kz/>. On the official website, students, employees and interested parties can find information about the structure, mission, strategy, events in the scientific, educational, and social life of the university, as well as an electronic class schedule (<https://tttu.edu.kz/ru/elektronnoe-raspisanie/>), as well as information on educational programs, in particular, information about the department (<https://tttu.edu.kz/ru/kafedra-texnologicheskije-mashini-i-transport/>, <https://tttu.edu.kz/ru/kafedra-stroitelstvo/>), mandatory items being studied and elective subjects (CED <https://tttu.edu.kz/ru/katalog-elektivnix-disciplin/>).

Information on the formation and implementation of the KarIU development plan is published on the corresponding section "University Development Plans" of the official website (<https://tttu.edu.kz/ru/plani-razvitiya/>). Providing effective information support for the management processes of the education system, as well as managing the educational process of the university is carried out by the "PLATONUS" and MOODLE system (<https://dot.tttu.edu.kz/>).

KarIU uses internal and external methods for assessing the functioning of the EP to develop recommendations for further development and improvement. Internal assessment methods include: evaluating the department's performance; conducting internal audits; checking the degree of readiness of departments for the new academic year; evaluating the quality of the educational process; evaluating academic achievements, students; questioning employers, students, employees, and teaching staff. Indicators of external assessment of the quality of the EP are: conclusions of the external quality assurance procedure (specialized accreditation); AC reports; places in the EP rating; achievements of students at subject Olympiads and scientific conferences, etc.

Within the framework of EP 7M07103-ETE, 7M07301-TaTDBS, there is a system of regular reporting, including an assessment of the performance of departments and scientific research. Based on the results of the academic semesters of teaching staff and department staff, reports of teaching staff on educational, teaching-methodical, scientific and educational activities are compiled (individual reports of teachers, individual reports of undergraduates).

KarIU measures the degree of satisfaction with the needs of teaching staff, staff and students within the framework of the EP. To determine the degree of satisfaction of the needs of teaching staff, staff and students in the framework of the EP, a questionnaire is provided, which is conducted 2 times a year. Conducting questionnaires and analyzing their results are regulated by the QMS documents.-27-2-2021 "Regulations on conducting a survey on monitoring the quality of educational, educational and research processes in the NPJSC " Karaganda Industrial University " (<https://drive.google.com/file/d/1cggvTTt5Qxqr55v4wBU-252pMRij784/view?usp=sharing>) QMS SrT II. 8-02. 01-2023 "Processes related to consumers" (<https://tttu.edu.kz/ru/smk/>). The results of the survey are discussed at the meeting of the Academic

Council, the Educational and Methodological and Scientific and Technical Councils of KarIU, in the structural divisions interested in conducting the survey, in order to analyze them and form proposals for improving the quality of educational activities.

The KarIU defines the procedure for ensuring information protection, including those responsible for the accuracy and timeliness of information analysis and data provision. Documented information security management measures that ensure the trust of stakeholders, as well as the storage, use and protection of personal data of students and university employees are defined in the documents "Instructions for ensuring the safety of information of NPJSC Karaganda Industrial University" and in QMS P4-27-2022 "Regulations on informing the Public".

KarIU has a mechanism for communication with students, employees and other stakeholders, including a mechanism for conflict resolution. The functioning of the mechanism of communication with subjects of the educational process and other interested parties is regulated by the documents of the QMS StO II. 8-02. 01-2021 "Processes related to consumers", QMS P-4-42-1-2020 "Regulations on the Conciliation Commission".

The main communication channels at KarIU are: direct communication (educational process, meetings, meetings, personal conversations, round tables, etc.), local network (Net Speakerphone), Internet (university website, e-mail, social networks, AIS "Platonus", AIS "Moodle"), telephones, mass media (newspapers, magazines, and television). Feedback to KarIU is provided through a periodic survey of students, teaching staff, employers; open days; reception by the rector on personal issues; meetings of the rector with students; maintaining the rector's blog on the official website of the university; holding employment fairs for students with the invitation of heads of enterprises, firms, companies ("Alumni Fair – 2023").
<https://www.facebook.com/100022651051239/videos/1368447887107545/>).

Evaluation of the effectiveness of the EP is carried out according to 20 indicators, including: the number of students enrolled, employment of graduates, participation in academic mobility, participation of students in research activities, the number of prize-winners of various competitions, multilingual training, the availability of developed MoES on the EP, etc.

(https://docs.google.com/document/d/1sqKuo_lyTnny2Ycuw_QDVBlCgi86cmk/edit?usp=sharing&ouid=100185768834912070493&rtpof=true&sd=true).

At KarIU, undergraduates, employees and teaching staff document their consent to the processing of personal data. Work on documenting consent to the processing of personal data is carried out by the Personnel Management Service and deans' offices in accordance with the procedure established by the Law of the Republic of Kazakhstan "On Personal Data and their Protection".

Analytical part

Analyzing the content and semantic load of the standard "Information Management and Reporting" in accredited areas, the commission notes as a positive point that the university has a system for managing information and reporting on student recruitment, academic performance, contingent movement, and personnel, which is presented in regular reports at meetings of departments, the rector's Office, and the Academic Council of the University.

Regular surveys of students and employers are conducted and appropriate measures are taken to eliminate shortcomings based on the results of their survey/interviewing.

Based on the results of the self-report and the work of the EEC, the commission notes that the process of collecting and analyzing information at the level of the EP is not complete: how preventive and corrective measures are developed based on the collection and analysis of information, what methods are used to assess the effectiveness of changes in the context of the EP, whether external experts are involved in the assessment.

A survey of students conducted during the visit to the UEC NAAR showed that 91.7 % are fully satisfied and 8.3 % are partially satisfied with the information about courses, educational programs and academic degrees obtained.

Strengths/best practices in EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

The presence of a reporting system reflecting the activities of all structural divisions and departments within the framework of the EP, including an assessment of their performance, is demonstrated.

EEC recommendations for EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

1. By the beginning of the 2024-2025 academic year, the university management should develop methodological recommendations for evaluating the effectiveness of changes made in the university, including in the context of the EP, including maps of corrective measures and the process of evaluating the effectiveness of implemented changes.

EEC's conclusions based on the following criteria:

According to the standard "Information management and reporting", the accredited educational programs 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures" have 1 strong, 15 – satisfactory positions, 1 position requiring improvement.

6.3. Standard "Development and approval of educational programs"

- ✓ The university must demonstrate the existence of a documented procedure for developing the EP and its approval at the institutional level.
- ✓ The university must demonstrate that the developed EP meets the established goals and planned learning outcomes.
- ✓ The EP management should determine the impact of disciplines and professional practices on the formation of learning outcomes.
- ✓ The university demonstrates the existence of a graduate model of the EP, which describes the results of training and personal qualities.
- ✓ The qualification awarded upon completion of the EP should be clearly defined, explained and correspond to a certain level of NSC, QF-EHEA.
- ✓ The management of the EP should demonstrate the modular structure of the program based on ECTS, ensure that the structure of the content of the EP corresponds to the goals set, with a focus on achieving the planned learning outcomes of each graduate.
- ✓ The EP management should ensure that the content of academic disciplines and learning outcomes correspond to each other and the level of study (bachelor's, master's, doctoral studies).
- ✓ The EP management must demonstrate that external reviews of the EP are conducted.
- ✓ The EP management should provide evidence of the involvement of students, teaching staff, and other stakeholders in the development and quality assurance of the EP.
- ✓ The EP management should demonstrate the uniqueness of the educational program, its positioning in the educational market (regional/national/ international).
- ✓ An important factor is the ability to prepare students for professional certification.
- ✓ An important factor is the existence of a joint and / or two-degree EP with foreign universities.

Proof part

The development and approval of educational programs at the university is carried out in accordance with the provisions of regulatory legal acts in the field of higher and postgraduate education. KarIU defines and documents the procedures for the development of educational programs and their approval at the institutional level, which are reflected in the documents of QMS StO II. 8-03. 01-2021 "Design and development of educational services", QMS P 4-25-1-2021 "Regulations on the development of modular educational programs".

According to the QMS P 4-25-1-2021 "Regulations on the development of modular educational programs", developed and implemented in the educational process EP are subject to annual examination and updating. For this purpose, in March-April of the current academic year, an expanded meeting of the department is held with the participation of employers and students, at which the current EP is evaluated, based on the results of which a conclusion is made about the

effectiveness of the program, and a decision is made on the further use of the EP in the educational process, making changes to

An extended meeting of the TMT Department to review the update of EP 7M07103-ETE was held on 25.04.2023, Protocol No. 18. Representatives of employers were present: Senyuk L. I.-Head of vocational training at Gordorservis-T LLP, Konovalenko M. A.-head of LPC-1 at ArcelorMittal Temirtau JSC (QARMET JSC), representatives of students: Kamarov A. U.-doctoral student at IITM-22d group, Asanov R. A.-Master's student at ITTS-22mn group, Taisagatov A.D.-Master's student of the ETE-22mn group. Extended meeting of the Department "Construction" to review the update of EP 7M07301-TaTDBS, was held on 14.03.2023, Protocol No. 8. Employers attended: Director of LOGOS-Montazhstroy LLP Altaybaeva Z. A., Production Director of LOGOS-Montazhstroy LLP Ziganshin I. B., Director of Absolute Smart Development Group LLP, Master's degree Altaybayev A. A., Director of AKM-9 LLP Bychkov A. N.; Undergraduates: Marinina A. E., Balabay N. A., Sakenova Zh. K. and others.

The Register of Educational Programs of the Center for the Bologna Process and Academic Mobility is updated at least once every four years. EP 7M07103-ETE was updated in the registry on 03.08.2023, EP 7M07301-TaTDBS was updated on 11.09.2023. Various reference and information resources, in particular the Information and Legal System of regulatory legal acts of the Republic of Kazakhstan "Adilet", are used in the design of EP (<http://adilet.zan.kz/rus>), the register of professional standards on the websites of the National Chamber of Entrepreneurs "Atameken" and the Ministry of Labor and Social Protection of the Republic of Kazakhstan, etc.

The measurability of the goals of EP 7M07103-ETE, 7M07301-TaTDBS is determined by the planned learning outcomes, which are formulated on the basis of the Dublin descriptors of the second level of higher education (Master's degree) and correspond to the level of the National Qualifications Framework. Achievement of the planned learning outcomes is ensured by studying the disciplines presented in the EP passports 7M07103-ETE, 7M07301-TaTDBS.

The main normative and methodological documents regulating the work during the internship are QMS P 4-54-2022 "Regulations on the procedure for organizing and conducting pedagogical practice for undergraduates and doctoral students". According to EP 7M07103-ETE, 7M07301-TaTDBS, passing of pedagogical and research practices is provided. Undergraduates of KarIU pass pedagogical practice in the period of theoretical training without interrupting the educational process at the departments.

The management of EP 7M07103-ETE, 7M07301-TaTDBS, in accordance with QMS P 4-49a-2021 "Regulations on the development of a graduate model for educational programs of NPJSC "Karaganda Industrial University" developed graduate models. The model of a graduate of the EP 7M07103 - ETE, 7M07301 – TaTDBS in the form of requirements for the level of training is described in the MOE (<https://ttu.edu.kz/ru/obrazovanie/modulnie-obrazovatelnie-programmi/>).

The qualifications obtained upon completion of the EP 7M07103-ETE, 7M07301-TaTDBS are defined, explained to stakeholders and correspond to a certain level of NRC. The MOE provides a list of qualifications and positions according to the "Qualification Directory of positions of managers, specialists and other employees", which can be held by graduates of these EP.

Specialists of industrial enterprises who hold senior positions in the training profile are involved in the development of the EP as part of the working group. In particular, heads of departments (workshops, sites, etc.) of Gordorservis - T LLP, QARMET JSC, LOGOS - Montazhstroy LLP, Absolute Smart Development Group LLP were involved in the development of EP 7M07103-ETE, 7M07301-TaTDBS. The working group on updating EP 7M07103-ETE includes representatives of employers Senyuk L. I. (Head of the Production and technical Department of Gordorservis-T LLP), Konovalenko M. V. (head of the sheet rolling shop No. 1 of QARMET JSC), a representative of a foreign partner university Sladkovsky A. (Professor of the Department of Railway Transport, Silesian Technical University The working group on updating EP 7M07302-TaTDBS includes representatives of employers: Altaybaeva Z. A. (Director of LOGOS-Montazhstroy LLP), a representative of a foreign partner university Agnieszka Dabska

(Professor of the Department of Hydro and Environmental Engineering Warsaw University of Technology, Poland) and E. A. Belyanina (Master's student of the TaTDBS-23nm group (Jan)).

KarIU maintains close creative ties with many leading universities and research centers in the field of education. KarIU partners are leading universities and research centers of the CIS and far abroad countries. The list of KarIU partners is available on the University's website at the link <https://tttu.edu.kz/ru/ob-universitete/nashi-partneri/>.

Analytical part

The analysis of accredited training programs for compliance with the criteria of the standard "Development and approval of an educational program" shows that the content of educational programs, the sequence of their implementation, and the depth of development in all training programs require improvement in accordance with regulatory documents and labor market requirements.

The Commission notes that EP 7M07301 "Theory and technology of designing buildings and structures" could not demonstrate the positioning of the EP in the educational market, the validity of the criteria for evaluating these EP for competitiveness at the regional/national/international levels.

The analysis of the studied documents, as well as the results of interviews with students, teaching staff, graduates and employers made it possible to conclude that the developed graduate models for accredited educational programs, presented in model educational programs, describing the results of training, do not fully take into account the specifics of educational programs and the personal qualities of graduates.

The management of accredited EOS has demonstrated that external EOS reviews are conducted, but these reviews are not carried out regularly, without taking into account the opinions of experts from all areas of professional activity that it is focused on. In particular, the management of EP 7M07103 "Engineering of technological equipment" was limited only to the expertise of a representative of the Silesian Technical University, Poland; however, there are no expertise from the professional community, industry enterprises for which targeted training of graduates is carried out. There are no dates in the expert examinations submitted by the management of accredited EPS, which makes it impossible to assess the regularity of their conduct.

The departments of "Technological Machines and Transport" and "Construction", which include accredited educational institutions, have the potential to work in the field of providing students with additional professional competencies. However, as a result of interviewing students, it was noted that the training process does not provide for the possibility of professional certification, there are no links with certification centers.

To ensure favorable conditions for academic mobility and joint training of personnel, in 2019 a Memorandum was signed with the Yanka Kupala Grodno State University (1-70 80 01 "Construction of buildings and structures"); in 2020, an agreement was signed on joint training of specialists with higher education of the second stage (master's degree). Educational institution "Yanka Kupala Grodno State University" (1-36 80 02 "Innovative technologies in mechanical engineering). At the same time, the EEC members note that the opportunities for internal internationalization and the practice of creating joint programs are not sufficiently used, since joint training in accredited EP is not yet carried out.

The survey of teaching staff conducted during the visit to the NAAR EEC showed a satisfactory assessment (45.7%) of the university management's attention to the content of the EP. At the same time, the content of EP "very well" meets the needs of 54.3% of the teaching staff.

A survey of students showed that 83.3% were fully satisfied with the level of quick response to feedback from teachers regarding the educational process; 16.7% were partially satisfied.

Strengths/best practices in EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

Not detected

EEC recommendations for EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

1. By the beginning of 2025-2026, the management of accredited educational institutions should develop an action plan to harmonize educational programs with similar programs of Kazakh and foreign universities in order to provide for the possibility of implementing double-degree education programs, and start implementing it.

2. By the beginning of the 2024-2025 academic year, the management of EP 7M07301 "Theory and technology of designing buildings and structures" should plan and analyze the real positioning of EP in the national and international educational market, and specify the uniqueness of the educational program.

3. By the beginning of the 2024-2025 academic year, in order to ensure the uniqueness of the cluster's educational programs, it is recommended to clarify the personal qualities and professional competencies in the graduate models in the EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and Technology of designing buildings and structures". Ensure that the management team agrees on the graduate model with representatives from employers who correspond to the specifics of the graduate's type of activity.

4. By the beginning of the 2024-2025 academic year, the EP management should compile a database of experts, taking into account the specifics of educational programs, for annual review of the EP.

5. By the end of the 2024-2025 academic year, in order to conduct professional certification of undergraduates, the EP management should develop an action plan for students to complete courses in the context of professional activities within the framework of open educational platforms, and start implementing it.

EEC's conclusions based on the following criteria:

According to the standard "Development and approval of educational programs": accredited educational program 7M07103 "Engineering of technological equipment" has 9-satisfactory, 3 - suggesting an improvement in the position; educational program 7M07301 "Theory and technology of design of buildings and structures" has 8-satisfactory, 4-suggesting an improvement in the position.

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

✓ The university should ensure that the structure and content of the EP are reviewed, taking into account changes in the labor market, the requirements of employers and the social demand of society.

✓ The university must demonstrate that there is a documented procedure for monitoring and periodic evaluation in order to achieve the goal of the EP and continuously improve the EP.

✓ Monitoring and periodic evaluation of the EP should consider:

- ✓ content of the program in the context of the latest achievements in science and technology in a particular discipline;
- ✓ changes in the needs of society and the professional environment;
- ✓ students' workload, academic performance, and graduation;
- ✓ effectiveness of student assessment procedures;
- ✓ the needs and degree of satisfaction of students;
- ✓ compliance of the educational environment and support services with the goals of the EP.

✓ The EP management should publish information about changes to the EP, inform interested parties about any planned or taken actions within the framework of the EP.

✓ Support services should identify the needs of different groups, students and the degree of their satisfaction with the organization of training, teaching, assessment, and development of the EP in general.

Proof part

To ensure that the goal is achieved and meets the needs of students and society, KarIU regularly monitors and periodically evaluates the EP. The results of these processes are aimed at continuous improvement of the EP. The procedure for monitoring and periodic evaluation of the

University's EP is carried out on the basis of internal documents of the QMS: QMS P 4-25-1-2021 "Regulations on the development of modular educational programs", QMS P-27-2-2021 "Regulations on conducting a survey on monitoring the quality of educational, educational and research processes at Karaganda Industrial University", QMS P4-57-2022 "Regulations on the procedure for developing an educational program development plan and assessment procedure effectiveness of the implementation of the educational program". External and internal audits, methodological support expertise, performance evaluation, and consideration of issues by collegial bodies are used to assess the success of the EP implementation plan.

The main tool for monitoring the satisfaction of students' and society's needs at KarIU is a questionnaire conducted by the Department for Educational Work and Youth Policy (DVRiMP). To monitor the progress of students, control measures are provided: current control, boundary control, intermediate certification/final control, final certification. Conducting current monitoring of academic performance, intermediate and final certification is carried out in accordance with the rules of the Ministry of Education and Science of the Republic of Kazakhstan and internal regulatory documents of the QMS P 4-34-2021 "Regulations on the organization of current and mid-term controls, intermediate certification and assessment of students' knowledge". Intermediate certification for EP 7M07103-ETE, 7M07301-TaTDBS is carried out in accordance with the curriculum and curricula in the form of passing exams.

The process of continuous improvement of the quality of educational programs is directly related to the process of their development, in which representatives of the labor market and foreign universities are widely involved. When determining the need to change the content of curricula and EP, the wishes of employers, students and teachers are identified. Various tools are used to identify changes, such as questionnaires, marketing research, etc. Proposals adopted by the department to amend the EP are submitted to the Faculty Council for consideration. The Faculty Council reviews the compliance of changes made to the EP with regulatory requirements and issues an opinion for the Educational and Methodological Council (Order No. 073-01 / 07 On Approval of the Academic Council's composition for the 2023-2024 academic year.)

Monitoring of the training load consists in setting the annual volume and checking the progress of its implementation. The establishment of the annual amount of academic load is carried out by the heads of departments together with the academic secretaries of departments and the dean of the faculty on the basis of the working curricula of the EP and the contingent of students. This process is regulated in the QMS StO II. 8-02. 02-2021 "Management of the learning activity process".

Monitoring of employers' satisfaction based on the results of professional practices is carried out according to the assessment of the practice manager from the enterprise, who evaluates the student's compliance with competencies, that is, basic knowledge and skills that allow them to be implemented while continuing their studies at the next stage of higher professional education or during subsequent work on this EP.

Monitoring of the internship and monitoring the quality of its organization is carried out by the internship managers from departments, the sector of organization of the educational process and professional development of the DAP and the sector of postgraduate education and international cooperation of the Institute of International Relations. Achievement of the goals and objectives of teaching and research practices is guaranteed by the fulfillment of the established tasks in the practice programs and the internal document of the QMS P 4-54-2022 "Regulations on the procedure for organizing and conducting teaching practice for undergraduates and doctoral students".

Tools for informing interested parties about any planned or undertaken actions in relation to the EP are: KarIU official website (<https://tttu.edu.kz/>); social networks, activity reports; letters, e-mail; interviews in the media, on radio or television; open Doors days, excursions, seminars, conferences, exhibitions, fairs; personal contacts with interested parties, etc. Updated EP contents are published by posting them on the KarIU official website (<https://tttu.edu.kz/ru/obrazovanie/modulnie-obrazovatelnie-programmi>).

Analytical part

The analysis of the procedures for monitoring and periodic evaluation of educational programs is carried out on the basis of: analysis of curricula, catalog of elective subjects, individual program plans of students, internal regulatory documents regulating the implementation of educational programs, their monitoring and evaluation; minutes of collegial bodies and meetings of departments; interviews and questionnaires of students, teaching staff and interested parties; results of observations of the activities of support services.

At the same time, the EP management did not fully demonstrate the processes for identifying and reviewing employers' proposals for making changes to the EP.

This standard does not fully reflect the issues of informing interested parties about any planned or taken actions in relation to the EP. The university's website does not provide up-to-date information on the development plans of educational programs EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures".

In the course of interviewing focus groups, visiting departments, and analyzing the documentation provided, representatives of the EEC note that in practice, monitoring and periodic evaluation of the EP do not fully take into account the effectiveness of student assessment procedures based on the results of practical training. Analysis of the internship programs "Program for research practice of undergraduates" (https://drive.google.com/file/d/16qHnBWjURxR3NmluZViVGPXDOM_Y-xoQ/view?usp=sharing); "Program on pedagogical practice of undergraduates" (<https://drive.google.com/file/d/1K3tmflhyo6rmzcbwPtJ4pqmhTUa8yZNk/view?usp=sharing>) found that there are no evaluation criteria for students' achievements.

Strengths/best practices in EP7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

Not detected

EEC recommendations for EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

1. By the 2024-2025 academic year, the management of accredited educational institutions should develop a format for identifying and reviewing employers' proposals for making changes to educational programs.
2. By the 2024-2025 academic year, the management of accredited educational institutions should review the program and guidelines for conducting internships in order to determine indicators for evaluating students' internships.
3. The responsible structural division should promptly update the university's website with up-to-date information on plans for the development and implementation of educational programs.

EEC's conclusions based on the following criteria:

According to the standard "Continuous monitoring and periodic evaluation of educational programs", the accredited educational programs 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures" have 9-satisfactory, 1 – pedagogical improvement position.

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

✓ The EP management should ensure respect and attention to different groups of students and their needs, and provide them with flexible learning paths.

- ✓ The management of the EP should ensure that teaching is based on modern achievements of world science and practice in the field of training, the use of various modern teaching methods and assessment of learning outcomes that ensure the achievement of the goals of the EP, including competencies, skills in performing scientific work at the required level.
- ✓ The management of the EP should determine the mechanisms for distributing the academic load of students between theory and practice in the framework of the EP, ensuring the development of the content and achievement of the goals of the EP by each graduate.
- ✓ An important factor is the availability of our own research in the field of methods of teaching EP disciplines.
- ✓ The university must ensure that the procedures for evaluating learning outcomes are consistent with the planned results and goals of the EP.
- ✓ The university should ensure consistency, transparency and objectivity of the mechanism for evaluating the learning outcomes of the EP, publication of evaluation criteria and methods in advance.
- ✓ Evaluators should be familiar with modern methods of evaluating learning outcomes and regularly improve their skills in this area.
- ✓ The EP management should demonstrate the existence of a feedback system for using various teaching methods and evaluating learning outcomes.
- ✓ The EP leadership should demonstrate support for students' autonomy, while providing guidance and assistance from the teacher.
- ✓ The EP management should demonstrate that there is a procedure in place to respond to student complaints.

Proof part

At the University, student-centered learning is implemented by fulfilling the following provisions. In the course of studying at KarIU, questionnaires and meetings with the management are conducted to identify the needs of students. In the course of mastering the EP, students independently form an individual learning trajectory based on the RUP and CED through the preparation of an individual curriculum (IEP). The student creates an IEP by selecting the required number of compulsory subjects, university component subjects, and elective subjects with the help of a supervisor.

The university provides comprehensive support for the educational process of students with special needs in accordance with the recommendations of the medical and social expertise service or the psychological, medical and pedagogical commission. In particular, on the 1st floor of the KarIU academic building there is a specialized classroom for inclusive education, and a bathroom is equipped for students with musculoskeletal disorders. Organization of the educational process for persons with special educational needs is regulated in the "Academic Policy" of KarIU and QMS P 4-50-2021 "Regulations on the organization of inclusive education for persons with disabilities in the NPJSC "Karaganda Industrial University".

The EP guidelines 7M07103-ETE, 7M07301-TaTDBS provide the use of various forms and methods of teaching and learning. Teachers of the university successfully practice conducting presentations of training courses using interactive whiteboards, multimedia projectors, using language equipment in the classroom (discipline – foreign language), etc.

To monitor the effectiveness and effectiveness of innovation and the use of active teaching methods, open lessons are used, the conduct of which is regulated by the internal regulation on the planning and conduct of open classes. KarIU holds methodological weeks of departments, during which teaching staff make innovative proposals, exchange experience and demonstrate personal implementation of innovative proposals in the educational process.

KarIU conducts various studies in the field of teaching methods of academic disciplines of the EP. KarIU holds a Republican scientific and methodological conference once every two years, where teachers share their experience and the results of their own research of a scientific and methodological nature. In the proceedings of the Republican Scientific and Methodological Conference "Innovative Approaches in Education", held in KarIU on November 29-30, 2022, more than 10 reports of teachers of TMT and Construction departments were published, in which EP 7M07103 - ETE, 7M07301 – TaTDBS are implemented.

Students' and teachers' satisfaction with methodological innovations is monitored through the analysis of the results of a survey conducted in accordance with the QMS of the University.- 27-2-2021 "Regulations on conducting a survey on monitoring the quality of educational, educational and research processes in the NPJSC "Karaganda Industrial University". The results of the survey are provided to the university management, who provides information to deans and heads of departments.

KarIU provides procedures for responding to student complaints. The procedure for submitting applications with requests and complaints on various issues is set out in QMS P 4.18-2021 "Regulations on working with student complaints". Students' complaints are accepted by the

deans, considered at meetings of various levels, at meetings of students with the university management.

KarIU ensures consistency, transparency and objectivity of the learning outcomes assessment mechanism for each EP, including appeal. The assessment of academic achievements of KarIU students is carried out on the basis of a point-rating system (<https://ttu.edu.kz/education/sistema-ocenki-znaniy-studentovstudent-assessment-systemstudentterdi%d2%a3-bilimin-ba%d2%93alau-zh%d2%afyesi/>). The mechanism of knowledge assessment is reflected in the internal documents of SrT II. 9-01. 01-2021 " Control process (preparation and conduct of the examination session), reference guide(https://drive.google.com/file/d/1IZQBEwdlyWciyQaOoAI_6dWFtmYfN34I/view).

KarIU ensures that the procedures for evaluating the learning outcomes of EP students correspond to the planned learning outcomes and program goals. Criteria and methods of assessment within the framework of the EP are set out in the " Academic Policy " of KarIU and syllabuses of disciplines. To conduct the exam, examiners are appointed from among leading professors, associate professors, and senior teachers who have qualifications corresponding to the profile of this academic discipline, and, as a rule, have not conducted training sessions in this academic group (stream).

To improve the skills of evaluators, seminars are held on conducting exams in the AIS "PLATONUS", on drawing up test tasks, etc. Confirmation of the level of competence of teachers is the effectiveness and quality of teaching, assessed by conducting open training sessions, mutual visits to classes, as well as conducting a questionnaire "Teacher through the eyes of the student" on the quality and effectiveness of the organization of the educational process, determining the level of professional standards and ethics, competence, oratorical and communicative abilities of teachers. The results of these activities serve as the basis for extending the employment contracts of teaching staff, promotion.

Analytical part

The Commission notes that the University strives to develop objective tools for assessing students ' knowledge, using the recommendations of the latest version of ECTS and implementing a clear anti-corruption policy.

At the same time, the commission notes that the following questions are not fully reflected in the self-report and were not confirmed during the EEC visit.

Analyzing the educational and methodological documentation of the departments "Technological Machines and Transport", "Construction", as well as internal regulatory documents, the commission notes that the issues of transparency and objectivity of the mechanism for evaluating the results of training in accredited educational programs need to be improved. In particular, information about the applied criteria for assessing knowledge, reflected in syllabuses (the discipline "Mathematical Modeling and Computer Engineering Analysis" for undergraduates of the 7M07103 Engineering of Technological Equipment educational program, is of a formal nature, types and forms of training are not taken into account, goals and expectations regarding the quality of students ' work are not defined, taking into account the specifics of the disciplines, explanations are not provided, how achievements will be evaluated.

At the meeting with the NAAR experts, employers emphasized the need to involve practitioners more widely in the educational process. In addition, the EEC notes the need to introduce a more active practice of implementing dual or informal training in the implementation of the cluster EP, which was also noted by groups of students, graduates, employers, and managers of practice bases at the meeting with the EEC. It was noted that the university, in general, is ready both morally and according to documented procedures to start purposeful work on large-scale practice-oriented training. It is necessary to bring to the bases of practices (Akzholt LLP; AsiaProfStroy LLP, Inkar -1 LLP, etc.); branches of departments (LOGOS-Montazhstroy LLP), not only summer professional practices, but also conduct practical and lecture courses within full-fledged disciplines, with the preparation of official schedules on the bases of enterprises.

In general, both students and teaching staff expressed positive opinions about the implementation of the accredited EP, which was later confirmed by the results of the survey. However, it should be noted that at the university, within the framework of accredited programs, there is a need to develop and implement new own research on the profile of EP within the framework of teaching methods in order to develop student-centered learning.

Strengths/best practices in EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

Not detected

EEC recommendations for EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

1. By the beginning of the 2024-2025 academic year, the management of the EP in the educational and methodological documentation of educational programs should develop and publish mechanisms for evaluating learning outcomes, taking into account the goals of training, the specifics of the discipline taught.

2. By the 2025-2026 academic year, the EP management should analyze the use of informal (dual) training for students in accredited EP, attract practitioners in the relevant industry to teach specialized subjects, or other options for increasing practical training.

3. By the beginning of the 2024-2025 academic year, the University management should develop an action plan for the development and implementation of new own research in the field of teaching methods in the profile of educational programs at the university, and start implementing it.

EEC's conclusions based on the following criteria:

According to the standard "Student-centered learning, teaching and evaluation of academic performance", the accredited educational programs 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures" have 9-satisfactory, 1 - suggesting improvement position.

6.6. The "Learners" Standard

- ✓ The university must demonstrate the policy of forming a contingent of students and ensure transparency and publication of procedures regulating the life cycle of students (from admission to completion).
- ✓ The EP management should provide for special adaptation and support programs for newly enrolled and foreign students.
- ✓ The university must demonstrate that its actions comply with the Lisbon Recognition Convention, including the existence and application of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and non-formal education.
- ✓ The university should provide opportunities for external and internal academic mobility of students, as well as assist them in obtaining external grants for training.
- ✓ The university should encourage students to self-educate and develop outside of the main program (extracurricular activities).
- ✓ An important factor is the availability of a support mechanism for gifted students.
- ✓ The university must demonstrate cooperation with other educational organizations and national centers of the "European Network of National Information Centers for Academic Recognition and Mobility/National Academic Recognition Information Centers" ENIC/NARIC to ensure comparable recognition of qualifications.
- ✓ The university should provide students with places of practice, demonstrate the procedure for promoting employment of graduates, and maintain communication with them.
- ✓ The university must demonstrate the procedure for issuing graduates with documents confirming their qualifications, including the achieved learning outcomes.
- ✓ The management of the EP should demonstrate that graduates of the program have the skills that are in demand in the labor market and that these skills are really relevant.
- ✓ The EP management should demonstrate the existence of a mechanism for monitoring the employment and professional activities of graduates.
- ✓ An important factor is the existence of a functioning alumni association.

Proof part

KarIU has a policy of forming a contingent of students in the context of EP from admission to graduation and ensures transparency of its procedures. The procedures governing the life cycle of students (from admission to completion) are defined, approved, and published in the internal

documents of QMS P 4-28-1-2019 "Regulations on career guidance", QMS StO II. 8-01. 01-2021 "Management of the selection process of applicants", QMS StO II. 8-02. 02-2021 "Management of the process of educational activities", QMS StO II. 8-02. 03-2021 "Management of the educational process", QMS P 4 – 53 – 2022 "Regulations on the internal quality assurance system of NPJSC "Karaganda Industrial University", Academic policy of KariU.

Acceptance of documents for admission to KariU is made upon the personal application of applicants, with the provision of the necessary documents in accordance with the Standard Rules for Admission to study in educational organizations that implement educational programs of higher and postgraduate education. EP 7M07103-ETE, 7M07301-TaTDBS accepts persons with higher education who have passed comprehensive testing (CT), the scores of which correspond to the established norm. Admission of foreigners to the master's program is carried out on a paid basis. The dynamics of changes in the contingent of students of EP 7M07103 - ETE, 7M07301 – TaTDBS for 2019-2024 are shown in Table 2.

Table 2-Dynamics of changes in the contingent of students of EP 7M07103 - ETE, 7M07301-TaTDBS

Academic year	1st course	2nd course	Total
EP 7M07103 "Engineering of technological equipment"			
2019-2020	4	9	13
2020-2021	3	4	7
2021-2022	2	3	5
2022-2023	2	2	4
2023-2024	5	2	7
EP 7M07301 "Theory and technology of designing buildings and structures"			
2019-2020	2	4	6
2020-2021	3	2	5
2021-2022	8	3	11
2022-2023	1 (Jan)	8	9
2023-2024	2 (Jan)	0	2

In order to prevent possible problems related to academic performance and behavior of students, intensive work is carried out. At the beginning of the academic year, meetings are held with undergraduates, current issues are considered, the internal regulations of KariU, the transfer GPA score from course to course, etc. To help students, the KariU Student's Guide has been developed. The reference guide is freely available on the university's website (<https://ttu.edu.kz/wp-content/uploads/2022/12/spravochnik-putevoditel-2022.pdf>). The reference book is updated annually in order to make changes in the university's regulatory framework.

The management of the university and accredited educational institutions conduct adaptation and support programs for newly enrolled and foreign students. In accordance with the KariU Academic Policy and the Rules of Transfer and Reinstatement of Students (QMS P 4-33-2022), a student has the right to transfer subjects previously mastered in other educational institutions.

Within the framework of the Bologna Process, great importance is attached to the academic mobility of students, teachers and administrative staff of the university. The mechanism of recognition of learning outcomes acquired during academic mobility is spelled out in QMS P 4-24-2021 Regulations on academic mobility of NPJSC "Karaganda Industrial University". Information on academic mobility of students is available on the KariU website (<https://ttu.edu.kz/ru/akademicheskaya-mobilnost-2/>).

To analyze the assessment of students' satisfaction with places and the organization of internships, students are interviewed annually when defending reports on practical training, and the commission for accepting reports conducts a survey of students for satisfaction with the place of practical training issued by the task. Work on the organization of professional practice and promotion of employment of graduates at the department is based on constant communication with

potential employers, the conclusion of new cooperation agreements. Information about concluded contracts is shown in Table 3 in the context of the EP.

Table 3-Organization of professional internships for students studying in the EP 7M07103-ETE, 7M07301-TaTDBS.

EP	Organization, contract No., contract validity period, order No.
7M07301 "Theory and technology of designing buildings and structures"	Akzholt-T LLP, Contract No. 2022/13 dated 14.04.2022, Contract No. 13-03-02 / 36/2m dated 19.08.2022
	Aziyaprofstroy LLP, Contract No. 2022/14 dated 15.04.2022, Contract No. 13-03-02 / 36/2m dated 19.08.2022
	Service note dated 19.09.2022, Optimal Build Company LLP
7M07103 " Process Equipment Engineering "	Imstalcon-T LLP contract No. 22/09/29 dated 29.09.2022, valid for 3 years with automatic extension
	Inkar-1 LLP contract No. 2022/16 dated 21.04.2022, valid for 3 years with automatic extension
	Eurasian Machinery LLP contract No. 2021/2 dated 18.05.2021, valid for 3 years with automatic extension
	Foreign Enterprise "Borusan Makina Kazakhstan" LLP contract No. VMK-392-21 dated 29.09.2021, valid for 3 years with automatic extension

The work on the employment of KarIU graduates is coordinated by the DAP and the DIIIMS. The sector of organization of the educational process and professional development of the DAP, together with departments, monitors the labor market, employs graduates, maintains communication with enterprises and graduates, and annually organizes a "Graduate Fair" (<https://www.facebook.com/100022651051239/videos/1368447887107545/>). DAP annually collects graduate resumes and organizes their distribution to enterprises. On the university's website there is a section "Employment" (<https://ttu.edu.kz/ru/trudoustroystvo/>), which contains information about vacancies, employers, and graduate resumes. Information on employment by EP is presented in Table 4.

Table 4-Employment of graduates of the year in the context of EP 7M07103 - ETE, 7M07301-TaTDBS.

EP	Number of graduates	Number of distributed graduates	Percentage of employment
2020-2021			
7M07302 "Theory and technology of designing buildings and structures"	2	2	100
7M07103 " Process Equipment Engineering "	4	4	100
2021-2022			
7M07302 "Theory and technology of designing buildings and structures"	2	2	100
7M07103 " Process Equipment Engineering "	3	3	100
2022-2023			
7M07302 "Theory and technology of designing buildings and structures"	8	7	88
7M07103 " Process Equipment Engineering "	2	2	100

The management of the EP provides graduates of the EP with documents confirming their qualifications, including the achieved learning outcomes, as well as the context, content and status of the education received and evidence of its completion. Each graduate receives a diploma of their own sample with a transcript in 3 languages indicating the volume of mastered disciplines in credits and a European diploma supplement. The appearance and description of KarIU diplomas can be found on the website at the link <https://ttu.edu.kz/ru/diplomi-sobstvennogo-obrazca/>.

Analytical part

The information provided in the self-report in the context of this standard was sufficiently confirmed during the EEC visit. The university has developed an Academic Policy that contains the main issues of educational and organizational activities of students.

During the visit to the practice bases of Inkar-1 LLP and Kaztemirstroy LLP, real places of research internship were visited, and there are concluded contracts for professional internship of students.

At the same time, the EEC notes that the academic mobility of students enrolled in accredited educational programs is low. In addition, the EEC commission notes the lack of participation of students in competitions for receiving external grants, international competitions. In this regard, there is an objective need to include in the development plans of educational programs such indicative indicators as: "participation of students in competitions for obtaining external grants for training", "participation of students in research work". The EEC commission also notes that the university is not actively attracting foreign students from non-CIS countries to study within the framework of accredited educational programs, in particular, over the past three years there has been no incoming academic mobility.

According to interviews with graduates, not all of them are aware of the fact that the university has an Alumni Association <https://ttu.edu.kz/ru/associaciya-vipusnikov-2/>, information on the website of the University about the plans and work of the Association is also not provided.

According to the survey data, students express full satisfaction with the availability of academic counseling-75 %; the availability of health services-50 %; the level of availability of library resources – 83.3%; existing educational resources – 83.3%; the quality of educational programs in the EP – 91.7%; the relationship between student and teacher-91.7 %.

Strengths/best practices in EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

Not detected

EEC recommendations for EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

1. By the 2024-2025 academic year, the EP management should draw up an indicative plan (with an indication of deadlines) to attract foreign students, as well as to organize external and internal academic mobility of students and assist in obtaining external grants for training.

2. By the beginning of the 2024-2025 academic year, the university management should review the format of providing information on the Alumni Association with the publication of plans and reports on the Association's activities, announcements of events held on the website.

EEC's conclusions based on the following criteria:

According to the standard "Trainees", the accredited educational programs 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures" have 11-satisfactory, 1-suggesting improvement position.

6.7 Standard "Teaching staff"

- ✓ The university should have an objective and transparent HR policy in the context of EP, including hiring (including invited teaching staff), professional growth and development of personnel, ensuring the professional competence of the entire staff.
- ✓ The university must demonstrate that the quality of teaching staff meets the established qualification requirements, the university's strategy, and the goals of the EP.
- ✓ The EP management should demonstrate a change in the role of the teacher in connection with the transition to student-centered learning and teaching.
- ✓ The university should provide opportunities for career growth and professional development of teaching staff, including young teachers.
- ✓ The university should involve in teaching specialists of relevant industries who have professional competencies that meet the requirements of the EP.
- ✓ The university must demonstrate the existence of a mechanism for motivating the professional and personal development of teaching staff.
- ✓ The university must demonstrate the wide use of teaching staff of information and communication technologies and software tools in the educational process (for example, on-line training, e-portfolio, MOHSs, etc.).
- ✓ The university must demonstrate its focus on developing academic mobility and attracting the best foreign and domestic teachers.
- ✓ The university must demonstrate the involvement of each teacher in promoting a culture of quality and academic integrity in the university, and determine the contribution of teaching staff, including invited ones, to achieving the goals of the EP.
- ✓ An important factor is the involvement of teaching staff in the development of the economy, education, science and culture of the region and the country.

Proof part

KarIU has an objective and transparent personnel policy, including in the context of the EP, which includes hiring, professional growth and development of personnel, ensuring the professional competence of the entire university staff. The personnel policy of the University is reflected in the Charter, the collective agreement, the rules of labor regulations, the Regulation "On competitive replacement of positions of faculty and research staff of the University" and other internal regulations and rules that are available for review by teaching staff on the university's website <https://ttu.edu.kz/ru/polozheniya/>. The criteria for hiring teaching staff are established on the basis of QMS P 4-20-2022 "Regulations on the qualification characteristics of positions of research and teaching staff" and the Regulation " Rules for competitive replacement of positions of teaching staff and researchers. The competence model of university teaching staff is presented in QMS P 4-20-2022 "Regulations on the qualification characteristics of positions of scientific and pedagogical workers".

Analysis of the compliance of the qualification of teaching staff with the requirements of the legislation of the Republic of Kazakhstan revealed that all teaching staff implementing accredited training programs have the necessary basic education corresponding to the subjects taught. They hold positions corresponding to the results of the competition to fill vacant positions.

Information about teachers participating in the implementation of the EP is available on the KarIU website: EP 7M07103-ETE - <https://ttu.edu.kz/ru/sostav-kafedri/>; EP 7M07301-TaTDBS - <https://ttu.edu.kz/ru/kafedra-stroitelstvo-profil-prepodavateley-2-2/>.

The staff of teaching staff of departments is formed based on the volume of academic load of the department and the number of students. Today, the Department of TMT has 12 teachers, including 5 candidates of sciences, 2 doctors of Philosophy (PhD), 3 masters. The faculty of the department is 58% settled down. According to the profile of EP 7M07103-ETE, master's students are trained by 5 full-time teachers of the graduating department of TMIT, who have the corresponding basic engineering and technical education, academic degrees and titles in technical sciences.

All teachers of the Construction Department of NPJSC "Karaganda Industrial University" have a basic education corresponding to the subjects taught. The main staff of the department "Construction" consists of 8 people, including: 2 doctors of sciences, 3 candidates of sciences, 3 masters. According to EP 7M07301– TaTDBS, the rate of settling down is 50%. Currently, 4 full – time teachers of the graduating department train undergraduates in the EP 7M07301-TaTDBS profile.

Improving the working conditions of teaching staff and employees to strengthen their motivation to improve the quality of education and scientific activities is one of the main tasks of achieving the strategic goals of the university, noted in the "KarIU Development Program 2023-

2029" According to QMS P 3-01-2021 "Regulations on the University's educational grant, University scholarships and benefits for studying at NPJSC "Karaganda Industrial University" benefits for studying at the university are provided to full-time teachers, children of full-time teachers, and their spouses. The Trade Union Committee of the University provides financial assistance in accordance with the clauses of the KarIU Collective Agreement to employees on anniversary dates, for treatment, surgery, sanatorium treatment, etc. A dormitory is provided for teaching staff and employees if there are free places in it according to the QMS of the University 4 – 23 – 2022 "Regulations on student dormitories of Karaganda Industrial University".

The needs of employees and the degree of satisfaction of teaching staff are determined by conducting a sociological survey. The survey is conducted once a year. (<https://tttu.edu.kz/ru/anketi-oprosniki-2/>) .

KarIU management creates the necessary conditions for training, retraining and advanced training of employees. For the professional and personal development of young teaching staff, the university provides support: it pays for advanced training courses, partially compensates for the publication of scientific articles in international peer-reviewed journals, organizes internships, and provides methodological support. Corporate trainings for teaching staff are held annually. The opportunity to study in the KarIU doctoral program is provided, as well as applications for targeted doctoral studies in universities of the Republic of Kazakhstan are submitted.

(<https://docs.google.com/document/d/1Bs6vc3r1TNVBXqxIJRO2xlRgP9aAqfLW/edit?usp=sharing&oid=100213452418714698182&rtpof=true&sd=true>). Over the past three years, 11 faculty members of KarIU have defended their doctoral theses and received confirmation. In 2024, KarIU budget funds were used to pay for the issuance of invention patents prepared by such university teaching staff as Ashkeev Zh. A., Nogaev K. A., Abishkenov M. Zh., Zhaslan R. K., Romanov V. I., Merkulov V. V., Kabieva S. K., Almazov A. I., Sitdikova E. V., Tatueva M. V.M., Bayasilova Z. A.

The University provides the necessary balance between academic and scientific activities of teaching staff. Research work of teaching staff is based on the current and long-term development plans of the department and the university. Information on the main results of the research activities of the teaching staff of the TMT Department, which implements EP 7M07103-ETE, for 2019-2023 is presented in Table 5.

This year, the Department of TMT, which implements EP 7M07103-IT, implements 5 grant scientific and technical projects funded by the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan for a total amount of 266 million tenge. For 2019-2023, based on the results of scientific research of the Faculty of TMT Department implementing EP 7M07103 – IT, 147 articles were published in scientific journals, in proceedings of international and national conferences, including 23 articles published in scientific publications indexed in the Web of Science database & Scopus.

Table 5-Scientific publications of teaching staff of departments in the context of EP for the period 2020-2023.

Publications: with a non-zero impact factor, etc.	2020/2021	2021/2022	2022/2023
EP 7M07301 "Theory and technology of designing buildings and structures"			
WoS, Scopus	4	3	6
RSCI	15	16	11
KKSON	2	3	1
university journals and other publications of the Republic of Kazakhstan	6	4	2
Patents, AS	-	-	2
Textbooks, study guides	2	1	1
Monographs	4	1	-

EP 7M07103 - "Engineering of technological equipment"			
WoS, Scopus	4	7	8
RSCI			
KKSON		3	4
university journals and other publications of the Republic of Kazakhstan	8		2
Patents, AS	6	1	2
Textbooks, study guides	3	2	4
Monographs			1
Total	21	13	21

Conducting open classes, conducting mutual visits by teachers, as well as a questionnaire "Teacher through the eyes of a student" allows the university administration to systematically assess the quality of teaching disciplines. For example, professional, ethical and personal qualities of the teacher of the department "TMT" Ashkeev Zh. A. were evaluated according to twelve indicators on a 10-point system each. The survey was conducted online, and a total of 34 students of the TMO – 18, TMO - 18k, TEP – 20c, PTSDM – 20c, TOMD - 18 – 1k, TOMD-18-2k, OMD-19k groups were interviewed. The majority of respondents highly appreciated the professional and moral and ethical qualities of the teacher Zh.A. Ashkeyev. According to the survey results, the average score was 9.18.

At the moment, the departments of TMT and Construction have full-time teachers with significant experience in the relevant industries. For example, Professor of the Department of TMT, Ph. D. Romanov V. I., has many years of experience in engineering positions in JSC "QARMET", Professor of the Department of "Construction", Ph. D. Filatov A.V. also worked for many years in the trust "Kazmetallurgstroy", including as chief engineer.

The faculty is the main resource for ensuring the mission of the university. The effectiveness of financial motivation of teachers and employees is determined by the quality of work of teaching staff and employees and is ensured by saving the university's own funds. The university introduced incentives based on the results of the rating of teaching staff and UVP, as well as bonuses for holidays, awards for anniversaries.

An important factor for the quality of training is the active use of teaching staff and information and communication technologies in the educational process. The Department of TMT, which implements EP 7M07103-EET, has on the basis of the corporate account of the department of TMT - tmt@ttu.edu.kz Youtube video hosting channel (<https://www.youtube.com/@user-hj6hp1bo3s/videos>), where teaching staff place their video lectures. Teaching staff of EP 7M07103-EET, 7M07301-TaTDBS actively use the Moodle learning management system in the educational process (<https://dot.ttu.edu.kz/>), which provides a space for teachers and students to work together.

An important factor is the development of academic mobility within the framework of the EP, attracting the best foreign and domestic teachers. Rules and recommendations for organizing academic mobility of teachers and students are given in QMS P 4-24-2021 "Regulations on academic mobility of NPJSC "Karaganda Industrial University".

Foreign teachers can be invited to the University for up to 1 academic year for research work and lectures as part of the implementation of academic mobility programs. In the 2022-2023 academic year, a foreign scientist at Onuralp Yugel (Istanbul Technical University), in the 2023-2024 academic year I. V. Shestitko (Belarusian State Pedagogical University named after I. V. Shestitko). Maxim Tank) conducted a series of lectures and seminars for undergraduates of EP 7M07103-EET and EP 7M07301-TaTDBS.

Analytical part

The activity of the departments of accredited educational programs generally meets the criteria of the standard. Teachers are aware of the change in their role due to the transition to

student-centered learning. Teaching staff serving EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of designing buildings and structures", makes a significant contribution to the implementation of the university's development strategy.

During the interviews, the teaching staff confirmed that the university has created an opportunity for career growth and professional development, and active targeted actions are being taken to attract and develop young teachers professionally.

At the same time, during the visit, the EEC experts on this standard note that the department has a low level of academic mobility of teaching staff, which may lead to a lack of access to the resources of third-party higher education institutions. In this regard, the management of accredited educational institutions needs to increase the level of academic mobility of teaching staff, providing appropriate opportunities.

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

- the content of the educational program meets the scientific and professional interests and needs of teaching staff was rated very good-63% and good-37%.
- the opportunities provided by the University for professional development of teaching staff and career growth were rated very good-43.5% and good-56.5%.
- the degree of academic freedom of teaching staff, teachers rated very good-43.5% and good-56.5%.

Strengths/best practices in EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures"

Not detected

EEC recommendations for EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures"

1. By the beginning of the 2024-2025 academic year, the management of EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and Technology of designing buildings and structures" should develop an action plan to develop academic mobility, improve the skills of teaching staff, attract the best foreign and domestic teachers and conduct joint research on the profile of EP in the implementation of accredited educational programs.

EEC's conclusions based on the following criteria:

According to the standard "Teaching staff", the accredited educational programs 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures" have 9-satisfactory, 1 - suggesting improvement position.

6.8. Standard "Educational resources and student Support Systems"

✓ The university must ensure that the infrastructure and educational resources, including material and technical resources, meet the goals of the educational program.

✓ The EP management must demonstrate that classrooms, laboratories, and other facilities equipped with modern equipment are sufficient to meet the EP's goals.

✓ The university must demonstrate that the information resources meet the needs of the university and the implemented educational programs, including in the following areas:

- ✓ technological support for students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs);
- ✓ library resources, including the collection of educational, methodological and scientific literature on general education, basic and profile disciplines on paper and electronic media, periodicals, access to scientific databases;
- ✓ examination of research results, graduation papers, and dissertations for plagiarism;
- ✓ access to online educational resources;
- ✓ operation of WI-FI on its territory.

✓ The university must demonstrate that it creates conditions for conducting scientific research, integrating science and education, and publishing the results of research work of teaching staff, employees, and students.

✓ The university should strive 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.

✓ The EP management should demonstrate that there are procedures in place to support various groups of students, including informing and advising them.

- ✓ The EP management should show that there are conditions for the student's progress along the individual educational path.
- ✓ The university should take into account the needs of different groups of students (adults, working people, foreign students, as well as students with special educational needs).
- ✓ The university must ensure that the infrastructure meets the security requirements.

Proof part

An important factor in ensuring the quality of education and guaranteeing the sustainable development of KarIU is the continuous improvement of educational, material, technical and social infrastructure that meets the needs of students and the quality requirements of the educational program. For the implementation of EP 7M07103-ETE, 7M07301-TaTDBS of the Department of TMT, "Construction" are provided with the necessary educational, material, technical and social infrastructure.

The University has sufficient material and technical, information and library resources used for organizing the learning process and educating students. The university has 6 teaching and laboratory buildings with a total area of 44.01 thousand square meters, which house classrooms, specialized offices and laboratories, a university museum, an Information Technology and Telecommunications Center, and 20 computer classes. The University sports complex, with a total area of 2,300 sq. m., includes 6 game halls and 2 outdoor playgrounds <https://ttu.edu.kz/ru/materialno-texnicheskaya-baza/sportivniy-korpus/>.

The fleet of modern computer equipment is more than 400 units. The computer fleet is regularly upgraded. The volume of annual expenses for the purchase of computers and other information learning tools is growing. Specialized auditoriums and laboratories used in the implementation of accredited training programs are presented in Table 6.

The use of licensed computer application software packages-Mathcad, Matlab, COMPAS, DEFORM, Renga, SCAD Office, etc. - is constantly expanding. The university has free Internet access for students, teachers and staff, Wi-Fi zones, and a university website - <https://ttu.edu.kz>.

Table 6-Specialized classrooms and laboratories used in the implementation of EP 7M07103 "Engineering of technological equipment" of the Department "Technological Machines and Transport"; EP 7M07301 "Theory and technology of design of buildings and structures" of the Department "Construction".

Study rooms	Total area of premises (sq. m)	Number of seats	Material and technical support
EP 7M07103-Engineering of technological equipment			
113-Specialized audience	64,35	20	CNC machines (milling and laser), TV screen.
110-Center for Digital Engineering in Engineering and Technology	64,35	20	Computers complete with a TV screen (10 pcs.), interactive whiteboard, 3D printer, 3D scanner
003 - Laboratory of technological machines	64,35	20	Operating stands-Bridge crane, Belt conveyor, Crushing and sorting complex, classifier
010A-Research laboratory	33	5	Testing machine, heating furnace, melting furnace, tools, lifting mechanism, rolling stand
006-Specialized audience	50	20	Models of technological machines
EP 7M07301 – "Theory and technology of designing buildings and structures"			
301-Specialized audience	15.0	-	4 devices
302 - Specialized audience	15.0	-	10 devices
303 - Specialized audience	64.9	36	Desktop computer, projector
304-Specialized audience	14.3	6	Desktop computer, printer

305 - Specialized audience	47.2	16	6 desktop computers, projector
306 - Specialized audience	81.6	45	11 desktop computers, projector, printer, scanner
307 - Specialized audience	48.5	30	Desktop computer, projector
311 - Specialized audience	14.7	-	Desktop computer
313 - Specialized audience	81.5	36	Desktop computer, projector

In 2023, on the basis of the laboratory "Computer Graphics and DAS" of the Department of TMIT, the "Center for Digital Engineering in Engineering and Technology" was created, designed to form students' digital competencies necessary for performing design, research and production process management using modern digital engineering technologies. Within the framework of the center's activities, the university closely cooperates with leading software manufacturers in the field of digital engineering, such as ANSYS, Autodesk, DEFORM, ASCON, etc.

Faculty members and students from KariU IP addresses have access to international databases of peer-reviewed scientific literature, such as Scopus, Web of Science, which expands the range of use of electronic research resources. The university practices publishing electronic textbooks, which are placed in the digital library and are freely available (link to the Digital Library <https://sites.google.com/tttu.edu.kz/library/%D0%B1%D0%B0%D1%81%D1%82%D1%8B-%D0%B1%D0%B5%D1%82?authuser=0>).

The analysis of material and technical resources of the EP is carried out annually at a meeting of the department at the end of the academic year. The results of this analysis are summarized in the Act of readiness of departments. Questions about the provision of educational, scientific and methodological literature, as well as the improvement of the university's laboratory base are considered at a meeting of the Academic Council (<https://tttu.edu.kz/ru/plan-raboti-uchenogo-soveta/>). The corresponding development of the infrastructure used for the implementation of the EP is carried out based on the results of monitoring the satisfaction of infrastructure with internal stakeholders. Feedback forms are provided by the rector's blog (<https://tttu.edu.kz/ru/blog-rektora/>), a system for reviewing complaints and suggestions, and regular meetings between management and the team.

KariU has various student support services, such as a Student Service Center, a Registrar's Office. The Registrar's Office provides academic support to students in choosing and mastering the educational program, calculates the student performance rating, and issues transcripts to students upon their request transcripts. The list of services provided by the Student Service Center is available on the website (<https://tttu.edu.kz/ru/centr-obsluzhivaniya-obuchayushhixsya/>). The university management and the EP management carry out support procedures for various groups of students, including informing and advising. Before starting their studies at the university, all students have the opportunity to get acquainted with the university by studying the KARIU guide book posted on the university's website.

The University is constantly striving to improve the level of use of information technologies in the organization of the educational process. Educational process management systems AIS "Platonus" [are functioning http://platonus.tttu.edu.kz/](http://platonus.tttu.edu.kz/) and the management system of educational electronic courses (e-learning), "Moodle" <https://dot4.tttu.edu.kz/>.

Library resources, including the collection of educational, methodological and scientific literature on general education, basic and profile disciplines on paper and electronic media, periodicals, access to scientific databases meet the requirements for educational activities.

The University has a modern library and reading room, in the fund of which there are more than 290 thousand copies of educational, methodical, scientific literature in Kazakh, Russian and foreign languages, more than 30 titles of newspapers and magazines are issued annually. The University library is located in the main academic building of the university. In the periodicals hall, which is located inside the subscription, there are 12 computerized seats, with the ability to access the Internet and access the library's electronic resources. The reading room is designed for

42 readers. The fund of the reading room is arranged in 2 tiers in a systematic order, which ensures the completeness of the disclosure of funds and their accessibility to readers. <https://ttu.edu.kz/ru/nauchnaya-biblioteka-karagandinskogo-industrialnogo-universiteta/>.

The total book collection of the library as of 01.01.2024 is 296,520 copies, including 115,409 copies in the state language and 1,348 copies in English. Educational literature on electronic media accounts for 23 % of the total fund - 67,441 copies. The library has organized permanent book exhibitions: "Higher Education in Kazakhstan", "To help the student", "Novelties of literature", "New literature in English", "Works of University teachers", and many others, which are systematically updated. All book exhibitions are designed in 3 languages. Open book reviews, Information Days, and Specialist Days are organized so that teachers and students can get directly acquainted with the new literature. As new literature becomes available, newsletters "Novelties of Literature" are posted on the KarIU website, reviews of scientific and technical journals are made, and photo reports of novelties of literature are made (<https://ttu.edu.kz/ru/nauchnaya-biblioteka-karagandinskogo-industrialnogo-universiteta/>).

Part of the library's collection is replenished at the expense of the publishing center of the Association of Higher Education Institutions of the Republic of Kazakhstan. The University received 4880 copies (107 titles) of books from the public fund free of charge under the program "100 best textbooks of the world in the Kazakh language". The book fund by EP is presented in Table 7.

Table 7-Book fund, including the fund of educational and scientific literature on general education basic and profile disciplines.

№	EP	Educational literature (units)		Scientific literature (units)		Based on one trainee		
		in kaz lang..	on rus lang..	on kaz. lang.	on rus.lang.	on kaz. lang.	on rus. lang.	Total
1	7M07103 "Engineering of technological equipment"	442	265	30	15	78	47	125
2	EP 7M07301 - "Theory and technology of design of buildings and structures"	34	13	16	58	50	58	108

The procedure for supporting students with disabilities is regulated by the regulation of the QMS P 4-50-2021 "Regulations on the organization of inclusive education for persons with disabilities in the NPJSC "Karaganda Industrial University". To ensure access to education for students with special educational needs, KarIU uses a form of remote access for students to the resources of the educational portal through the KarIU website and personal accounts in the Platonus or Moodle information system. KarIU provides educational and methodological assistance to students through teacher consultations in online and offline modes.

Во всех корпусах университета имеются точки доступа Free Wi-Fi access points are available in all university buildings. Internet access is provided by a fiber-optic line connected to the network of the Association of Users of the Scientific and Educational computer Network of Kazakhstan "KazRENA". In each academic building of the university there is a video surveillance system and an electronic access system: by electronic key, fingerprint, Face ID. The movement of students, teaching staff, and university employees through the turnstile is recorded in a separate database.

Undergraduates of KarIU are interned on the basis of such companies as JSC "QARMET", LLP "Akzhol-T", LLP "AsiaProfStroy", LLP "Inkar -1", etc., where they can put into practice the knowledge and skills regarding equipment and software obtained during practical work. For students 'professional practices, there are cooperation agreements with the following enterprises

and educational organizations: for students' professional practices, there are bilateral cooperation agreements, information on which is given in the table.

Examination of research results and master's theses for plagiarism is carried out using the "StrikePlagiarism" system, the Polish academic anti-plagiarism system (Contract on Public Procurement of Services No. 08.2-06/7). Based on the results of the examination, a document is issued, a copy of which is stored at the department.

Analytical part

As a result of visual inspection of the objects of the material base by the members of the EEC, it should be noted that the university has enough necessary educational and material assets to ensure the educational process of accredited educational institutions. Classroom and laboratory facilities and classrooms comply with the established norms and rules. KarIU has created a fund of educational, methodical and scientific literature on general education, basic and profile disciplines of educational programs on paper and electronic media; обновляемость updating of literature collections in accordance with the standards defined by the qualification requirements for licensing. The University signed a sublicense agreement dated 08.08.2023 on the transfer of the software license rights with MediVidia for the use of the DEFORMTM software package for the Department of Technological Machines and Transport.

At the same time, during the interviewing of focus groups, having studied the material and technical support of the educational organization and infrastructure, the EEC commission noted the need to provide for the purchase of additional modern software tools that will be used in the development of EP 7M07301 "Theory and Technology of designing buildings and structures", including, as graduates noted, software tools for automating the process budget files, such as the Budget of the Republic of Kazakhstan 2020, ABC.

Taking into account the concluded contracts for all types of professional internships, the EEC commission noted the need for targeted work to further expand the base of partner enterprises and introduce a system of dual (informal) training at the bases of partner enterprises for accredited educational programs of the cluster.

A survey of students conducted during the visit to the UEC NAAR showed that satisfaction with:

- availability of library resources is 83.3 %;
- availability of computer classes – 100 %.
- availability and quality of Internet resources – 83.3%.

Strengths / best practices in EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

Not detected

EEC recommendations for EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

1. By the beginning of the 2024-2025 academic year, the management of EP 7M07301 "Theory and Technology of designing buildings and structures" should conduct an analysis of the available material and technical resources for compliance with the established goals, based on the results of which, develop and start implementing a plan for the phased acquisition of the necessary equipment and software to provide the educational process with modern equipment and software.

Conclusions of the EEC by criteria:

According to the standard "Educational resources and student support systems": accredited educational programs 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures" have 13-

satisfactory positions.

6.9. "Informing the Public" Standard

- ✓ The university guarantees that the published information is accurate, objective, up-to-date and reflects all areas of the university's activities within the framework of the educational program.
- ✓ Public awareness should include supporting and explaining the national development programs of the country and the system of higher and postgraduate education.
- ✓ University management should use a variety of ways to disseminate information (including mass media, web resources, information networks, etc.) to inform the general public and interested parties.
- ✓ Information about the educational program is objective, up-to-date and should include:
 - ✓ the purpose and planned results of the EP, the qualification to be assigned;
 - ✓ information about the system for evaluating учебных достижений students' academic achievements;
 - ✓ information about academic mobility programs and other forms of cooperation with partner universities and employers;
 - ✓ information about opportunities for developing students' personal and professional competencies and employment;
 - ✓ data that reflects the EP's positioning in the educational services market (at the regional, national, and international levels).
- ✓ An important factor is the publication on open resources of reliable information about teaching staff, in the context of personnel.
- ✓ The university must publish on its own web resource the audited financial statements on the EP.
- ✓ The university should post information and links to external resources based on the results of external assessment procedures.
- ✓ An important factor is the publication of information about cooperation and interaction with partners, including scientific/consulting organizations, business partners, social partners, and educational organizations.

Proof part

KarIU carries out targeted work on informing the public about the activities of the educational organization, the conditions and features of the implementation of the EP. The procedure for publishing information about the university's activities is regulated by an internal document of the QMS.-4-27-2022 "Regulation on informing the public".

The management of EP 7M07103-ETE, 7M07301-TaTDBS uses a variety of ways to disseminate information, including the media, information networks to inform the general public and interested persons. The main source of public information about KRMU's activities is the university's website (<https://ttu.edu.kz>). Information tools are: Republican journal "Bulletin of Karaganda State Industrial University" (<https://ttu.edu.kz/ru/vestnik-kgiu/>); social networks (<https://www.facebook.com/profile.php?id=100022651051239&mibextid=ZbWKwL>, https://www.youtube.com/channel/UCxgobaOnSnEzI78E4sb4xOA?view_as=subscriber); printed materials (brochures, booklets, 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, interviews in the media, on radio or television; presentations; personal contacts with interested parties, etc.

Within the framework of career guidance and explanatory work, the University engages the mass media to explain the technology for awarding educational grants. In regional and city newspapers "Evening newspaper", "Industrial Karaganda", "Egemen Kazakhstan" (<https://ttu.edu.kz/2019/09/statya-v-gazete-industrialnaya-karaganda-programma-peremen/>), "Ortalyk Kazakhstan", "Kazakhstanskaya Pravda" articles about KarIU are published. In the newspaper "Kazakhstanskaya Pravda" (<https://ttu.edu.kz/2021/06/46476/>), an article dated June 2, 2021 was published. "A new stage in the development of universities"; in August 2022, the project "Looking to the Future" was released on the TV channel TTK-News of Temirtau (Department of TMT» <https://www.instagram.com/p/CgUmc5IIIdV/>).

Public awareness provides support and explanation of the national development programs of the country and the system of higher and postgraduate education. The KarIU website highlights the anti-corruption strategy of the Republic of Kazakhstan <https://kgiu.kz/abuniv/korrupciey/antikorrupcionnaya-strategiya-respubliki-kazaxstan-na-2015-2025-gody/>.

KarIU reflects on the web resource information that characterizes the university as a whole and in the context of educational programs. 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 P 4-27-1-2021 "Regulations on the official website of Karaganda Industrial University", which also regulates the technology of its creation and

operation.

The KarIU website contains reliable, objective, up-to-date information about EP 7M07103 - ETE, 7M07301 - TaTDBS and their specifics, which include:

- expected learning outcomes of the implemented EPS (<https://tttu.edu.kz/ru/obrazovanie/modulnie-obrazovatelnie-programmi/>);
- the qualification and / or qualifications that will be awarded upon completion of the educational program (<https://tttu.edu.kz/ru/obrazovanie/modulnie-obrazovatelnie-programmi/>);
- teaching and learning approaches, as well as the system (procedures, methods and forms) of assessment (https://drive.google.com/file/d/1c1Kk_3F-snBeVjBQmD_76OhtWwOHA-aG/view);
- information about passing scores and training opportunities provided to students (<https://tttu.edu.kz/wp-content/uploads/2022/12/spravochnik-putevoditel-2022.pdf>);
- information about employment opportunities for graduates (<https://tttu.edu.kz/ru/trudoustroystvo/>).

The satisfaction of interested parties with the quality of the information received and in its completeness is investigated by conducting an online survey (<https://tttu.edu.kz/ru/anketi-oprosniki-2/>).

The KarIU website publishes adequate and objective information about the staff of the EP, in the context of personalities. Information about teaching staff contains information about education, academic degrees and titles, subjects taught, contact details, etc.

KarIU informs the public about cooperation and interaction with partners within the framework of the EP, including scientific / consulting organizations, business partners, social partners and educational organizations. The sections "International Academic Partners" are provided on the KarIU website to provide relevant information (<https://tttu.edu.kz/ru/mezhdunarodnie-akademicheskie-partneri/>), "International scientific partners" (<https://tttu.edu.kz/ru/mezhdunarodnie-nauchnie-partneri-2/>), "Our partners" (<https://tttu.edu.kz/ru/ob-universitete/nashi-partneri/>). Also, information about new facts of cooperation and interaction is published in the site's news feed and social networks. An example of such publications is the information from 20.02.2023 about the visit of the KarIU delegation the University of Portsmouth (Great Britain) to develop mutually beneficial cooperation, conduct joint research, develop strategies and cooperation projects (<https://tttu.edu.kz/ru/2023/02/delegaciya-kariu-posetila-portsmutskij-universitet/>).

Analytical part

Analysis of the information provided on the Institute's website showed that KarIU publishes complete and reliable information about its activities, admission rules for applicants, educational programs, terms and form of study, contact information and other useful information for applicants and students.

At the same time, experts noted that on the official website of the university (<https://tttu.edu.kz>) information in Kazakh and English is not fully provided (in terms of EP and CED). The university's website does not provide plans for the development of educational programs.

Available on [the departments page https://tttu.edu.kz/ru/kafedra-stroitelstvo/](https://tttu.edu.kz/ru/kafedra-stroitelstvo/), <https://tttu.edu.kz/ru/kafedra-texnologicheskie-mashini-i-transport/> the information is contained in three main sections: Research activities, Teaching and methodological activities, teacher profiles, which do not sufficiently reflect all areas of the university's activities within the educational program. The Scientific Activities section is insufficiently developed, and there is no information about ongoing research projects within the framework of the EP, research plans, or reports.

Departments need to constantly update information about planned and ongoing events of the department: guest lectures, field classes, events of scientific circles, achievements in research and development, meetings with stakeholders and other events of the department.

A survey of students conducted during the visit to the UEC NAAR showed that satisfaction with the content and information content of the website of educational organizations in general and faculties (schools) in particular – 83.3% .

Strengths/best practices in EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

Not detected

EEC recommendations for EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures":

1. By the beginning of the 2024-2025 academic year, the main information about educational programs and plans for the development of educational programs should be made available to the EP management on the university's website in three languages for interested parties..

2. By the beginning of the 2024-2025 academic year, the responsible structural unit, together with the management of the Department, should review the occupancy structure of the Department section on the university's website, including information on international cooperation, practice and employment in the context of the Department, plans and annual reports of departments.

EEC's conclusions based on the following criteria:

According to the "Public Awareness" standard, the accredited educational programs 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of design of buildings and structures" have 12-satisfactory positions.

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

According to the Educational Program Management standard:

Not detected.

According to the "Information Management and Reporting" standard:

The presence of a reporting system reflecting the activities of all structural divisions and departments within the framework of the EP, including an assessment of their performance, is demonstrated.

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

Not detected.

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

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

Not detected.

According to the "Students" standard:

Not detected.

According to the standard "Teaching staff":

Not detected.

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

Not detected.

According to the "Informing the Public" standard:

Not detected.

(VIII) OVERVIEW QUALITY IMPROVEMENT RECOMMENDATIONS FOR EACH STANDARD

According to the Educational Program Management standard:

1. By the beginning of the 2024-2025 academic year, the EP management should determine the list of employers by the profile of the educational program, taking into account the specifics of individual areas within the EP to involve in the discussion and updating of Educational Program Development Plans.

According to the "Information Management and Reporting" standard:

1. By the beginning of the 2024-2025 academic year, the university management should develop methodological recommendations for evaluating the effectiveness of changes made in the university, including in the context of the EP, including maps of corrective measures and the process of evaluating the effectiveness of implemented changes.

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

1. By the beginning of 2025-2026, the management of accredited educational institutions should develop an action plan to harmonize educational programs with similar programs of Kazakh and foreign universities in order to provide for the possibility of implementing double-degree education programs, and start implementing it.

2. By the beginning of the 2024-2025 academic year, the management of EP 7M07301 "Theory and technology of designing buildings and structures" should plan and analyze the real positioning of EP in the national and international educational market, and specify the uniqueness of the educational program.

3. By the beginning of the 2024-2025 academic year, in order to ensure the uniqueness of the cluster's educational programs, it is recommended to clarify the personal qualities and professional competencies in the graduate models in the EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and Technology of designing buildings and structures". Ensure that the management team agrees on the graduate model with representatives from employers who correspond to the specifics of the graduate's type of activity.

4. By the beginning of the 2024-2025 academic year, the EP management should compile a database of experts, taking into account the specifics of educational programs, for annual review of the EP.

5. By the end of the 2024-2025 academic year, in order to conduct professional certification of undergraduates, the EP management should develop an action plan for students to complete courses in the context of professional activities within the framework of open educational platforms, and start implementing it.

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

1. By the 2024-2025 academic year, the management of accredited educational institutions should develop a format for identifying and reviewing employers' proposals for making changes to educational programs.

2. By the 2024-2025 academic year, the management of accredited educational institutions should review the program and guidelines for conducting internships in order to determine indicators for evaluating students' internships.

3. The responsible structural division should promptly update the university's website with up-to-date information on plans for the development and implementation of educational programs.

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

1. By the beginning of the 2024-2025 academic year, the management of the EP in the educational and methodological documentation of educational programs should develop and publish mechanisms for evaluating learning outcomes, taking into account the goals of training, the specifics of the discipline taught.

2. By the 2025-2026 academic year, the EP management should analyze the use of informal (dual) training for students of accredited EP, attract practitioners in the relevant industry to teach specialized subjects, or other options for increasing practical training.

3. By the beginning of the 2024-2025 academic year, the University management should develop an action plan for the development and implementation of new own research in the field of teaching methods in the profile of educational programs at the university, and start implementing it.

According to the "Students" standard:

1. By the 2024-2025 academic year, the EP management should draw up an indicative plan (with an indication of deadlines) to attract foreign students, as well as to organize external and internal academic mobility of students and assist in obtaining external grants for training.

2. By the beginning of the 2024-2025 academic year, the university management should review the format of providing information on the Alumni Association with the publication of plans and reports on the Association's activities, announcements of events held on the website.

According to the standard "Teaching staff":

1. By the beginning of the 2024-2025 academic year, the management of EP 7M07103 "Engineering of technological equipment", 7M07301 "Theory and Technology of designing buildings and structures" should develop an action plan to develop academic mobility, improve the skills of teaching staff, attract the best foreign and domestic teachers and conduct joint research on the profile of EP in the implementation of accredited educational programs.

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

1. By the beginning of the 2024-2025 academic year, the management of EP 7M07301 "Theory and Technology of designing buildings and structures" should conduct an analysis of the available material and technical resources for compliance with the established goals, based on the results of which, develop and start implementing a plan for the phased acquisition of the necessary equipment and software to provide the educational process with modern equipment and software.

According to the "Informing the Public" standard:

1. By the beginning of the 2024-2025 academic year, the main information about educational programs and plans for the development of educational programs should be made available to the EP management on the university's website in three languages for interested parties.

2. By the beginning of the 2024-2025 academic year, the responsible structural unit, together with the management of the Department, should review the occupancy structure of the Department section on the university's website, including information on international cooperation, practice and employment in the context of the Department, plans and annual reports of departments.

(IX) OVERVIEW RECOMMENDATIONS FOR THE DEVELOPMENT OF AN EDUCATIONAL ORGANIZATION

Not available.

(X)RECOMMENDATION TO THE ACCREDITATION COUNCIL

The members of the external expert commission came to the unanimous opinion that the educational programs implemented by Karaganda Industrial University 7M07103 "Engineering of technological equipment", 7M07301 "Theory and technology of designing buildings and structures" can be accredited for a period of 5 (five) years.



Appendix 1. Evaluation table "Conclusion of the external expert Commission" (for EP "M07103 Engineering of technological equipment")

p/n	p/n	evaluation Criteria	, the organization of education			
			Strong	Suit- tive	Involves improving	Unsatisfa- tional
Standard "educational program"						
1	1.	the University must demonstrate the development of goals and strategies for the development of EP based on the analysis of external and internal factors, with wider involvement of diverse stakeholders		+		
2	2.	quality assurance Policy needs to reflect the relationship between research, teaching and learning of		+		
3	3.	, the University demonstrates the development of a quality assurance culture		+		
4	4.	Commitment to quality assurance should relate to any activity carried out by contractors and partners (outsourcing), including the implementation of joint/double-diploma education, academic mobility		+		
5	5.	EP Guide provides transparency on the development of the plan of development of EP based on the analysis of its functioning, the actual positioning of the University and focus its activities to meet the needs of students, the state, employers and other stakeholders		+		
6	6.	EP Guide demonstrates the mechanisms of formation and regular review of the plan for the development of EP and monitoring its implementation, and assessment of achievement of learning objectives, meet the needs of students, employers and society, decision-making, aimed at continuous improvement of EP		+		
7	7.	Guide EP should involve representatives of stakeholder groups, including employers, students and teachers to the formation of a plan of development EP		+		
8	8.	Manual EP must demonstrate the individuality and uniqueness of the plan development EP, consistency with national development priorities and development strategy to the organization of education		+		
9	9.	the Institution must demonstrate a clear definition of responsible for the business processes within the framework of the EP, the distribution of duties of personnel, segregation of collective bodies		+		
10	10.	Guide EP is coordinating the activities of all persons involved in the development and management of EP and its continuous implementation and involving in this process all stakeholders		+		
11	11.	Manual EP should maintain the transparency of the management system, the functioning of the internal quality assurance system, including its design, control and monitoring, the adoption of the resolutions		+		
12	12.	R Manual EP should implement risk management		+		
13	13.	Manual EP should ensure the participation of representatives of stakeholders (employers, faculty, students) in the composition of the collegial management bodies of the educational program, as well as their representation in decision-making on the management of the educational program		+		
14	14.	University must demonstrate innovation management in EP, including analysis and implementation of innovative proposals		+		

15	15.	Manual EP needs to demonstrate its openness and accessibility for students, faculty, employers, and other stakeholders		+		
16	16.	Manual EP confirms the completion of the training programs education management		+		
17	17.	Manual EP should seek to ensure that the progress made since the last procedures of external quality assurance is taken into account in the preparation of the next procedure		+		
total standard			0	17	0	0
Standard is "information Management and reporting"						
18	1.	the University must ensure the functioning of the system of collection, analysis and information management based on modern information and communication technologies and software		+		
19	2.	Manual EP system demonstrates the use of processed adequate information to improve the internal quality assurance system		+		
20	3.	EP Guide demonstrates the existence of a system of statements reflecting the activities of all structural divisions and departments within the framework of the EP, including the assessment of their effectiveness	+			
21	4.	the Institution must determine the frequency, forms and methods of assessment, management, activities of collective bodies and structural subdivisions of senior management		+		
22	5.	the University must demonstrate the mechanism of protection of information, including the definition of responsible persons for the accuracy and timeliness of information analysis and provide data		+		
23	6.	University demonstrates the involvement of students, employees and teachers in the process of collecting and analyzing information and making decisions based on them		+		
24	7.	Manual EP must demonstrate the existence of mechanisms of communication with students, employees and other stakeholders, including conflict resolution		+		
25	8.	the University shall be provided to measure the degree of satisfaction of needs of students, faculty and staff in the framework of the EP and demonstrate proof eliminate the deficiencies		+		
26	9.	the Institution must assess the performance and effectiveness in the context of EP			+	
<i>Information collected and analysed by the University in the EP should consider:</i>						
27	10.	key performance indicators		+		
28	11.	dynamics of the number of students in the context of forms and types		+		
29	12.	level of academic performance, student achievements and deductions		+		
30	13.	satisfaction of students with the implementation of the EP and the quality of education at the university		+		
31	14.	availability of educational resources and support systems for students		+		
32	15.	employment and career development of graduates		+		
33	16.	Students, teaching staff and staff must document their consent to the processing of personal data		+		
34	17.	The management of the EP should help to provide the necessary information in the relevant fields of science		+		
Total according to the standard			1	15	1	0

Standard "Development and approval of the educational program"						
35	1.	The university must demonstrate the existence of a documented procedure for the development of the educational program and its approval at the institutional level		+		
36	2.	The university must demonstrate the compliance of the developed educational program with the established goals and planned learning outcomes		+		
37	3.	The management of the educational program must determine the impact of disciplines and professional practices on the formation of results		+		
38	4.	The university demonstrates the existence of a graduate model of the EP describing learning outcomes and personal qualities		+		
39	5.	The qualification awarded upon completion of the EP should be clearly defined, explained and correspond to a certain level of NSC, QF-EHEA		+		
40	6.	The EP management should demonstrate the modular structure of the program based on ECTS, ensure that the structure of the content of the EP meets the set goals with a focus on achieving the planned learning outcomes of each graduate		+		
41	7.	The management of the EP should ensure that the content of academic disciplines and learning outcomes correspond to each other and the level of study (bachelor's, master's, doctoral studies)		+		
42	8.	The EP management should demonstrate that external reviews of the EP			are conducted	
43	9.	The EP management should provide evidence of the participation of students, teaching staff and other stakeholders in the development and quality assurance of the EP		+		
44	10.	The EP management should demonstrate the uniqueness of the educational program, its positioning in the educational market (regional/national/international)		+		
45	11.	The ability to train students is an important factor access to professional certification			+	
46	12.	An important factor is the presence of a joint (s) and / or two-degree EP with foreign universities			+	
Total according to the standard			0	9	3	0
Standard "Continuous monitoring and periodic evaluation of the educational program"						
47	1.	The university should provide a review of the structure and content of the EP, taking into account changes in the labor market, employer requirements and social demand of society		+		
48	2.	The university should demonstrate the existence of a documented procedure for monitoring and periodic evaluation to achieve the goal of the EP and continuous improvement of the EP		+		
<i>Monitoring and periodic evaluation of the EP should consider:</i>						
49	3.	the content of the program in the context of the latest achievements in science and technology in a particular discipline		+		
50	4.	changes in the needs of society and the professional environment		+		
51	5.	the workload, academic performance and graduation of students		+		
52	6.	the effectiveness of student assessment procedures		+		
53	7.	the needs and degree of satisfaction of students		+		
54	8.	compliance of the educational environment and EP		+		
55	9.	The EP management should publish information about changes to the EP, inform stakeholders about any planned or undertaken actions within the framework of EP		++	+	

56	10.	Support services should identify the needs of different groups students and the degree of their satisfaction with the organization of training, teaching, assessment, development of the EP in general		+		
Total according to the standard			0	9	1	0
Standard "Student-centered learning, teaching and assessment of academic performance"						
57	1.	The EP leadership should ensure respect and attention to different groups of students and their needs, provide them with flexible learning paths		+		
58	2.	The EP leadership should ensure that teaching is based on modern achievements of world science and practice in the field of training, use various modern teaching methods and assessment of learning outcomes that ensure the achievement of the EP goals, including competencies skills of performing scientific work at the required level		+		
59	3.	The EP management should determine the mechanisms for distributing the academic load of students between theory and practice within the EP, ensuring the development of the content and achievement of the goals of the EP by each graduate		+		
60	4.	An important factor is the availability of their own research in the field of teaching methods of EP disciplines			+	
61	5.	The university should ensure compliance with the procedures for evaluating learning outcomes		+		
62	6.	university should ensure consistency, transparency and objectivity of the learning outcomes assessment mechanism of the EP, publication of criteria and methods for evaluating learning outcomes in advance		+		
63	7.	Evaluators should be familiar with modern methods for evaluating learning outcomes and regularly improve their skills in this area		+		
64	8.	The EP management should demonstrate a feedback system on the use of various methods of evaluating learning outcomes. teaching methods and assessment of learning outcomes		+		
65	9.	The EP management should demonstrate support for students ' autonomy while providing guidance and assistance from the teacher		+		
66	10.	The EP management should demonstrate that there is a procedure in place to respond to student complaints		+		
Total according to the standard			0	9	1	0
Standard "Students"						
67	1.	The university must demonstrate the policy of forming a contingent of students and ensure transparency and publication of procedures regulating the life cycle of students (from admission to completion).		+		
68	2.	The EP management should provide for special adaptation and support programs for newly enrolled and foreign students		+		
69	3.	The university should demonstrate that its actions comply with the Lisbon Recognition Convention, including the existence and application of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and non-formal education		+		
70	4.	The university should ensure that opportunity for external and internal academic mobility of students, as well as to assist them in obtaining external grants for training			+	
71	5.	The university should encourage students to self-education and development outside the main program (extracurricular activities)		+		
72	6.	An important factor is the availability of a mechanism for supporting gifted students		+		
73	7.	The university must demonstrate cooperation with other educational organizations and national centers of the " European Network of National Information Centers for Academic Recognition and Mobility/National Academic Recognition Information Centers " ENIC/NARIC in order to ensure comparable recognition of qualifications		+		

74	8.	The university should provide students with places of practice, demonstrate the procedure for promoting employment of graduates, maintaining communication with them		+		
75	9.	The university should demonstrate the procedure for issuing graduates with documents confirming their qualifications, including the achieved learning outcomes		+		
76	10.	The management The EP management should demonstrate that graduates of the program have skills that are in demand in the labor market and that these skills are really relevant		+		
77	11.	The The EP management should demonstrate that there is a mechanism for monitoring the employment and professional activities of graduates		+		
78	12.	An important factor is the presence of a functioning alumni association/association		+		
Total according to the standard			0	11	1	0
Standard "Teaching staff"						
79	1.	The university must have an objective and transparent HR policy in the context of the EP, including hiring (including invited faculty members), professional growth and development of personnel, ensuring the professional competence of the entire staff		+		
80	2.	The university must demonstrate compliance with the quality of the teaching staff with the established requirements qualification requirements, the university's strategy, and the goals of the AP		+		
81	3.	The AP management should demonstrate a change in the role of the teacher due to the transition to student-centered learning and teaching		+		
82	4.	The university should provide opportunities for career growth and professional development of teaching staff, including young teachers		+		
83	5.	The university should attract specialists from relevant industries with professional competencies to teach		4		
84	6.	university must demonstrate the existence of a mechanism for motivating the professional and personal development of teaching staff+85 The		+		
85	7.	university must demonstrate the widespread use of information and communication technologies and software tools in the educational process (for example, on-line training, e-portfolio, MEPs		+		
86	8.	The university should demonstrate its focus on developing academic mobility, attracting the best foreign and domestic teachers			+	
87	9.	The university should demonstrate the involvement of each teacher in promoting a culture of quality and academic integrity in the university, determine the contribution of teaching staff, including invited students, to achieving the goals of the EP		+		
88	10.	An important factor is the involvement of teaching staff in the development of the economy, education, science and culture of the region and the country		+		
Total according to the standard			0	9	1	0
Standard "Educational resources and student support systems"						
89	1.	The university must ensure that its infrastructure and educational resources, including material and technical resources, meet the goals		of the +		
90	2 edu cati onal pro gra m.	The EP management must demonstrate that classrooms, laboratories, and other facilities equipped with modern equipment are sufficient to meet the EP's goals		+		
<i>The university must demonstrate that the information resources meet the needs of the university and the implemented educational programs, including in the following areas:</i>						

91	3.	technological support for students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs)		+		
92	4.	library resources, including the collection of educational, methodological and scientific literature on general education, basic and profile disciplines on paper and electronic media, periodicals, access to scientific databases		+		
93	5.	examination of research results, graduation papers, dissertations for plagiarism		+		
94	6.	access to educational Internet resources		+		
95	7.	functioning of WI-FI on its territory		+		
96	8.	The university must demonstrate that it creates conditions for conducting scientific research, integrating science and education, and publishing the results of research work of teaching staff, employees, and students		+		
97	9.	The university should strive 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		+		
98	10.	The EP management should demonstrate the availability of support procedures for various groups of students, including informing and advising		+		
99	11.	The EP management should show that there are conditions for the student's progress along the individual educational path		+		
100	12.	The university should take into account the needs of different groups students (adults, working people, foreign students, as well as students with special educational needs)		+		
101	13	The university must ensure that the infrastructure meets the security requirements		+		
Total according to the standard			0	13	0	0
Standard "Informing the public"						
102	1.	The university guarantees that the published information is accurate, objective, up-to-date and reflects all areas of the university's activities within the framework		of the +		
103	2 edu cati onal pro gra m.	Public awareness should include supporting and explaining the national development programs of the country and the system of higher and postgraduate education		+		
104	3.	The university management should use a variety of ways to disseminate information (including mass media, web resources, information networks, etc.) to inform the general public and interested persons		+		
<i>Information about the educational program is objective, relevant and should include:</i>						
105	4.	the purpose and planned results of the EP, the assigned qualification		+		
106	5.	information about the system for evaluating students ' academic achievements		+		
107	6.	information about academic mobility programs and other forms of cooperation with partner universities and employers		+		
108	7.	information on opportunities for developing students ' personal and professional competencies and employment		opp ort unit ies+		
109	8.	data reflecting the positioning of the EP in the educational services market (at the regional, national, and international levels)		+		

110	9.	An important factor is the publication on open resources of reliable information about teaching staff, in the context of personnel		+		
111	10.	The university must publish on its own web resource the audited financial statements on the EP		+		
112	11.	The university should post information and links to external resources based on the results of external assessment procedures		+		
113	12.	An important factor is the publication of information about cooperation and interaction with partners, including scientific/consulting organizations, business partners, social partners, and educational organizations		+		
Standard total			0	12	0	0
TOTAL			1	104	8	0



Appendix 2. Evaluation table "Conclusion of the external expert Commission" (for EP 7M07301 "Theory and technology of design of buildings and structures")

p/n	p/n	evaluation Criteria	, the organization of education			
			Strong	Suit- tive	Involves improving	Unsatisfa- tional
Standard "educational program"						
1	1.	the University must demonstrate the development of goals and strategies for the development of EP based on the analysis of external and internal factors, with wider involvement of diverse stakeholders		+		
2	2.	quality assurance Policy needs to reflect the relationship between research, teaching and learning of		+		
3	3.	, the University demonstrates the development of a quality assurance culture		+		
4	4.	Commitment to quality assurance should relate to any activity carried out by contractors and partners (outsourcing), including the implementation of joint/double-diploma education, academic mobility		+		
5	5.	EP Guide provides transparency on the development of the plan of development of EP based on the analysis of its functioning, the actual positioning of the University and focus its activities to meet the needs of students, the state, employers and other stakeholders		+		
6	6.	EP Guide demonstrates the mechanisms of formation and regular review of the plan for the development of EP and monitoring its implementation, and assessment of achievement of learning objectives, meet the needs of students, employers and society, decision-making, aimed at continuous improvement of EP		+		
7	7.	Guide EP should involve representatives of stakeholder groups, including employers, students and teachers to the formation of a plan of development EP		+		
8	8.	Manual EP must demonstrate the individuality and uniqueness of the plan development EP, consistency with national development priorities and development strategy to the organization of education		+		
9	9.	the Institution must demonstrate a clear definition of responsible for the business processes within the framework of the EP, the distribution of duties of personnel, segregation of collective bodies		+		
10	10.	Guide EP is coordinating the activities of all persons involved in the development and management of EP and its continuous implementation and involving in this process all stakeholders		+		
11	11.	Manual EP should maintain the transparency of the management system, the functioning of the internal quality assurance system, including its design, control and monitoring, the adoption of the resolutions		+		
12	12.	Guide EP should implement risk management		+		
13	13.	Manual EP should ensure the participation of representatives of stakeholders (employers, faculty, students) as part of the collegial management bodies of the educational program, as well as their representation in decision-making on the management of the educational program		+		
14	14.	University must demonstrate innovation management in EP, including analysis and implementation of innovative proposals		+		

15	15.	Manual EP needs to demonstrate its openness and accessibility for students, Faculty, employers, and other stakeholders		+		
16	16.	EP management confirms training in educational management programs		+		
17	17.	The EP management should strive to ensure that progress made since the last external quality assurance procedure is taken into account when preparing for the next procedure		+		
Total according to the standard			0	17	0	0
Standard "Information Management and reporting"						
18	1.	The university should ensure the functioning of a system for collecting, analyzing and managing information based on modern information and communication technologies and software tools		+		
19	2.	The EP management demonstrates the systematic use of processed, adequate information to improve the internal quality assurance system		+		
20	3.	The EP management demonstrates the availability of a system for reports reflecting the activities of all structural divisions and departments within the framework of the EP, including an assessment of their performance	+			
21	4.	The university should determine the frequency, forms and methods of evaluating the management of the EP, the activities of collegial bodies and structural divisions, and top management		+		
22	5.	The university should demonstrate a mechanism for ensuring information security, including identifying those responsible for the accuracy and timeliness of information analysis and data provision		+		
23	6.	The university demonstrates the involvement of students, employees and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them		+		
24	7.	The management of the EP should demonstrate the existence of communication mechanisms with students, employees and other stakeholders, including conflict resolution		+		
25	8.	The university should measure the degree of satisfaction with the needs of students, teaching staff and staff within the framework of the EP and demonstrate evidence of addressing the identified shortcomings		+		
26	9.	The university should evaluate the effectiveness and efficiency of activities in the context of the EP			+	
<i>Information collected and analyzed by the university within the framework of the EP should take into account:</i>						
27	10.	key performance indicators		+		
28	11.	dynamics of the number of students in the context of forms and types		+		
29	12.	level of academic performance, student achievements and deductions		+		
30	13.	satisfaction of students with the implementation of the EP and the quality of education at the university		+		
31	14.	availability of educational resources and support systems for students		+		
32	15.	employment and career development of graduates		+		
33	16.	Students, teaching staff and staff must document their consent to the processing of personal data		+		
34	17.	The management of the EP should help to provide the necessary information in the relevant fields of science		+		
Total according to the standard			1	15	1	0

Standard "Development and approval of the educational program"						
35	1.	The university must demonstrate the existence of a documented procedure for the development of the educational program and its approval at the institutional level		+		
36	2.	The university must demonstrate the compliance of the developed educational program with the established goals and planned learning outcomes		+		
37	3.	The management of the educational program must determine the impact of disciplines and professional practices on the formation of learning outcomes		+		
38	4.	The university demonstrates the existence of a graduate model of the EP describing learning outcomes and personal qualities		+		
39	5.	The qualification awarded upon completion of the EP should be clearly defined, explained and correspond to a certain level of NSC, QF-EHEA		+		
40	6.	The EP management should demonstrate the modular structure of the program based on ECTS, ensure that the structure of the content of the EP corresponds to the goals set to achieve the planned learning outcomes of each graduate		+		
41	7.	, the EP management must ensure that the content of academic disciplines and learning outcomes correspond to each other and the level of study (bachelor's, master's, doctoral studies).		+		
42	8.	The EP management should demonstrate that external reviews of the EP			are conducted+	
43	9.	The EP management should provide evidence of the participation of students, teaching staff and other stakeholders in the development and quality assurance of the EP		+		
44	10.	The EP management should demonstrate the uniqueness of the educational program, its positioning in the educational market (regional/national/international)			+	
45	11.	The ability to train students is an important factor access to professional certification			+	
46	12.	An important factor is the presence of a joint (s) and / or two-degree EP with foreign universities			+	
Total according to the standard			0	8	4	0
Standard "Continuous monitoring and periodic evaluation of the educational program"						
47	1.	The university should provide a review of the structure and content of the EP, taking into account changes in the labor market, employer requirements and social demand of society		+		
48	2.	The university should demonstrate the existence of a documented procedure for monitoring and periodic evaluation to achieve the goal of the EP and continuous improvement of the EP		+		
<i>Monitoring and periodic evaluation of the EP should consider:</i>						
49	3.	the content of the program in the context of the latest achievements in science and technology in a particular discipline		+		
50	4.	changes in the needs of society and the professional environment		+		
51	5.	the workload, academic performance and graduation of students		+		
52	6.	the effectiveness of student assessment procedures		+		

53	7.	the needs and degree of satisfaction of students		+		
54	8.	compliance of the educational environment and EP		+		
55	9.	The management of the EP should publish information about changes to the EP, inform interested parties about any planned or undertaken actions within the framework of the EP			+	
56	10.	Support services should identify the needs of various groups of students and the degree of their satisfaction with the organization of training, teaching, assessment, and development of the EP as a whole		+		
Total according to the standard			0	9	1	0
Standard " Student-centered training, teaching and assessment of academic performance"						
57	1.	The EP leadership should ensure respect and attention to different groups of students and their needs, provide them with flexible learning paths		+		
58	2.	The EP leadership should ensure that teaching is based on modern achievements of world science and practice in the field of training, use various modern teaching methods and assessment of learning outcomes that ensure the achievement of the EP goals, including competencies skills of performing scientific work at the required level		+		
59	3.	The EP management should determine the mechanisms for distributing the academic load of students between theory and practice within the EP, ensuring the development of the content and achievement of the goals of the EP by each graduate		+		
60	4.	An important factor is the availability of their own research in the field of teaching methods of EP disciplines			+	
61	5.	The university should ensure compliance with the procedures for evaluating learning outcomes		+		
62	6.	The university should ensure consistency, transparency and objectivity of the learning outcomes assessment mechanism of the EP, publication of criteria and methods for evaluating learning outcomes in advance		+		
63	7.	Evaluators should be familiar with modern methods for evaluating learning outcomes and regularly improve their skills in this area		+		
64	8.	The EP management should demonstrate a feedback system on the use of various methods of evaluating learning outcomes. teaching methods and assessment of learning outcomes		+		
65	9.	The EP management should demonstrate support for students ' autonomy while providing guidance and assistance from the teacher		+		
66	10.	The EP management should demonstrate that there is a procedure in place to respond to student complaints		+		
Total according to the standard			0	9	1	0
Standard "Students"						
67	1.	The university must demonstrate the policy of forming a contingent of students and ensure transparency and publication of procedures regulating the life cycle of students (from admission to completion).		+		
68	2.	The EP management should provide for special adaptation and support programs for newly enrolled and foreign students		+		
69	3.	The university should demonstrate that its actions comply with the Lisbon Recognition Convention, including the existence and application of a mechanism for recognizing the results of academic mobility of		+		

		students, as well as the results of additional, formal and non-formal education				
70	4.	The university should ensure that opportunity for external and internal academic mobility of students, as well as to assist them in obtaining external grants for training			+	
71	5.	The university should encourage students to self-educate and develop outside the main program (extracurricular activities)		+		
72	6.	An important factor is the availability of a mechanism for supporting gifted students		+		
73	7.	The university must demonstrate cooperation with other educational organizations and national centers of the " European Network of National Information Centers for Academic Recognition and Mobility/National Academic Information Centers of Recognition " ENIC/NARIC in order to ensure comparable recognition of qualifications		+		
74	8.	The university must provide students with places of practice, demonstrate the procedure for promoting employment of graduates, maintaining communication with them		+		
75	9.	The university must demonstrate the procedure for issuing graduates with documents confirming their qualifications, including the achieved learning outcomes		+		
76	10.	The management of the EP must demonstrate that graduates of the program have skills that are in demand in the labor market and that these skills are really relevant		+		
77	11.	The The EP management should demonstrate that there is a mechanism for monitoring the employment and professional activities of graduates		+		
78	12.	An important factor is the presence of a functioning alumni association/association		+		
Total according to the standard			0	11	1	0
Standard "Teaching staff"						
79	1.	The university must have an objective and transparent HR policy in the context of the EP, including hiring (including invited faculty members), professional growth and development of personnel, ensuring the professional competence of the entire staff		+		
80	2.	The university must demonstrate compliance with the quality of the teaching staff with the established requirements qualification requirements, the university's strategy, and the goals of the AP		+		
81	3.	The AP management should demonstrate a change in the role of the teacher due to the transition to student-centered learning and teaching		+		
82	4.	The university should provide opportunities for career growth and professional development of teaching staff, including young teachers		+		
83	5.	The university should attract specialists from relevant industries with professional competencies to teach		4 The		
84	6.	university must demonstrate the existence of a mechanism for motivating the professional and personal development of teaching staff+85 The		+		
85	7.	university must demonstrate the widespread use of information and communication technologies and software tools in the educational process (for example, on-line training, e-portfolio, MEPs		+		
86	8.	The university should demonstrate its focus on developing academic mobility, attracting the best foreign and domestic teachers			+	

87	9.	The university should demonstrate the involvement of each teacher in promoting a culture of quality and academic integrity in the university, determine the contribution of teaching staff, including invited students, to achieving the goals of the EP		+		
88	10.	An important factor is the involvement of teaching staff in the development of the economy, education, science and culture of the region and the country		+		
Total according to the standard			0	9	1	0
Standard "Educational resources and student support systems"						
89	1.	The university must ensure that its infrastructure and educational resources, including material and technical resources, meet the goals		of the +		
90	2. educational program.	The EP management must demonstrate that classrooms, laboratories, and other facilities equipped with modern equipment are sufficient to meet the EP's goals		+		
<i>The university must demonstrate that the information resources meet the needs of the university and the implemented educational programs, including in the following areas:</i>						
91	3.	technological support for students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs)		+		
92	4.	library resources, including the collection of educational, methodological and scientific literature on general education, basic and profile disciplines on paper and electronic media, periodicals, access to scientific databases		+		
93	5.	examination of research results, graduation papers, dissertations for plagiarism		+		
94	6.	access to educational Internet resources		+		
95	7.	functioning of WI-FI on its territory		+		
96	8.	The university must demonstrate that it creates conditions for conducting scientific research, integrating science and education, and publishing the results of research work of teaching staff, employees, and students		+		
97	9.	The university should strive 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		+		
98	10.	The EP management should demonstrate the availability of support procedures for various groups of students, including informing and advising		+		
99	11.	The EP management should show that there are conditions for the student's progress along the individual educational path		+		
100	12.	The university should take into account the needs of different groups students (adults, working people, foreign students, as well as students with special educational needs)		+		

101	13	The university must ensure that the infrastructure meets the security requirements		+		
Total according to the standard			0	13	0	0
Standard "Informing the public"						
102	1.	The university guarantees that the published information is accurate, objective, up-to-date and reflects all areas of the university's activities within the framework		of the +		
103	2 educational program.	Public awareness should include supporting and explaining the national development programs of the country and the system of higher and postgraduate education		+		
104	3.	The university management should use a variety of ways to disseminate information (including mass media, web resources, information networks, etc.) to inform the general public and interested persons		+		
<i>Information about the educational program is objective, relevant and should include:</i>						
105	4.	the purpose and planned results of the EP, the assigned qualification		+		
106	5.	information about the system for evaluating students ' academic achievements		+		
107	6.	information about academic mobility programs and other forms of cooperation with partner universities and employers		+		
108	7.	information on opportunities for developing students ' personal and professional competencies and employment		opportunities+		
109	8.	data reflecting the positioning of the EP in the educational services market (at the regional, national, and international levels)		+		
110	9.	An important factor is the publication on open resources of reliable information about teaching staff, in the context of personnel		+		
111	10.	The university must publish on its own web resource the audited financial statements on the EP		+		
112	11.	The university should post information and links to external resources based on the results of external assessment procedures		+		
113	12.	An important factor is the publication of information about cooperation and interaction with partners, including scientific/consulting organizations, business partners, social partners, and educational organizations		+		
Standard total			0	12	0	0
TOTAL			1	103	9	0

