«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING

REPORT

about results of work of external expert commission on assessment on compliance to requirements of standards of specialized accreditation of educational programs

6B07107 - Technological equipment of the industry
(5B072400 - Technological machines and the equipment)
6B07108 - Forging and stamping production in mechanical engineering
(5B071200 – Mechanical engineering, a trajectory "The theory and technology of forging and stamping production")
6B07109 - Foundry technologies in mechanical engineering
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(5B071300 - Transport, the transport equipment and technologies)
6B11201 - Industrial, environmental and fire safety
(5B073100 - Health and safety and environment protection)

KARAGANDA INDUSTRIAL UNIVERSITY
the period from October 12 to October 14, 2020

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING
External expert commission

Addressed
To accreditation
council of IAAR

АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ ТӘУЕЛСІЗ АГЕНТТІГІ
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Temirtau, 2020

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(I) LIST OF DESIGNATIONS AND REDUCTIONS

AIS – automated information system.
HS&EP – Health and safety and environment protection
EAEA – External assessment of educational achievements.
SCC – State certifying commission.
SOSE – State obligatory standard of education.
DAP – Department on the academic policy.
DEW&YP – Department on educational work and youth policy.
DIC – Department of the international cooperation.
DS&I - Department of science and innovations .
DHR – Department on human resources.
UNT – Uniform national testing.
IEP – Individual educational plan.
KarIU (KSIU), university – NLC "Karaganda industrial university".
FSPME – Forging and stamping production in mechanical engineering.
CED – catalog of elective disciplines.
LEP – Laboratory of an engineering profile.
FTME – Foundry technologies in mechanical engineering.
M&MS – Metallurgy and materials science.
MES RK – Ministry of Education and Science of the Republic of Kazakhstan.
MS – Mechanical engineering.
R&DW – research, developmental work.
RW – research work.
NIRS – research work of students.
SMC – Scientific and methodical council.
OCT – Office of commercialization of technologies.
MF – Metal Forming.
EP – Educational program.
TS – teaching stuff.
HTCRM – Hoisting-and-transport, construction and road machines.
IE&FS – Industrial, environmental and fire safety.
RK - Republic of Kazakhstan.
WEP – Working educational plan.
CAD – Computer-aided design.
QMS – quality management system.
IWS – independent work of the student.
IWST – independent work of the student with the teacher.
TM&E - Technological machines and the equipment.
TM&T - Technological machines and transport.
TEI – Technological equipment of the industry.
TTE&T – Transport, the transport equipment and technologies.
EMC – educational and methodical complex.
EMCD – educational and methodical complex of discipline.
EMC – Educational and methodical council.
CT&E – Chemical technology and ecology.
CIT&T – Center of information technologies and telecommunications (Department of digital transformation).
PT&CS – Power, transport and control systems.

(II) INTRODUCTION

According to order No. 79-20-OD of 24.09.2020. of the Independent agency of accreditation and rating from October 12 to October 14, 2020 the externa lexpert commission carried out assessment of conformity of educational programs 6B07107 "Technological equipment of the industry" (5B072400 "Technological machines and the equipment"), 6B07108 "Forging and stamping production in mechanical engineering" (5B071200 "Mechanical engineering", a trajectory "The theory and technology of forging and stamping production"), 6B07109 "Foundry technologies in mechanical engineering" (5B071200 "Mechanical engineering", a trajectory "Technology of foundry production"), 6B07110 "Hoisting-and-transport, construction and road machines" (5B071300 "Transport, the transport equipment and technologies"), 6B11201 "Industrial, environmental and fire safety" (5B073100 "Health and safety and environment protection") by the NLC "Karaganda industrial university" (KarIU) (Temirtau) to standards of specialized accreditation of IAAR (No. 10-17-OD of February 24, 2017, edition fifth).

The report of the external expert commission (EEC) contains assessment of the provided educational programs to criteria of the IAAR standards, the recommendation of EEC about further improvement of educational programs and parameters of a profile of educational programs.

Structure of EEC:

1. **Chairman of the commission of IAAR** – Mikhail Borisovich Smirnov, c.t.s., professor, NLC "University of Shakarim of the city of Semey" (Semey);
2. **Foreign expert of IAAR** – Alexander Sergeyevich Vorontsov, c.t.s., associate professor, dean of faculty of "Innovation technologies of mechanical engineering", Grodno state university of Janka Kupala (Grodno, Republic of Belarus);
3. **Foreign expert of IAAR** – Mikhail Yuryevich Narkevich, c.t.s., associate professor, Magnitogorsk State Technical University (MSTU) of G.I. Nosov, expert of Rosakkredagentstvo (Magnitogorsk, Russian Federation);
4. **Expert of IAAR** – Timur Saatdinovich Kartbayev, PhD, academician of MAIN, Almaty university of power and communication (Almaty);
5. **Expert of IAAR** - Nurlan Narkenovich Tashatov, c.ph-m.s., associate professor, the NLC "The Eurasian national university of L.N. Gumilev" (Nur-Sultan);
6. **Expert of IAAR** – Aybek Muratbekovich Akayev, associate professor, PhD, NLC "East Kazakhstan technical university of D. Serikbayev" (Ust-Kamenogorsk);
7. **Expert of IAAR** – Vadim Pavlovich Markovsky, c.t.s., associate professor, NLC "Toraygyrov university" (Pavlodar);
8. **Expert of IAAR** – Ermek Tolegenovich Abilmazhinov, d.t.s., associate professor, NLC "University of Shakarim of the city of Semey" (Semey);
9. **Expert of IAAR** – Aliya Kayratovna Aldungarova, PhD, associate professor, NLC "Toraygyrov university" (Pavlodar);
10. **Expert of IAAR –** Botagoz Ongarovna Torlanova, c.ph.s., associate professor, Southern Kazakhstan medical academy (Shymkent);
11. **Employer IAAR –** Sergey Yuryevich Kutlin, the director of Logic-Soft training center, is nominated by Chamber of businessmen of the Karaganda region (Karaganda);
12. **Student of IAAR –** Asanov Alikhan Altinbekuly, leader of Alliance of students of Kazakhstan in the Karaganda region (Karaganda);
13. **Student of IAAR –** Kuyshybayeva Roza Maratkizi, undergraduate of 2nd course of EP "Automation and Management", Kazakh national technical university of K.I. Satpayev (Almaty);

14. **Student of IAAR -** Kozhanova Adem Tlekkyzy, student 3rd course of EP "Technology of Pharmaceutical Production", Kazakh national medical university of S.D. Asfendiyarov (Almaty);

15. **Observer from the IAAR Agency** – Timur Erbolatovich Kanapyanov, PhD, Manager of International Projects and Public Relations of IAAR (Nur-Sultan).

(III) REPRESENTATION OF EDUCATION TO THE ORGANIZATION

Non-profit joint-stock company "Karaganda Industrial University" (further KarIU, university) it was created in September, 2006 on the basis of AO "Karaganda metallurgical institute". According to the Government decree RK No. 705 of July 25, 2006 Karaganda metallurgical institute was transformed by the Resolution of the Cabinet of RK of 19.03.1993 from the Plant-VTUZ at the Karaganda iron and steel works created, in turn, based on branch of the Karaganda polytechnical institute in 1963 on the basis of the Resolution of the Central Committee of the CPSU and Council of ministers of the USSR No. 533 of May 9, 1963 and the Resolution of the Central Committee of the CPC and Council of ministers of the Kazakh SSR No. 615 of August 1, 1963. In October, 2001, according to the Government decree RK of 11.05.2001, order No. 623, Karaganda metallurgical institute becomes closed joint stock company. On May 3, 2005 it is re-registered as AO "Karagandinsky metallurgichesky institut".

The structure of the Karaganda Metallurgical institute included three day faculties, the correspondence faculty, the Kazakh office at which preparation in the metallurgical, machine-building, construction, chemical and economic directions was conducted. The military department training operators reserve officers functioned. For implementation of pre-university preparation at institute the Koktem lyceum and college were organized. Postgraduate training of specialists was conducted according to programs of a postgraduate study and magistracy. In 2004 the Karaganda metallurgical institute began to pass to credit technology of training of students and preparation of technical shots according to a three-level system: bachelor – master – PhD.

2006 based on the Karaganda metallurgical institute the Karaganda state industrial university is created. (Decree of the Government of the Republic of Kazakhstan of July 25, 2006, No. 705). It allowed to expand the nomenclature of specialties on which the higher education institution performs preparation of technical shots.

June, 2020 the KSIU passed into non-profit joint-stock company and was renamedthe Karaganda industrial university (KarIU).

According to the website of the university, training KarIU is performed according to the 24th educational programs of a bachelor degree, 13 EP of a magistracy and the 2nd EP of doctoral studies (https://kgiu.kz/abuniv/abiturient2020/).

More than in 50 years about 24 thousand people became university graduates. From them – over 14000 got engineering education for years of independence. In general, from 2015-2020 93.3% of graduates were on average employed.

Today in structure of the university 3 faculties: "The metallurgy and mechanical engineering", "Power, transport and control systems", "Economy and construction" as a part of which functions 12 departments. The higher education institution has 59 specialized laboratories, the center of metallurgy with 12 laboratories of a professional profile. Based on the university the Karaganda regional center of Network Academy Cisco is open.

Library resources. The university has modern library and the reading room in which fund there are more than 260 thousand copies of educational, educational and methodical, scientific literature on Kazakh, Russian and foreign languages. More than 30 names of newspapers and magazines are annually written out. The library of the university is in the main academic building of higher education institution. In the hall of the periodical press which is located in the subscription there are 12 computerized seats, with a possibility of Internet connection and access to electronic resources of library. The reading room is calculated on 42 reader's places. The fund of the reading room is located in 2 tiers in a systematic order that provides completeness of disclosure of funds and their availability to readers. For convenience of readers on the subscription and in the reading room there is an access of Wi-fi. For 01.01.2020 the fund of Scientific library of the university makes 274556 copies of units of storage. From them in a state language – 102999 copies, in English – 1163 pieces. Including on electronic media –

55975 pieces. The area of library is 1219 sq.m. In library the specialized library IRBIS-64 program which systematically is replenished is installed.

Contingent of students. The contingent of students of day form of education for October 01, 2020 makes 2257 people, of them: on the basis of the state educational grant – 811. To remote form of education – 659, evening form of education – 117, extramural studies - 440, undergraduates – 53, from them by the state order 34 and doctoral candidates – 18, from them by the state order 18.

Regular structure of the university. The total number of regular teachers at the university for 01.10.2020 makes 111 people, of them 7 doctors of science, professors, 37 candidates of science, associate professors, doctors of PhD - 12, undergraduates - 39. Average age of TS on higher education institution of 49 years. Degree level – 50.45%.

The higher education institution has the following positive indicators:

- According to the Rating of Webometrics the university takes the 66th place (from 122 higher education institutions).
- In KarIU EMC REMS in the Metallurgy direction functions.
- At the university there is a unique educational and research and production laboratory base with semi-plants on metallurgy and mechanical engineering, the 3D factory laboratory - engineering is open (Technological Machines and Transport department), the regional center of Network academy "Cisco" and the SOTSBI information and communication center are open.
- In higher education institution since 2018, Grants of the Academic council of the University to graduates of schools – winners of a competition of the essay and multimedia projects are awarded.
- 5 joint educational programs are developed (FGBOOU HE "AlGU", Scientific Research Institute TGU, FGBOOU HE "MSTU of G.I. Nosov", KGTU of T.F. Gorbachev, Astrakhan GU).
- 5 students of higher education institution are winners of the Republican competition "The Best Student" and "The Best Undergraduate".
- Participation of KarIU in the 30th and 31st International festivals of KVN in Sochi by the invitation of the President of the International union of KVN A.V. Maslyakov.
- For three years the active and successful students of the Karaganda industrial university by the invitation of the head of Office of the First President of the Republic of Kazakhstan – Elbasa, participate in the Republican seminar - a training in Library of the First President of the Republic of Kazakhstan – Elbasy N.A. Nazarbaev.
- In higher education institution the regional office "Ruhani zhangyru" being the dialogue site for all ethnocultural associations of the city works.

Training in KarIU is performed according to the State license for occupation educational activity in the sphere of the higher and postgraduate professional education № AB 0137432 of 03.02.2010, the annex to the license for occupation educational activity 02.04.2019, Mr. Nur-Sultan.

The contingent of students of internal and remote form of education of the accredited EP for October 01, 2020 **makes:**

- 6B07107 "TEI" - 131 students, from them: on the basis of the state educational grant – 31 persons, on a commercial basis - 88, full-time courses – 42 students, remote – 89 students;
- 6B07108 "FSPME" - 27 students, from them: on the basis of the state educational grant – 5 people, on a commercial basis - 22, full-time courses – 5 students, remote – 22 students;
- 6B07109 "FTME" - 23 students, from them: on the basis of the state educational grant – 23 students, full-time courses – 23 students;
- 6B07110 "HTCRM" - 159 students from them: on the basis of the state educational grant – 42 persons, on a commercial basis - 117, full-time courses – 57 students, remote – 102 students;
- 6B11201 "IE&FS" - 106 students from them: on the basis of the state educational grant – 2 persons, on a commercial basis - 104, full-time courses – 18 students, remote – 88 students.

Information on Technological Machines and Transport department

Training of specialists on the accredited EP of specialties 6B07110 "Hoisting-and-transport, construction and road machines" (5B071300 "Transport, the transport equipment and technologies"), 6B07107 "Technological equipment of the industry" (5B072400 "Technological machines and the equipment") is carried out in KarIU at Technological Machines and Transport department which is formed based on Mechanical Equipment of Steel Works department (later Metallurgical Machines and Equipment) in 1975, in 1998 Metallurgical Machines and Equipment department (MMiO) united with Mechanical Equipment of Industrial Enterprises department ("Construction and road machines" earlier) and in connection with expansion of a profile of preparation in 2008 the department changed the name and began to be called Technological Machines and Transport department (TM&T)

Training of students is performed in the state and Russian languages. Training internal and remote, with application of DET.

Qualitativequantitative list of teachers of department:

As a part of Technological Machines and Transport department in 2020-2021 work 11 TS, percent of an degree level of 66.7%, from them: the c.t.s. – 6, PhD – 1. Average age of TS on department – 55 years.

Employment of graduates of the last three years on the accredited EP of a cluster:

- EP 6B07107 "TEI" - 2017-2018 - 100%, 2018-2019 - 100%, 2019-2020 – 62.5%;
- EP 6B07110 HTCRM - 2017-2018 - 100%, 2018-2019 - 100%, 2019-2020 - 70%;

The number of not employed included the graduates who continued training in programs of postgraduate professional education (doctoral studies) and undergoing conscription military service in armed forces of RK.

Information on Metal Forming department

Training of specialists on the accredited EP 6B07108 "Forging and stamping production in mechanical engineering" (5B071200 "Mechanical engineering", a trajectory "The theory and technology of forge and forming production") is carried out in KarIU at Metal Forming department which is formed in 1964. At department since 2001 the magistracy in the specialty 6M071200 — "Mechanical engineering" functions. Since 2010, doctoral studies in "Nanomaterialy and nanotechnologies", since 2019 according to the educational program 8D07101 — "Nanotechnologies in engineering" work.

Qualitative and quantitative list of teachers of department:

As a part of Metal Forming department in 2020-2021 work 9 TS, percent of an degree level of 55.5%, from them: the c.t.s. – 3, PhD – 2. average age of TS on department – 44 years.

Employment of graduates of the last three years on the accredited EP of a cluster:

- EP 6B07108 "FSPME" - 2017-2018 - 100%, 2018-2019 - 81%, 2019-2020 - 93%;

Information on Metallurgy and Materials Science department

Training of specialists on the accredited EP 6B07109 "Foundry technologies in mechanical engineering" (5B071200 "Mechanical engineering", a trajectory "Technology of foundry production") is carried out in KarIU at Metallurgy and Materials Science department, one of the first releasing departments ("Metallurgy of cast iron and steel") since 1963 (year of formation of the plant - VTUZ). The organization of department of a metallurgical profile was caused by need of in-service training of qualified personnel for service of domain and steel-smelting production of the Karaganda steel works. In 1981 at the plant - VTUZ the Technology of Metals and Metallurgical Science department which in 1989 was renamed Metallurgical Science and Physics of Metals department was created. In September, 2009 the departments were joint. On their base the Metallurgy and Materials Science department is created.

Training of students is performed in the state and Russian languages. Training internal and remote, with application of DET.

Qualitative and quantitative list of teachers of department:

As a part of Metallurgy and Materials Science department in 2020-2021 work 11 TS, percent of an degree level of 76%, from them: d.t.s. – 2, c.t.s. – 5, PhD – 3. Average age of TS on department – 49 years.

Employment of graduates of the last three years on the accredited EP of a cluster:

- EP 6B07109 "FTME" - 2017-2018 - 100%, 2018-2019 – 91.6%, 2019-2020 – 66.7%;

Information on Chemical Technology and Ecology department

Training of specialists on the accredited EP 6B11201 "Industrial, environmental and fire safety" (5B073100 "Health and safety and environment protection") is carried out in KarIU at Chemical Technology and Ecology department which is formed at the Plant - VTUZ of Temirtau at the Karaganda steel works on the basis of order No. 2 of 01.11.63 with transition from Chemical Technology department to transition to present department in 2007.

The department performs training of students according to requirements of the State general education standard of formation of RK. Trajectories aren't available. Graduates of the accredited EP can work:

- EP 6B11201 "IE&FS": in the sphere industrial, environmental and fire safety as the engineer on security and protection of labor, the environmental protection engineer, the interviewer on carrying out statistical observations (inspections), the technician on work, the engineer, the expert in the field of industrial, environmental and fire safety.

Training of students is performed in the state and Russian languages. Training internal and remote, with application of DET.

To graduates bachelors the academic degree of the bachelor in the service industry according to the educational program 6B11201 "Industrial, environmental and fire safety" is awarded.

Qualitative and quantitative list of teachers of department:

As a part of Chemical Technology and Ecology department in 2020-2021 work 10 TS, percent of an degree level of 70%, from them: d.t.s. – 1, the c.t.s. – 5, PhD – 1. Average age of TS on department – 50 years.

Employment of graduates of the last three years on the accredited EP of a cluster:

- EP 6B11201 "IE&FS" - 2017-2018 - 100%, 2018-2019 - 100%, 2019-2020 - 100%;

The academic mobility on the accredited EP of a cluster for 2015-2020: outgoing mobility: EP 6B07107 "TEI" - 3, EP 6B07109 "FTME" - 3.

Research, economic contractual projects on department in a section of the accredited EP of a cluster:

Performance of the research financed from the government budget:

1) Development and a research of the innovation technology of hot rolling for receiving a high-quality rod iron at the minimum material and power inputs – Metal forming department, 54,266,666 tenge, contract No. 259 of 04.02.2014 with MES RK ;

2) Development of the system of automatic control and complex protection of energy saving electromagnetic lifting installation – TM&T department, 13,511,000 tenge, contract №. 0115PK00975 of 6.10.2017, MES RK;

3) Development of foundry and deformation technology of receiving composite materials on the basis of an aluminum matrix with use of carbon-bearing ultradispersed raw materials is Metal forming department, 11 million tenge, contract № 536 of 07.04.2015 with MES RK;

4) Development of scientifically based bases of management of forming of a cross profile and planeness of thin strips when rolling on broadband mills for expansion of the rolled range – Metal forming department, 17,500,000 tenge, the contract № 6-091 of 15.08.2017 with the Lipetsk state technical university;

By orders of the enterprises research and development was conducted:

1) Development of the production technology of a range of wire products in the conditions of LLC "Kaz-Metiz" (by request of LLC "Kaz-Metiz") is Metal forming department, 180,000 tenge, contract No. 14/06-1 of 14.06.2017;

2) Development of technology of receiving the modified coke-chemical pitch from smolosoderzhashchy waste (by request of LLC "KUAN-INVEST") is CTandE department, 3 million tenge. contract No. 06/09-18 of 28.09.2018;

4) Approbation of technology of smelting of technical silicon with use of the bricketed mix on the basis of microsilicon dioxide and eliminations of carbonaceous reducer (by request of LLC "Tau-Ken Temir") – MiM department, 10 million tenge, contract No. 276611/2019/1 of 24.04.2019.

For the considered period at departments initiative researches were also carried out:

1) Development of a technique of a research and design of technological machines and the transport equipment with application of modern computer systems of the engineering analysis – TM&T department;

2) A research of properties and structure of nepreryvnolity metal for the purpose of development of recommendations about increase in its quality – Metal forming department; (01.01.2017-30.12.2018, registration 23.04.2018 No. 0118RKI0230).

3) Improvement of technological process of enrichment of coal for coking; CTandE department (01.01.2017-30.12.2018, registration 23.04.2018 No. 0118RKI0235).

4) Determination of parameters of a processing line for receiving road-building materials from industrial wastes is TM&T department.

(IV) DESCRIPTION OF THE PREVIOUS PROCEDURE OF ACCREDITATION

Educational programs 6B07107 "Technological equipment of the industry" (5B072400 "Technological machines and the equipment"), 6B07108 "Forging and stamping production in mechanical engineering" (5B071200 "Mechanical engineering", a trajectory "The theory and technology of forge and forming production"), 6B07109 "Foundry technologies in mechanical engineering" (5B071200 "Mechanical engineering", a trajectory "Technology of foundry production"), 6B07110 "Hoisting-and-transport, construction and road machines" (5B071300 "Transport, the transport equipment and technologies"), 6B11201 "Industrial, environmental and fire safety" (5B073100 "Health and safety and environment protection") undergo accreditation in IAAR for the first time.

(V) DESCRIPTION OF THE VISIT OF EEC

Work of EEC was carried out on the basis of the adopted agenda of a visit of commission of experts for specialized accreditation of educational programs in KarIU during the period from October 12 to October 14, 2020.

For the purpose of coordination of work of EEC of 11.10.2020 the adjusting meeting during which powers between members of the commission were distributed took place, the schedule of a visit is specified, consent in questions of the choice of methods of examination is reached.

For obtaining objective information about quality of educational programs and all infrastructure of higher education institution, specification of contents of reports on a self-assessment online meetings with the acting chairman of the board - the rector, vice rectors of higher education institution for activities, the heads of structural units, deputy deans of faculties managing departments, teachers, students, graduates, employers took place. In total 73 representatives (table 1).

Table 1 - The information about the employees and students who participated in meetings with EEC IAAR:

Category of participants	Quantity
The acting chairman of the board - the rector	1
Vice-rectors	2
Heads of structural units	18
Deputy deans of faculties	2
Managers of departments	6
Teachers	11
Students	10
Graduates	11
Employers	12
In total	**73**

During the online excursion the members of EEC got acquainted with a condition of material and technical resources, visited Laboratory factory of "3D engineering" - lecture hall 113, Laboratory of hoisting-and-transport and technological machines - lecture hall 03, Laboratory of the transport equipment - lecture hall 02, Specialized audience of technological machines – lecture hall 06., Specialized audiences on mechanical engineering – lecture hall 102, 105, 132, the Computer class - lecture hall 133, Laboratory of an engineering profile, the Trial Metallurgy site, the Laboratory case the site "Rolling mills".

At an online meeting of EEC IAAR target groups of KarIU the specification of mechanisms of implementation of policy of higher education institution and a specification of the separate data provided in the report on a self-assessment of higher education institution was performed.

For accreditation remote classes were attended: First aid (group IE&FS-19k. teacher I.A. Amanzhol), Means and process management systems of casting (group of MS-18k, teacher D.K. Musin), CAD of cars (group TTTiT-18k, teacher S.M. Habidolda), Technologies of mechanical engineering (TMO-18s group, teacher G.D. Isabekova). And also videos of record of the following disciplines were watched: Reliability of technical systems and EW, Information technologies in PB, Explosion and fire safety of production, Design of the foundry equipment, Mathematical modeling of technological processes forging and stamping production, Mechanical and technological properties of materials, New processes and materials in LP, Automation of machine-building production, Construction, road and municipal machines, Design of construction and road cars, Designing of metallurgical machines and the equipment, the LC Processing equipment, Industrial robots and manipulators.

To operating time the members of EEC held online visits of the following bases the practician: Joint-stock company "ArselorMittal Temirtau", LLC "KazPromAvtomatika", LLC "Gordorservice", LLC "Dat-TS", SP of Kotenko "STO the Drive", Karaganda regional branch of Republican research institute on labor protection (Karaganda).

According to the procedure of accreditation the online questioning of 46 teachers, 89 students, including students of younger and older years was carried out.

For the purpose of confirmation of information provided in the Report on a self-assessment by external experts the work documentation of the university was requested and analyzed. Along with it, experts studied Internet positioning of the university by means of the official site of higher education institution of https://kgiu.kz/.

Within the planned program of the recommendation about improvement of the accredited educational programs of KarIU, the developed EEC following the results of examination, were provided at an online meeting with the management of 14.10.2020.

(VI) COMPLIANCE TO STANDARDS OF SPECIALIZED ACCREDITATION

6.1. Management of the Educational Program standard

✓ *The higher education institution has to has the published policy of quality assurance.*

✓ *The policy of quality assurance has to reflect communication between scientific research, teaching and training.*

✓ *The higher education institution has to show quality assurance cultural development, including in EP coal mine.*

✓ *The commitment to quality assurance has to belong to any activity which is carried out by contractors and partners (outsourcing) including at realization of joint/two-degree education and the academic mobility.*

✓ *The management of EP provides transparency of plan development of development of EP on the basis of the analysis of its functioning, real positioning of higher education institution and orientation of its activity on satisfaction of needs of the state, employers, interested persons and students.*

✓ *The management of EP shows functioning of mechanisms of forming and regular revision of the development plan for EP and monitoring of its realization, assessment of achievement of the goals of training, compliance to needs of students, employers and society, the decision-making directed to permanent improvement of EP.*

✓ *The management of EP has to involve representatives of groups of interested persons, including employers, students and TS in forming of the development plan for EP.*

✓ *The management of EP has to show identity and uniqueness of the development plan for EP, its consistency with national priorities of development and the development strategy of the organization of education.*

✓ *The higher education institution has to show accurate definition responsible for business processes within EP, unambiguous distribution of functions of personnel, differentiation of functions of collegiate organs.*

✓ *The management of EP has to produce the evidence of transparency of a control system of the educational program.*

✓ *The management of EP has to show successful functioning of an internal system of ensuring quality of EP including its design, management and monitoring, their improvement, decision-making on the basis of the facts.*

✓ *The management of EP has to exercise risk management.*

✓ *The management of EP has to provide participation of representatives of interested persons (employers, TS studying) as a part of collective management bodies with the educational program and also their representativeness at decision-making concerning management of the educational program.*

✓ *The higher education institution has to show innovation management within EP, including the analysis and introduction of the innovation offers.*

✓ *The management of EP has to show proofs of openness and availability to students, TS, employers and other interested persons.*

✓ *The management of EP has to be trained according to programs of management of education.*

✓ *The management of EP has to aspire to that the progress made since the last procedure of external quality assurance was taken into account by preparation for the following procedure.*

Evidential part

The higher education institution has the published policy of quality assurance (it is approved 25.01.2019, protocol No. 7). The politician in the field of quality assurance KarIU (https://kgiu.kz/qms/politics/) whichproceeds from the Mission of the university (https://kgiu.kz/qms/mission/) directedto preserving and strengthening of a role of KarIU as the leading university providing the advancing training of new generation of specialists of a technical profile of the mining and metallurgical industry of the Republic of Kazakhstan"The development strategyof the university for 2017-2021" (https://kgiu.kz/abuniv/devplans/),"A comprehensive plan of development of the university for academic year" is reflected in "The purpose in area of quality" (https://kgiu.kz/qms/aims/). The purposes in area of quality of departments are developed according to QMS StO II.6-01.01-2018 "Development of the purposes and plans in the field of quality" (http://kgiu.kz/qms/indocs/orgstandards/) which establishes an operations procedure on development of the purposes in area of quality and planning of improvement of a quality management system.

The policy of ensuring quality of KarIU reflects communication between scientific research, teaching and training. Communication is caused by the global purpose of the university in the field of policy of quality assurance (https://kgiu.kz/qms/aims/) which consists in modernization in the city of Temirtau of the city-forming enterprise – the Karaganda

industrial university – as the center of social and political stability and integration of education, science and innovations, realization of the modern quality standards of multilevel model of continuous training and providing the mining and metallurgical industry with competitive specialists of a technical profile.

Educational programs 6B07107 "Technological equipment of the industry" (5B072400 "Technological machines and the equipment"), 6B07108 "Forging and stamping production in mechanical engineering" (5B071200 "Mechanical engineering", a trajectory "The theory and technology of forge and forming production"), 6B07109 "Foundry technologies in mechanical engineering" (5B071200 "Mechanical engineering", a trajectory "Technology of foundry production"), 6B07110 "Hoisting-and-transport, construction and road machines" (5B071300 "Transport, the transport equipment and technologies"), 6B11201 "Industrial, environmental and fire safety" (5B073100 "Health and safety and environment protection") are implemented according to the adopted development strategy of the university focused on the consumer of educational services.

The culture of ensuring quality of EP is provided through a complex of the interconnected actions covering changes in structure, the contents and technologies of educational, research and innovation processes in higher education institution, a control system and financial and economic mechanisms.

Direct control of the university is exercised of the Acting Chairman of the board - the rector according to the legislation of the Republic of Kazakhstan.

Management and development of educational activity of the university are implemented through activity of faculties and departments. The department is the main educational scientific division of the university. A main objective of activity of department is training of students according to one or several educational programs.

Collective management bodies of faculties are the Supervisory Board, the Academic council, Educational and methodical council, Scientific and technical council, Council of faculty.

The internal system of ensuring quality of EP at the level of departments is provided according to the established schedule according to which control on all types of activity with discussion at the weekly operational meetings is carried out. At the end of 1 and 2 semester the analysis of activity of TS for a semester with discussion at meetings of departments and decision-making is carried out. If necessary corrective actions are taken.

Monitoring of a condition of cases in point is performed by the competent commissions created by the order on the university, faculties. Execution of the made decisions is controlled by the commission and discussed at meetings of the Academic council of the university and Councils of faculties. At identification of discrepancies the corrective actions assume modification of educational documentation.

Annual adjustment of documentation, its updating, unification are carried out for the purpose of creation of optimum educational groups and lecture flows at faculties. Need of correction of the existing disciplines on EP according to the proposal of employers, abolition lost relevance or implementation of new elective disciplines are discussed at meetings of departments and meetings of methodical council of faculty.

The management of the accredited EP provides participation of representatives of interested persons in work of the working groups with involvement of external experts of the enterprises and the organizations - strategic partners for the purpose of monitoring of all processes at the level of departments, faculty in general (extracts from protocols with discussion of questions were presented to experts of EEC).

By results of an interview with TS, students, employers and graduates it is possible to draw a conclusion that the management of the accredited EP are open and available. On the website of the university there is a blog by the rector (https://kgiu.kz/rector/)and also all contact information of the management of EP (personal e-mail addresses, contact telephone numbers, the addresses).

Maintenance of feedback from students, TS, employers and other interested persons is regulated by documents QMS StO II.8-02.01-2018 "The processes related to consumers", QMS P-27-2-2019 "The provision on carrying out questioning on monitoring of quality of educational, educational and research processes at the Karaganda state industrial university". Feedback is performed for achievement of the following purposes:

- increase in efficiency of educational, educational and research processes;
- obtaining information on quality of educational, educational and research processes from students, teachers, as main concerned parties;
- a collection and the analysis of marketing information on potential consumers of the provided service;
- involvement of potential consumers of educational services;
- choice of target markets and positioning;
- identification and satisfaction of the current and future needs and expectations of present and potential consumers;
- management of complaints, claims;
- development of recommendations about improvement of the carried-out work.

For maintenance of feedback it is carried out:

- periodic poll of students, TS, employers;
- Open Days (https://kgiu.kz/2018/05/postupayte-k-nam-uchitsya/;
- reception by the rector on private matters;
- blogging of the rector on the official site of the university;
- holding fairs on employment of students with the invitation of heads of the enterprises, firms, companies.

Information obtained during feedback is brought to the attention of the management and is used for improvement of the provided services. If necessary corrective actions according to QMS StO II.10-02.01-2018 are taken.

Management of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS aspires to that the progress made since the last procedure of external quality assurance was taken into account by preparation for the following procedure. The last procedure of external ensuring quality of KarIU is carried out in 2019 by Independent agency on accreditation and examination of quality of education of "ARQA" as a result of which the university obtained National institutional accreditation and specialized accreditation on 8 EP magistracies till May 29, 2024. The last procedure of external ensuring quality of specialties 5B072400 - TMO (EP 6B07107 – the TEI), 5B071200 – MS (EP 6B07108 – FSPME and EP 6B07109 – FTME), 5B071300 – TTTIT (EP 6B07110 – HTCRM), 5B073100 – HS&EP (EP 6B11201 – HS&EP) is held in 2015 by Independent Kazakh Agency for Quality Assurance in Education - NKAOKO (now Independent quality assurance agency in education - IQAA).

The higher education institution monitors the changes which happened since the last procedures of quality assurance, the management of EP realizes the recommendations of externa lexpert commission . By results of the carried-out works on implementation of recommendations the report is formed and is sent to accreditation agency.

Following the results of the last procedure of ensuring quality of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS are provided recommendations and suggestions for improvement of work in various activities.

According to recommendations and offers the actions plan which realization led to achievement of the following progress is developed:

- the contingent of students on EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS is increased;
- the new maintenance of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS, on the basis of a branch framework of qualifications and qualification competences of professional standards is created;

- polylingual groups are organized;
- the base of a work practice is expanded;
- the international cooperation with higher education institutions of the FSU and beyond is expanded;
- the management efficiency and supports of EP and students for the account reorganization of structure of the university is increased (new structural units are created: Career center, School of respectability, Service center of students, Center of polygraphy and design, etc.);
- the material and technical resources are improved (are open: 3D laboratory of engineering; center of Network academy "CISCO"; SOTSBI information and communication center, etc.).

All officials responsible for development of the accredited EP, development programs and work plans apply scenario approach, use SWOT analysis for identification of risks and assessment of their influence on results. The list identified, including high risks, is provided StO II.6-01.02-2018 of "Action concerning risks". At the tactical level of planning the risks are estimated by heads of structural units, by drawing up the annual plan of faculty. Monitoring of risks and opportunities is performed at meetings of the Academic councils of the university, faculties, administration, Councils for activities within a year, the achieved results are registered in protocols. Assessment of effectiveness of activity undertakens is reflected in the annual report of faculties. Risk management according to educational programs is included in annual plans of work of faculty (2018-2019, 2019-2020 ed.y.) are also discussed at faculty meetings.

Analytical part

Prior to a procedure of accreditation in Samootcheta and in applications the development plans for EP weren't provided, on the website information on development plans for EP isn't found. At the time of the procedure of accreditation, Development plans for EP were provided: 6B07109 "FTME" for 2020-2021 uch. (utv. 07.09.2020) - there are no accurate indicative indicators, risks aren't registered, completion dates exceed the limit of terms of EP determined by the management for development; EP - 6B07110 of "HTCRM", 6B07107 "TEI" for 2020-2022 uch.: not approved options are provided. On EP 6B11201 "IE&FS", EP 6B07108 "FSPME" - development plans for EP aren't provided. The contents of the provided development plans for EP of the accredited cluster aren't structured, terms of development plans for EP differ, there is no uniform scheme of design of contents. Participation of interested persons in plan development of development of EP isn't confirmed, the approved versions of development plans on a web a resource aren't placed. Regular revision of development plans for EP 6B07109 "FTME", 6B07110 of "HTCRM", 6B07107 "TEI", including their identity and uniqueness isn't traced .

The management of university showed availability of the existing innovation projects in the university. Within all the innovation processes are implemented by EP of higher education institution through forming of new contents of educational programs and also development an i□vnedreniye of new pedagogical technologies. For example: in 2019 the new maintenance of EP which includes the innovation elements, such as, modular and competence-based approach, the additional educational program (minor) are created. *The commission of EEC notes that in the presence of* close connection with the city-forming partner enterprises the higher education institution has a good opportunity for introduction of the innovation offers, results of the large realized researches in educational process both from TS, and from representatives of production.

Managers of departments of the accredited EP passed the development program in number of the 72nd hour in various directions. Among them,the program for the Management in the System of Higher Education direction, it is possible to carry Effective Work of the Teacher rate which was studied by the head of EP 6B07107 "TEI", 6B07110 of "HTCRM"

during the period from January 11 to January 25, 2020. According to the vice rector of higher education institution for study, other heads of EP relatively started recently a senior position, skills development according to the Management in Education program is planned.

Strengths / the best practice on the accredited EP aren't revealed.

Recommendations of EEC for EP 6B07107 " Technological equipment of the industry", 6B07108 " Forging and stamping production in mechanical engineering", 6B07109 " Foundry technologies in mechanical engineering", 6B07110 " Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To develop uniform requirements for forming of development plans for educational programs of the university, having provided questions:

- compliances of the development plan for EP of the Development strategy of higher education institution;

- regular revision of the development plan for EP in connection with possible changes of regulations in the higher education system;

- involvement of employers, students and TS to scheduling of development of EP;

- determination of identityuniqueness of the development plan for EP;

- reflections of qualitative results of execution of the development plan for EP.

2. To the management of university to develop a technique of the analysis and introduction of the innovation offers and innovation management within the accredited EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS". To define mechanisms of support and stimulation of initiatives of commercialization of the scientific projects having the innovation focus.

The additional recommendations of EEC for EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering, 6B11201 "Industrial, environmental and fire safety"

3. To the management of university to organize passing of advanced training courses of heads of EP 6B07108 "FSPME", 6B07109 "FTME", 6B11201 "IE&FS" according to the program of management of education current academic year.

Conclusions of EEC:

According to the Management of the Educational Program standard 17 criteria from which 12 have a satisfactory position and 5 are disclosed - assume improvements.

6.2. Management of Information and Reporting standard

✓ *The higher education institution has to provide functioning of a system of a fee, the analysis and management of information on the basis of application of modern information and communication technologies and software.*

✓ *The management of EP has to show system use of the processed, adequate information for improvement of an internal system of quality assurance.*

✓ *Within EP there has to be a system of the regular reporting which is reflecting all levels of structure, including assessment of effectiveness and efficiency of activity of divisions and departments, scientific research.*

✓ *The higher education institution has to establish frequency, forms and methods of assessment of management of EP, activity of collegiate organs and structural units, the top management, implementation of scientific projects.*

✓ *The higher education institution has to show definition of an order and ensuring information security, including definition of responsible persons for reliability and timeliness of the analysis of information and providing data.*

✓ *Important factor is involvement of students, workers and TS in processes of a fee and the analysis of information and also decision-making on their basis.*

✓ *The management of EP has to show availability of the mechanism of communication with students, workers and other interested persons, including availability of mechanisms of conflict resolution.*

✓ *The higher education institution has to provide measurement of degree of satisfaction of requirements of TS, personnel and students within EP and to show proofs of elimination of the found shortcomings.*

✓ *The higher education institution has to estimate effectiveness and efficiency of activity, including in EP coal mine.*

✓ *The information collected and analyzed by higher education institution within EP has to consider:*

- *key performance indicators;*
- *to the loudspeaker of the contingent of the forms and types studying in a section;*
- *level of progress, achievement of students and assignment;*
- *satisfaction of students with realization of EP and quality of training in higher education institution;*
- *availability of educational resources and systems of support to students;*
- *employment and career development of graduates.*

✓ *Students, workers and TS have to document the consent to processing of personal data.*

✓ *The management of EP has to promote all necessary information in the respective areas of sciences.*

Evidential part

For automation of collecting, the analysis and management of information in KarIU are introduced and the systems of a fee, the analysis and management of information on the basis of use of modern information communication technologies and software work: in higher education institution, processes of management of information with use of the official https://kgiu.kz/ website, the PLATONUS and DALES system which solve a complex of problems of the following directions are introduced:

- improvement of quality of rendering educational services on the basis of improvement of information and technical support of activity of higher education institution, its personnel and students;

- increase in knowledge of students of higher education institution concerning conducting educational process and also implementation of activity in education on the basis of a possibility of electronic interaction with the relevant authorized bodies.

For management of information resources of library of KarIU the system of automation of IRBIS-64 libraries which allows is used:

- to create and maintain any amount of the databases making the Electronic Catalogue (EC) or representing the problem-oriented bibliographic database (D).

- to process and describe any kinds of editions, including nonconventional, such as audio- and videos, computer files and programs, etc. means of cataloguing.

For conducting business and tax accounting in KarIU the 1C Accounts department program which main objective is consolidation and rationalization of primary documentation, for removal of financial performance of the organization, calculation of tax base and providing tax statements is used.

For distribution of the current information corporate e-mail, the application for communication in local network of the Net Speakerphone university, social networks Facebook, WhatsApp, Instagram are used.

Providing full, impartial, objective, exact and available information to all interested persons about activity of KarIU is performed according to the document QMS P-4-27-2019 "The provision on informing the public". Depending on the level of information, heads division, the deans managing departments.

General information on the university and EP is placed in three languages (Kazakh, Russian and English languages).

On the website of university, on the page of department it is possible to obtain information on the structure of department, the taught disciplines, educational and methodical work, on scientific activity and material and technical resources.

The management of EP shows use of the processed, adequate information for improvement of an internal system of quality assurance. The analysis of data for improvement is carried out by heads of divisions of KarIU the sphere of the competence systematically within a year. For carrying out the analysis for improvement the collection of the following data is performed about:

- suitability and efficiency of QMS (report on results of the analysis of a quality management system; report on external audit; report on results of internal audit; certificate of check of functioning of the quality system; the cost statement on quality; proposals of personnel on improvement; inspection statements of efficiency of corrective actions; inspection statements of efficiency of the warning actions; studying the international practice in the field of quality management; the consolidated report on a self-assessment; financial and economic indicators);

- satisfactions and (or) dissatisfaction of consumers (claim of consumers; letters, faxes of consumers; personal contact with the consumer; information reports on market researches; results of social researches; results of measurements and monitoring of degree of consumer satisfaction);

- compliance of educational service to requirements of GOSO (report of the state certifying commissions);

- characteristics of processes and educational service (statistical methods (histograms, control maps, Pareto's analysis) and other methods of engineering of quality);

- internal and external benchmarking (results of external benchmarking; results of internal benchmarking).

By results of the systematic analysis from the management actions for improvement are outlined and implemented. Actions for improvement are implemented within a year in a type:

- decisions of the Academic council;
- actions for results of internal audits;
- actions for results of external audits by consumers and certification authority;
- actions for results of accreditation of higher education institution;
- actions for results of the analysis of functioning of QMS.

Carrying out improvements is performed according to the Actions plan on improvement of QMS. Check and efficiency analysis of the made improvements also heads of divisions perform the vice rector.

Identification and forecasting of risks is carried out on the basis of the analysis of information, are performed in the order described in QMS STO II.6-01.02-2018 "Actions concerning risks". Within EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS come to light and predicted the following risks:

external:

- high level of the competition in education market of the region;
- reduction of number of possible entrants because of departure to the Russian Federation and the European universities;
- change of psychological climate in society.

Changes of the regulations regulating activity of the university is also an external factor which causes changes in management of the university. Change of the Law "About Education" of the Republic of Kazakhstan caused inclusion in the Development strategy of the university of the tasks connected with expansion of the academic independence of higher education institution, development of the joint forms of government.

internal:

- increase in prices for educational services,
- high cost of the equipment for ensuring educational process of the technical direction,
- personnel policy (developing the skills of teachers, programs of exchange of teachers, involvement of third-party specialists, etc.).

Within EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS exists the system of the regular reporting which is reflecting all levels of structure, including assessment of effectiveness and efficiency of activity of divisions and departments, scientific research. By results of results of educational semester of TS and the staff of departments reports of TS on educational, educational and methodical, scientific and educational activity (individual reports of teachers) are formed.

KarIU the frequency, forms and methods of assessment of management of EP, activity of collegiate organs and structural units, the top management, implementation of scientific projects are established.

Management process of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS at departments is analyzed information on various activities (on the contingent of students and graduates, the available resources, personnel, scientific and international activity, etc.).

KarIU the order of ensuring information security is defined, including responsible persons for reliability and timeliness of the analysis of information and providing data are defined. The documentary measures of management of information security providing trust of stakeholders and also storage use and personal data protection of students and staff of the university are defined in the documents "Provision on the Center of Information Technologies and Telecommunications" and in QMS P4-27-2019 "The provision on informing the public". Information security policy defines requirements in the following fields of ensuring information security: policy of network security; password policy; policy of protection of servers; anti-virus policy; rules of Internet access. The safety of information is ensured by structural unit of the university – the Center of information technologies and telecommunications which is responsible for working capacity and permanent improvement of the servers intended for storage and information processing.

KarIU there is a communication mechanism with students, workers and other interested persons, including the conflict resolution mechanism. Functioning of the mechanism of communication with subjects of educational process and other interested persons QMS P-27-2-2019 "The provision on carrying out questioning on monitoring of quality of educational, educational and research processes at the Karaganda state industrial university", QMS P-4-27-2019 "The provision on informing the public" are regulated by documents QMS StO II.8-02.01-2018 "The processes related to consumers".

The management of EP for conflict resolution, communication with students, workers and other interested persons adheres to regulations. In regulations of the university the procedure of filing of applications with expression of requests and complaints on various questions of the academic discipline and progress is stated. The legal service and trade-union committee of the university coordinates policy of conflict resolution of interests and the relations. At emergence of conflict situations the working commission, as a part of the vice rector for study, the dean, the chairman of trade-union committee, the lawyer, the chairman of the board of curators and other officials is created. The commission defines the reason, circumstances of emergence of the conflict, solves a conflict dispute.

KarIU the measurement of degree of satisfaction of requirements of TS, personnel and students within EP is provided. For establishment of degree of satisfaction of requirements of TS, personnel and students within EP the questioning which is carried out by Department on educational work and youth policy (DVRIMP) 2 times a year is provided. Carrying out questioning and the analysis of their results are regulated by documents QMS P-27-2-2019 "The provision on carrying out questioning on monitoring of quality of educational, educational and research processes at the Karaganda state industrial university" and QMS StO II.8-02.01-2018 "The processes related to consumers".

2019 the social research for the purpose of studying degree of satisfaction of students with educational process in KarIU. During the research 794 students of full-time department are interviewed. The block of the questions provided in the questionnaire lights the professional level of teachers of higher education institution, the attitude of students towards quality of the organization of educational process, their satisfaction with various parties of educational process, control forms.

The analysis of results of questioning showed that 87.5% of respondents are completely satisfied with quality of competences of the faculty and the level of 82% of educational and

methodical providing classes; 83.3% of respondents noted the organization of educational process in general of satisfactor.

Survey results regarding availability of information showed that 91% of students are completely satisfied with informing requirements for a successful completion of training. 90% of respondents noted availability and responsiveness of the management of higher education institution, 74% are satisfied with availability of consultation on personal problems.

The separate block in questionnaires allocated questions on studying level of satisfaction with research activity of higher education institution. Answered the direct Question "Whether the Level of the Organization of Research Work in Higher Education Institution Satisfies the Interviewed Students" of 88% of respondents in the affirmative.

The university showed availability of mechanisms of measurement of degree of satisfaction of requirements of TS and students within EP.

Questioning of TS and workers according to degree of satisfaction with conditions of working and social and psychological climate at the university showed:

- high authority of heads of KarIU;
- absence of the confronting groups;
- growth of appeal of a profession;
- forming in KarIU of corporate culture in the form of the traditions peculiar to scientific educational institutions;
- presence of the leaders holding informal and deserved authority.

In general, by results of questioning of TS and employees of the university it is established that the collective highly appreciates enough, both work of heads, and a control system. Results of questioning are discussed at a meeting of the Academic council, an EMC and NTS, in the structural units interested in carrying out questioning for the purpose of their analysis and forming of offers on improvement of quality.

KarIU the effectiveness and efficiency of its activity, including in EP 6B07107-TEI coal mine, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS is estimated.

Assessment of effectiveness of EP includes the analysis of achievement of planned values of indicators of educational process, in particular the measured criteria, the development of KarIUfor academic year.

Efficiency evaluation of EP is carried out on the basis of the analysis of data on consumer satisfaction of educational services of the university, demand of EP (contingent of students, employment, etc.).

The effectiveness and efficiency of activity of departments within realization of EP is reflected in annual reports on primary activities: to the educational and methodical work, research, educational work, etc. considered at meetings of faculty, Council of faculty and the Academic council. For assessment of effectiveness and efficiency of EP external experts (National chamber of businessmen of the Republic of Kazakhstan of Atameken, Independent quality assurance agency in education (IQAA), etc.) who make EP rating are also attracted.

The information collected and analyzed by higher education institution within EP considers:

- key performance indicators;
- to the loudspeaker of the contingent of the forms and types studying in a section;
- level of progress, achievement of students and assignment;
- satisfaction of students with realization of EP and quality of training in higher education institution;
- availability of educational resources and systems of support to students;
- employment and career development of graduates.

Data of rating indicators are provided in tables 2-6.

Table 2 - The rating of educational programs of National chamber of businessmen of Atameken in 2018, 2019

Specialty	Busy place	How many higher education institutions in rating	Busy place	How many higher education institutions in rating
	2019		**2018**	
Technological machines and equipment	3	18	18	21
Mechanical engineering	14	15	11	18
Transport, transport equipment and technologies	7	25	16	30
Hoisting-and-transport, construction and road machines	7	25	16	30

Table 3 - General rating TEI-20 of higher education institutions of RK (within the national rating of demand of higher education institutions of RK) among technical colleges of IAAR

Year	**Position (Place)**
2018	15 place
2019	13 place

Table 4 - The national (general) rating of the best higher education institutions of Kazakhstan of IQAA among technical colleges

Year	**Position (Place)**
2017	11 place
2018	11 place
2019	10 place

Table 5 - Rating of educational programs of a bachelor degree of IQAA

Year	**Position (place)**
6B07108 - Forging and stamping production in mechanical engineering, 6B07109 - Foundry technologies in mechanical engineering (5B071200 Mechanical engineering)	
2017	1 place
2018	1 place
2019	2 place
6B07107 - Technological equipment of the industry (5B072400 - Technological machines and the equipment)	
2017	1 place
2018	2 place
2019	2 place

Table 6 - The rating of higher education institutions according to educational programs of a bachelor degree of IAAR

Year	**Position (place)**
6B07108 - Forging and stamping production in mechanical engineering, 6B07109 - Foundry technologies in mechanical engineering (5B071200 Mechanical engineering)	
2018	5 place
2019	2 place
6B07107 - Technological equipment of the industry (5B072400 - Technological machines and the equipment)	
2018	4 place
2019	3 place

Accounting of the contingent in a section of forms and types, a fee and the analysis of information on progress level, achievements and expels of students performs a DAP .

table 7 dynamics of the contingent of students on EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS in a section of forms and types for the reporting period is provided.

Table 7 - Dynamics of the contingent of the forms and types studying in a section

Academic year	Forms and types of training	TMiO (TEI)	MS (KShPMS and LTMS)	TTTIT (HTCRM)	HS&EP (IE&FS)
2015-2016	Day	62	54	48	4
	Evening, correspondence, remote	20	-	27	18
2016-2017	Day	78	73	68	7
	Evening, correspondence, remote	27	6	31	28
2017-2018	Day	87	99	96	16
	Evening, correspondence, remote	51	13	49	44
2018-2019	Day	105	93	97	9
	Evening, correspondence, remote	73	25	65	64
2019-2020	Day	61	58	65	18
	Evening, correspondence, remote	90	30	94	72
2020-2021	Day	23	5	39	18
	Evening, correspondence, remote	47	22	46	88

The analysis of dynamics of the contingent 2 clusters accredited by EP

- On EP 6B07107 "Technological equipment of the industry", EP 6B07108 "Forging and stamping production in mechanical engineering" and EP 6B07109 "Foundry technologies in mechanical engineering" (fig. 1.2) observes increase in the contingent of full-time courses till 2018, then the sharp slowdown (for 50%) connected with reduction of the allocated grants and need of students to work is observed and as a result to choose more convenient form of education – remote. In the same time the stable growth of students on this EP on remote form of education till 2019 is observed. In 2020 the recession, connected, according to comments of the management of EP, with a sanitary and epidemiologic situation in RK and as a result low solvency of the population is observed.

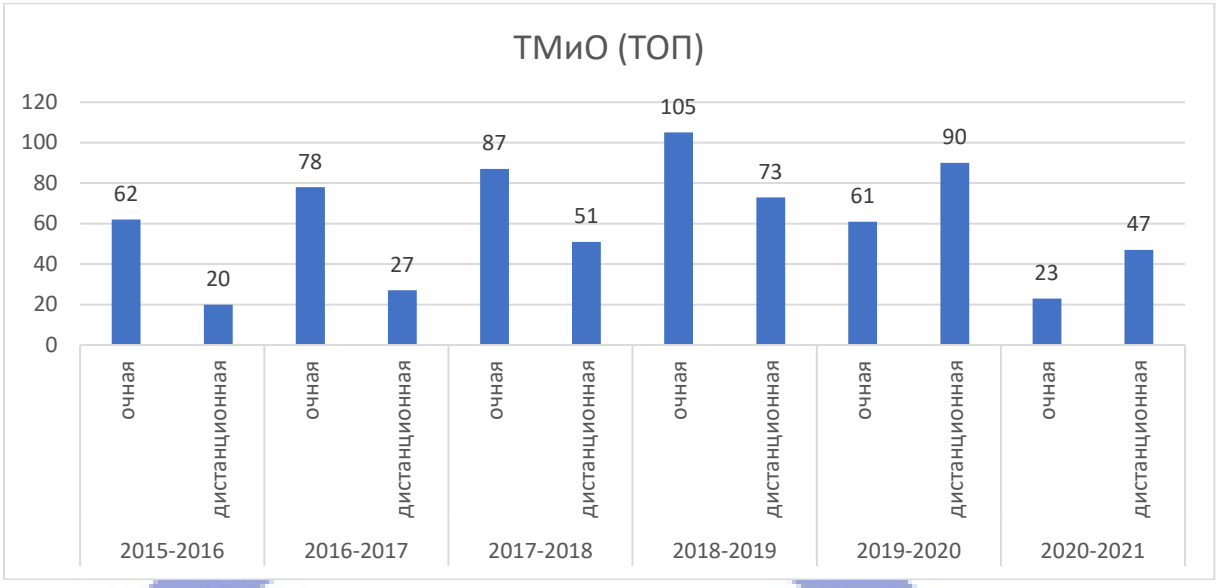

Figure 1 - Dynamics of the contingent of students
EP 6B07107 "Technological equipment of the industry")

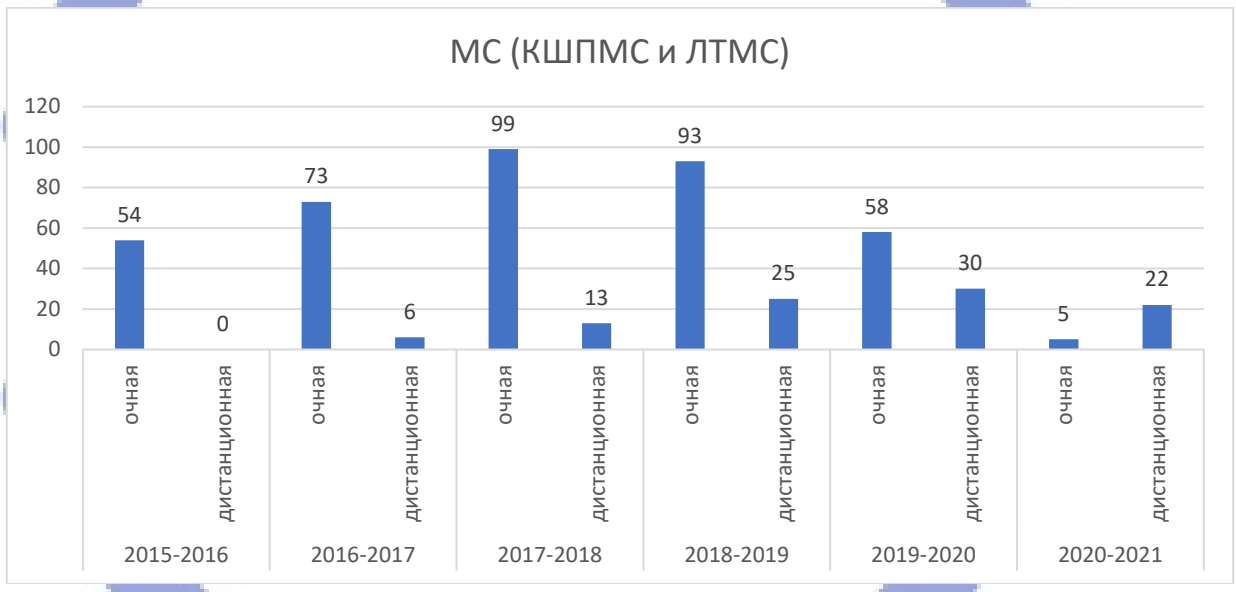

Figure 2 - Dynamics of the contingent of students
EP 6B07108 "Forging and stamping production in mechanical engineering"
EP 6B07109 "Foundry technologies in mechanical engineering"

- On EP 6B07110 "Hoisting-and-transport, construction and road machines" (fig. 3) observes the stable growth of the contingent as internal and remote form of education till 2019, then the sharp slowdown (for 50%), connected, according to comments of the management of EP, with a sanitary and epidemiologic situation in RK and as a result low solvency of the population is observed.

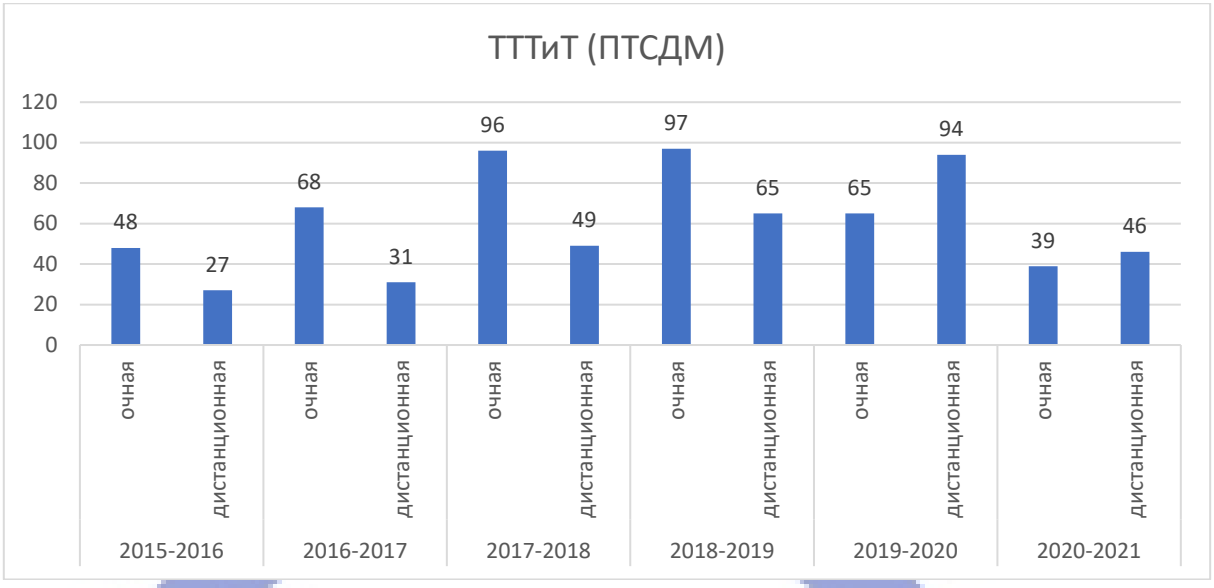

Figure 3 - Dynamics of the contingent of students
EP 6B07110 "Hoisting-and-transport, construction and road machines"

- On EP 6B11201 "Industrial, environmental and fire safety" (fig. 4) observes the stable growth of the contingent of full-time courses and also stable preserving of the contingent on a remote form.

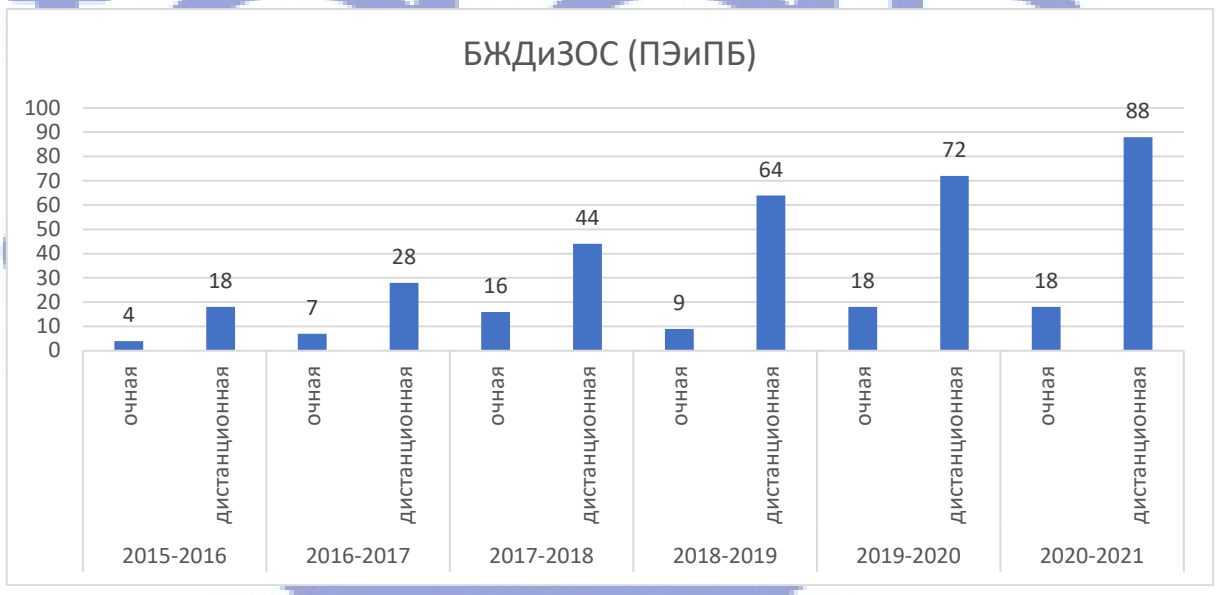

Figure 4 - Dynamics of the contingent of students
EP 6B11201 "Industrial, environmental and fire safety"

Level of progress of students is defined by the statistical analysis of results of passing the current sessional examinations. In table 8 the level of progress of students of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS for a summer session is provided 2019-2020 academic years.

Table 8 - Level of progress of students for a summer session 2019-2020.

EP	Forms and types of training	Qualitative progress	Absolute progress
6B07107 "TEI"	Day	76.5%	90.2%

EP	Forms and types of training	Qualitative progress	Absolute progress
	Evening, correspondence, remote	55.6%	96.8%
6B07108 "FSPME"	Day	81.5%	90.7%
	Evening, correspondence, remote	48.3%	75.9%
6B07110 HTCRM	Day	76.8%	92.9%
	Evening, correspondence, remote	67.7%	95.4%
6B07109 "FTME"	Day	76.8%	92.9%
	Evening, correspondence, remote	-	-
6B11201 "IE&FS"	Day	45.5%	63.6%
	Evening, correspondence, remote	79.2%	92.5%

Expels of students occurs for failure to follow contractual obligations, the academic poor progress and at own will.

The fee and carrying out statistical processing and the analysis of information following the results of all actions connected with employment of graduates of KarIU performs the Career Center which activity is regulated by document QMS software 15-58.03.02 – 2018 "The provision on the Career center of the Karaganda state industrial university". Data on employment of graduates of 2019 of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS are provided in table 9.

Table 9 - Data on employment of graduates of all forms of education 2019-2020 academic years of release

EP	Number of graduates, all	From them it is employed	Employment %
6B07107 "TEI"	59	47	79.66
MS (KShPMS and LTMS)	28	22	78.57
6B07108 "FSPME"	52	38	73.08
6B07109 "FTME"	12	11	91.6
HS&EP (IE&FS)	14	14	100

KarIU the students, workers and TS document the consent to processing of personal data. Work on documentary confirmation of consent to processing of personal data is carried out by Department on human resources (DHR) in the order determined by the Law of RK "About Personal Data and Their Protection".

Management of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS renders assistance on providing with all necessary information in the respective areas of sciences. Information support of scientific research in KarIU is provided with resources of scientific library, access to electronic resources of Republican Interuniversity electronic library, the international abstract Scopus and Web of Science databases .

Activities of scientific library of KarIU for information support of scientific research are directed to forming of resource base and in rendering assistance to information search to performers of NIR, TS and the student. Annually the library updates fund of scientific literature and also subscribes to the scientific and research and production periodicals corresponding to a profile of the accredited EP. Access to the international abstract Scopus and Web of Science databases in KarIU is provided to MES RK at the expense of the funds allocated from the government budget. In KarIU it is regularly held the training scientific seminars of the Elsevier and Clarivate Analytics companies on use of resources and work in the abstract and bibliographic, scientometric (bibliometrichesky) Scopus and Web of Science databases

By results of questioning on a question of assessment of the involvement of TS into process of acceptance of management and strategic decisions "it is very good" answered 37%, it is "good" - 58.7%, "unsatisfactory answers" - 4.3%.

Analytical part

The higher education institution showed availability and proofs of use in management processes of EP of a system of a fee and the analysis of statistics on the contingent of students and graduates, the available resources, to personnel, consulting, research and international activity by means of which operates as well as EP, and other activities, using at the same time various methods.

The measurability, reliability, accuracy, timeliness and completeness of information in EP coal mine is confirmed with the statistical information provided to experts of EEC.

Processes of management of information and reporting preparation are evaluated by carrying out the analysis of methods and forms of a fee and the analysis of information, decisions of collegiate organs and the guide, inspection of information resources of higher education institution, systems and software, interviewing of all concerned parties.

Strengths / the best practice on the accredited EP aren't revealed.

The recommendations of EEC for 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

Conclusions of EEC:

According to the Management of Information and Reporting standard 17 criteria from which 17 have a satisfactory position are disclosed.

6.3. Development and Approval of the Educational Program standard

✓ *The higher education institution has to define and document procedures of development of EP and their statement at the institutional level.*

✓ *The management of EP has to provide compliance of the developed EP to the established purposes, including expected results of training.*

✓ *The management of EP has to provide availability of the developed models of the graduate of EP describing results of training and personal qualities.*

✓ *The management of EP has to show conducting external examinations of EP.*

✓ *The qualification received on end of EP has to be accurately defined, explained and correspond to the NSK certain level.*

✓ *The management of EP has to define influence of disciplines and professional the practician on forming of results of training.*

✓ *Important factor is the possibility of training of students for professional certification.*

✓ *The management of EP has to produce the evidence of participation of students, TS and other stakeholders in development of EP, ensuring their quality.*

✓ *The labor input of EP has to be accurately defined in the Kazakhstan credits and ECTS.*

✓ *The management of EP has to provide the maintenance of subject matters and results of training in training level (bachelor degree, a magistracy, doctoral studies).*

✓ *structure of EP it is necessary to provide the different types of activity corresponding to results of training.*

✓ *Important factor is availability of joint EP with the foreign organizations of education.*

Evidential part

KarIU, procedures of development of EP and their statement at the institutional level which are reflected in documents QMS StO II.8-03.01-2018 "Design and development of educational services", QMS P 4-25-1-2018 "The provision on development of modular educational programs" are defined and documented.

At quality evaluation of EP first of all availability of highly qualified teaching and administrative personnel and also conditions in which there is an educational and research activity, and the corresponding material and technical resources is analyzed. Assessment procedures of resource security of EP are regulated by the documents QMS StO II.7-01.01-2018 "Human resources management", QMS StO II.7-01.04-2018 "Infrastructure and the environment of functioning of processes".

The quality of maintenance of EP is defined and estimated according to requirements of QMS P 4-25-1-2018 "The provision on development of modular educational programs".

Measures for quality evaluation of realization of EP include a systematic collection and the analysis of statistical data on a number of key indicators (progress, employment, the number of the enlisted students); assessment of satisfaction of students with conditions, process and results of training (survey results); feedbacks from the partner organizations, etc. All measures are reflected in documents QMS STO II.8-02.02-2018 "Management of process of educational activity", QMS StO II.8-01.01-2018 "Management of selection process of entrants"; QMS StO II.9-01.01-2018 "Monitoring process (preparation and holding examinations)", QMS StO II.8-02.01-2018 "The processes related to consumers", QMS P-27-2-2019 "The provision on carrying out questioning on monitoring of quality of educational, educational and research processes at the Karaganda state industrial university".

Results of assessment of EP are considered at meetings of departments, Educational and methodical council of the Academic council of KarIU together with employers and graduates of EP. For example, at a faculty meeting "Metallurgy and materials science" (the protocol of 04.05.2020 questions of modernization of content of disciplines "New processes and materials in foundry production", "Means and process management systems of casting" together with the representative from LLC "Kurylysmet" Erstein A.A. are considered.

Annually to examination and reviewing 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" potential specialists employers, heads of the enterprises are attracted: AO "ArselorMittal Temirtau", LLC "Kurylysmet", LLC "Gordorservice-T", etc**.**

Management of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS provides compliance of the developed EP to the established purposes, including expected results of training.

Realization of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS are directed to achievements of the following purposes:

On EP 6B07107 - TEI – Training of the highly educated and harmoniously developed bachelors possessing social and professional practice-the industry equipment focused by kompetentnost in the field of technological.

On EP 6B07108 - FSPME – Training of qualified specialists with theoretical and practical knowledge of the main technologies of forge and forming production used in mechanical engineering with the developed language competence and IT having profound skills of application in professional activity.

On EP 6B07109 - FTME – Forming of concepts about the current state and the prospects of development of foundry production: manufacturing techniques of casting molds, forming materials, automation of ways of molding, melting of foundry alloys and the modern melting equipment for receiving foundry constructional alloys from chugun, staly and non-ferrous metals for receiving castings.

On EP 6B07110 - HTCRM – Training of the highly educated and harmoniously developed bachelors possessing social and professional, practice-focused by kompetentnost in the field of hoisting-and-transport, construction and road machines.

On EP 6B11201 - IE&FS – Training of the competitive specialists owning theoretical knowledge and practical skills in the field of future professional activity, based on the international and domestic standards in the field of industrial, environmental and fire safety.

Forming of EP in KarIU is based on competence-based approach which focuses attention on result of training and is described in QMS P 4-25-1-2018 "The provision on development of modular educational programs ".

Model of graduates of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS in the form of requirements to level of training are described in MEP which maintenance it was developed by the Working group created from number of the conducting TS of TM&T, Metal Forming, MIME and CTandE departments, students and representatives of employers (AO "ArselorMittal Temirtau", LLC "Kurylysmet", LLC "Gordorservice-T") as established in QMS P 4-25-1-2018 "The provision on development of modular educational programs".

KarIU conducting external examination of EP is provided. At a development stage for conducting external examination employers are attracted. External examination of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS was carried out by representatives of AO "ArselorMittal Temirtau", LLC "Ku rylysmet", LLC "Gordorservice-T". As external experts from employers leading experts of the organizations and enterprises corresponding to a profile of preparation of EP are attracted. Passports of EP passed the external examination in the Center of Bologna Process and the academic mobility of MES RK at inclusion them in the Register of educational programs of the higher and postgraduate education (http://esuvo.platonus.kz/#/register/education_program).

The qualification received on end of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS, is accurately defined, explained and corresponds to the NRK certain level. The list of qualifications and positions according to "The job evaluation catalog of positions of heads, specialists and other employees" which are provided in MEP graduates of data of EP can borrow. According to the specified reference book, job descriptions and requirements to qualification of the positions given in MEP corresponds to the 6th level of the National Frame of Qualification (NFQ) – a bachelor degree.

The professional standards corresponding to skill level of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS, are in a stage of development by professional community now.

Information on qualification provided in MEP is carried to students during the presentation of EP and also is available on the website of the university

Students can study the list and the summary of disciplines in AIS "PLATONUS" in the sections "Curriculum" and "Catalogues of Disciplines" respectively and also in the Register of educational programs of the Uniform Control System of the Higher Education (UCSHE) MES RK (http://esuvo.platonus.kz/#/register/education_program). More detailedcontent of discipline is specified in syllabuses which are provided to students before studying discipline and also in the Educational and Methodical Complexes of Disciplines (EMCD) available at departments.

Relevance and present of maintenance of subject matters of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS, the fundamental nature and compliance to the new scientific directions is provided on the basis of monitoring of the current state and the prospects of technical development of the profile industries, achievements of science and technology, the best practices in the industry. For example, in 2019 the content of disciplines "Computer graphics and a CAD", "Machine graphics" with inclusion of materials in them on studying the latests version of software of computer-aided engineering systems (CAD) are updated that increased relevance and the present of the specified disciplines.

Annually, the staff of departments together with employers carries out monitoring of educational programs on relevance of the taught disciplines.

Content of disciplines and professional practician of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS are directed to forming of competence of the graduates described in MEP (https://kgiu.kz/education/modulnie-obrazovatelnie-programmi/mop-bakalavriat-2019/). In particular, influence of the main subjects and types professional the practician on forming special competences of the graduate on the example of EP 6B07107 - TEI:

– K6 - to carry out theoretical and pilot scientific research on search and check of the new ideas in improvement of processing equipment of the industry;
– K7 - to carry out engineering calculations for the main types of professional tasks;
– K8 - to participate in design and modernization of processing equipment of the industry;
– K9 - to develop design documentation with use of modern computer technologies;
– K10 - to apply progressive methods of operation of processing equipment;
– K11 - to participate in development of technological documentation for production, modernization, operation and repair of processing equipment of the industry;
– K12 - to organize work of small collectives on production and operation of processing equipment of the industry.

The main standard and methodical documents regulating work in the course of practical training are QMS P 4-28-2019 "The provision on an order of the organization and carrying out professional the practician" and the programs the practician developed by the releasing departments. Programs of professional practice it is agreed with the enterprises defined as bases the practician and affirms the vice rector for study of KarIU. Work on the organization professional the practician together with dean's offices and the releasing departments coordinates the Career Center. The organization of professional practice in the third-party enterprises is made on the basis of signing of the contract between KarIU and the enterprise (base of practice), or the tripartite contract between KarIU, the enterprise (base of practice) and the student. Besides, at the organization of individual practical training training represents characteristic of the enterprise which specifics of activity have to correspond to the EP profile for passing of professional practice to the Career Center. The basis professional the practician for the considered EP is large industrial enterprise of the mining and metallurgical industry of AO "ArselorMittal Temirtau" which corresponds to all criteria on a preparation profile. Besides, the university signed the contract about passings professional the practician with more than 60 enterprises and the organizations of the region. On EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS are provided passings educational, two productionpredegree the practician. Each type of professional practice has the purposes, tasks and the program proceeding from which, the relevant base of professional practice is defined.

Participation of interested persons in development and ensuring quality of EP are reflected in minutes of faculty meetings with participation of employers, feedbacks of employers in EP, in questioning of students, TS and employers.

The mechanism of involvement studying in forming of EP consists in inclusion in the structure of the Working group of students of older years at the releasing departments. As a rule, the working group joins the most active students who are engaged in scientific activity.

The specialists of industrial enterprises holding senior positions on a preparation profile are involved in development of EP as a part of the Working group. In particular, on development of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS are attracted heads of divisions (shops, sites, etc.) with AO "ArselorMittal Temirtau", LLC "Kurylysmet", LLC "Gordorservice-T". The competence of specialists of the specified enterprises in the field of preparation for EP causes representativeness of their attraction.

Analytical part

KarIU maintains close contact with many leading higher education institutions and scientific centers of the CIS and foreign countries in the field of education that promotes creation of joint EP (https://kgiu.kz/parcontracts/) with them. Now KarIU has 12 contracts with higher education institutions of the FSU and beyond in which creation of joint EP is provided. In 2018-2019 academic year Metal forming department developed the joint educational program (JEP) of a magistracy.

Are developed on the basis of the accredited EP 6B07108 "FSPME"6B07110 "PTSiDM" with FGBOOU WAUGH'S partner higher education institution "Magnitogorsk state technical university of G.I. Nosov (MSTU of G.I. Nosov)". *However*, there is no realization of the given JEPa type of absence of students. The management of EP proves absence of the studying JEP because of financial questions of training cost.

Experts of EEC, noted absence at the time of accreditation of the educational or two-degree program, joint with foreign higher education institutions, for EP 6B07107 "Technological equipment of the industry", 6B07109 "Foundry technologies in mechanical engineering", 6B11201 "Industrial, environmental and fire safety" at the time of carrying out accreditation.

According to the register of the centers of certification of specialists of NPP RK "Atameken" (https://atameken.kz/ru/services/16-professionalnyye-standarty-i-tsentry-sertifikatsii-nsk), in the region there areno centers of professional certification for the professional sphere corresponding to EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS. But at the same time, in KarIU for a possibility of training of students for professional certification the Training center on preparation of working professions which performs acquaintance of students with programs of additional education, the vocational training and retraining of workers, the unemployed serving specialists and other persons allowing to master a profession or specialty, with qualification assignment functions. The students wishing to master a working profession 1109082 – the Smith (all names), by results of passing of rates and the decision of the qualification commission receive qualification "The smith of the 3rd category". For example, in 2019 14 students of EP "Mechanical engineering" (6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering") mastered the specified profession. However, *the commission of EEC notes lack* of actions from the management of EP for the organization of receiving adjacent working professions in this center of the studying EP 6B07107 "TEI", 6B07110 "PTSiDM", 6B11201 "IE&FS".

Logiko-strukturny analysis of maintenance of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS shows that the sequence of studying disciplines on RUP is caused by logic of creation of a system of cross-disciplinary communications and is founded on their continuity. For example, the cycle of general education disciplines, providing students with necessary social, pedagogical and ethical knowledge and promoting development of skills of independent creative mastering new knowledge during all active activity, is studied in initial rates (1 and 2 rates). Also, on the example of EP 6B07107 - TEI can be seen that disciplines "The theory of mechanisms of cars" and "Details of cars and a basis of designing", the giving knowledge of methods of a research and design of mechanisms of cars and details of criteria of working capacity (result of training of P11), are bases for studying the main subjects "Hoisting-and-transport machines", "Processing equipment of the extracting industry", "Processing equipment of the metallurgical enterprises", "Design of processing equipment" and others in which this knowledge is applied. However, *according to the expert of EEC, in EP* 6B07107 - TEI the list and the contents of the taught disciplines differ in triviality.

Strengths for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

- The qualification received on end of the accredited EP is accurately defined, explained and corresponds to the NSK levels.

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07109 "Foundry technologies in mechanical engineering", 6B11201 "Industrial, environmental and fire safety":

1. To carry out the analysis of contents of educational programs of EP 6B11201 "Industrial, environmental and fire safety", 6B07107 "Technological equipment of the industry", 6B07109 "Foundry technologies in mechanical engineering" regarding harmonization of modules and development of joint EP with the foreign organizations of education.

Additional recommendation of EEC for EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines":

2. To consider possibility of financing for realization of joint EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines" with partner higher education institutions.

Additional recommendation of EEC for EP 6B07107 "Technological equipment of the industry", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

3. To the management of EP 6B07107 "Technological equipment of the industry", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety" to develop the plan and to start the organization of training of students for professional certification.

Additional recommendation of EEC for EP 6B07107 "Technological equipment of the industry":

4. When developing EP 6B07107 "Technological equipment of the industry" it is necessary to conduct works on filling of the program as relevant information, to apply the international experience in area of the transport systems, the modern industrial equipment corresponding to modern development of science and technology.

Conclusions of EEC:

According to the Development and Approval of Educational Programs standard 12 criteria from which on EP are disclosed: 1 - has a strong position, 10 - satisfactory, 1 - assumes improvement.

6.4. Permanent Monitoring and Periodic Assessment of Educational Programs standard

✓ *The higher education institution has to carry out monitoring and periodic assessment of EP to provide achievement of the goal and to meet needs of students and societies. Results of these processes are directed to permanent improvement of EP.*

✓ *Monitoring and periodic assessment of EP have to consider:*

- *Contents of programs in the light of the last achievements of science for specific discipline for ensuring relevance of the taught discipline;*

- *Changes of requirements of society and professional environment;*
- *Loading, progress and release of students;*
- *Efficiency of procedures of estimation of students;*
- *Expectations, requirements and satisfaction of students;*
- *Educational environment and support services, and their compliance to the purposes of EP.*

✓ *The higher education institution and the management of EP have to produce the evidence of participation of students, employers and other stakeholders in revision of EP.*

✓ *All interested persons have to be informed on any planned or activity undertakens concerning EP. All changes made to EP have to be published.*

✓ *The management of EP has to provide revision of contents and structure of EP taking into account market changes of work, requirements of employers and social request of society.*

Evidential part

The procedure of monitoring and periodic assessment of EP at the university is performed on the basis of internal documents QMS.

External and internal audits, examination of methodical providing, assessment of activity and consideration of questions on collegiate organs (Supervisory board, the Academic council, Educational and methodical council, faculty meetings) are applied to assessment of success of the plan of realization of EP. Within these mechanisms the effectiveness and efficiency of performance of the purposes, deviations from the set purposes are defined. If necessary decisions are made or plans for improvement of quality of training and improvement of educational activity are developed.

The main instrument of monitoring of satisfaction of needs of students and societies in KarIU is questioning which is carried out by Department on educational work and youth policy (DVRIMP). The questioning of students which is carried out 2019 was shown by high rates of satisfaction of their requirements (table 11).

Table 11 - Results of monitoring of satisfaction of needs of students and society

Questions	Assessment of satisfaction, %
Professional level of teachers of higher education institution	87.5
Level of educational and methodical providing classes	82
Organization of educational process	83.3
Informing requirements for a successful completion of training	91
Availability and responsiveness of the management of higher education institution	90
Availability of consultation on personal problems	74
Level of the organization of research work in higher education institution	88

The results of monitoring of satisfaction of employers with quality of training at the university received through questioning of executives of the production and commercial organizations of the city of Temirtau showed that 52% of respondents consider graduates of KarIU more professionally prepared in comparison with graduates of other higher education institutions working in their organizations.

The DAP carries out monitoring of maintenance of EP taking into account the latest developments of science on specific disciplines for ensuring relevance of the taught disciplines. In particular, at verification of contents an EMCD, the attention to the list of the recommended references which have to contain the textbooks and manuals published for the last 10 years is paid.

Monitoring of changes of requirements of society and the professional environment is carried out by definition:

- the requirements established by society and the professional environment to quality of training of specialists, their knowledge, skills, including requirements for training terms;

- unspecified consumer requirements to service, for example, the predicted requirements for training of specialists yet specialties, knowledge or skills not existing, but necessary in the future;

- the obligations relating to results of activity of higher education institution, including the regulating and statutory requirements, for example, requirements of GOSO.

Monitoring of an academic load consists in establishment of annual volume and check of the course of its performance. Establishment of annual volume of an academic load is performed by managers of departments together with scientific secretaries of departments and the dean of faculty on the basis of working curricula of EP and the contingent of students. This process is regulated in QMS STO II.8-02.02-2018 "Management of process of educational activity". Monthly monitoring of performance of an academic load is carried out a DAP on the basis of reports of departments which are formed according to the log-book of pedagogical loading of TS. At the end of each semester and academic year will be checked by the dean of faculty performance of an academic load according to reports on implementation of the individual plan of TS.

Carrying out the current control of progress, intermediate and final assessment of students is carried out according to MES RK'S rules and internal regulations of QMS P 4-34-2019 Situation about the organization of the current and rubezhny control, intermediate certification and assessment of knowledge of students. At the same time at the university the analysis and the control is exercised as on absolute progress (is defined as the amount of positive estimates to total number of the students taking examination), and on qualitative progress (is defined as the amount of estimates "well" and "perfectly" to total number of the students taking examination). Monitoring of release is performed according to reports SAC. For implementation of activities for employment of graduates by the Career Center systematic work on market research of work, search of vacancies is carried out.

Monitoring compliance of the educational environment and support services to the purposes of EP is performed during checks of degree of readiness of departments and divisions by new academic year. Results of monitoring it is represented to the management of KarIU and are discussed at meetings of departments, Council of faculty, an EMC, the Academic council of higher education institution. On the basis of the analysis of results the management makes various management decisions on improvement of EP which are reflected in development plans for EP and university, requests for necessary resources, etc.

Monitoring of satisfaction of employers following the results of professional the practician is performed according to the head of practice from the enterprise who estimates compliance at the student of competences the, that is main knowledge and skills allowing them to realize at continuation of training at the subsequent step of higher education or during the subsequent work on this specialty. Criteria for evaluation of the head of practice from the enterprise which are affixed in the diary on a work practice are given in table 12.

Table 12 - Criteria for evaluation of the head of practice from the enterprise

Name of components	Maximum number of points
Observance by the probationer of labor discipline, knowledge and observance of safety regulations in conditions of production	10
Quantity and quality of collected material	5
Participation in the solution of production tasks of this division, degree of the involvement into production (activity, initiative)	10
Level of theoretical knowledge of the chosen specialty	10
Quality of the report (registration, maintenance, ability is accurate to state thoughts)	5
Total assessment of the head of practice from the enterprise (ORPP):	40

Practical training monitoring, monitoring quality of its organization is carried out by heads of practice from departments and the Career Center. Following the results of a work practice the students submit on the releasing department the report which is checked by the head of practice and is protected before the commission created by the order of the head of the department. Results of protection of the report are estimated by the differentiated offset by the installed ball and rating system of estimates. At the same time is taken into account:

- compliance of the report to requirements of the program and methodical instructions on passing of a work practice;
- the acquired practical skills and competences;
- feedback of the head of practice from production and its assessment.

The list of the signed contracts and memorandums with the city-forming enterprises, representatives of large and medium business for practical training of students of the Karaganda industrial university is posted on the official site by https://kgiu.kz/centr-kareracenter-careerkarera-ortali%d2%93i/centr-kareracenter-careerkarera-ortali%d2%93i/praktikapracticepraktika/polozhenie-o-praktike/, the signedcontracts and memorandums are in the Career Center

Achievement of the goals and tasks of professional practice is guaranteed by performance of the problems of each type of practice which are accurately established in programs the practician and the internal document QMS P 4-28-2019 "The provision on an order of the organization and carrying out professional the practician".

Contents EP is considered annually and in need of them changes are made.

2019 the maintenance of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS and structure of RUP, in communication is completely updated by acceptance of the new GOSO approved by MES RK'S order of 31.10.2018 No. 604. At the same time in cycles DB and PD the obligatory components are replaced with high school components and also RUP included elective disciplines (Minor) for development of additional competences according to additional educational programs.

Offers on modification it is formulated by departments. By the employer and students recommendations when forming modules of the educational program can be made and also the list of the elective disciplines which are the most significant and relevant in vocational training of future specialists is offered. Also, in connection with transition of the enterprises from the system of scheduled preventive maintenance to the system of service on actual state of the equipment which important element is the service of technical diagnostics on a wish of employers in KED EP 6B07107 - the TEI and 6B07110 - HTCRM is included discipline "Diagnostics and maintenance of cars", at a faculty meeting "Metal forming" (protocol of 25.06.2018) with participation of the director of LLC "TemirtauUniversalStroy" Davletchin M.F., the chief of CML A.N. Krivtsov, the chief of the sortoprokatny shop of AO "AMT" Belyakov V.V. questions of changes of RUP are considered, it is recommended to make changes on quantity of the credits of special disciplines, on the sequence of disciplines, also to enter new disciplines for expansion of competence of graduates.

On a permanent basis meetings with the main strategically important enterprises employers, for example with LLC "Kurylysmet". On May 4, 2020 at a faculty meeting MiM participated the representative from LLC Erstein A.A. who made the proposal on acquisition of program sets for computer modeling of foundry processes. After studying the matter and carrying out search of commercial offers, representatives of department stopped on the Russian supplier company of the similar equipment then for consideration the commercial offer, the minutes of MiM department No. 17 of 04.05.2020 was sent.

On September 14, 2020 the faculty meeting "MIME" with participation of the representative of LLC "Kurylysmet" Kuzichev V.I. was held. At this meeting V.I. Kuzichev made the proposal on modification of EP "FTME", namely inclusion in RUP of the disciplines connected with study to computer-aided engineering systems. These actions will allow to

enhance substantially competences of graduates and to make them more competitive in labor market (minutes of department No. 2 of 14.09.2020).

Objects for modification of EP are working curricula, catalogs of elective disciplines, educational programs, etc. An order of introduction of changes in them QMS P 4-25-1-2018 "The provision on development of modular educational programs", QMS StO II.8-02.02-2018 "Management of process of educational activity".

All interested persons whom graduates of schools and colleges, students, parents, employers, the staff of the university, state bodies, the state and society in the form of various associations and government institutions treat are informed on any planned or activity undertakens concerning EP. Instruments of informing are: official site of KarIU (https://kgiu.kz/); activities reports; letters, e-mail; an interview in media, on radio or television; days of "Open doors", excursions, seminars, conferences, exhibitions, fairs, expositions; PTA meetings; personal contacts with concerned parties, etc.

Modular educational programs of all specialties of higher education institution are published on the official site of the university (https://kgiu.kz/education/modulnie-obrazovatelnie-programmi/mop-bakalavriat-2019/).

revision of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS in 2019 students of older years of the relevant EP took part (students N.T. Tarasov. – TMiO-17k, A. Zhal□asbek□yza – Metal forming-15k, M.A. Kabdolova. – TTTiT-17k, A. Merey, T. Ziyada – d-BZhD-16k) and employers of the profile enterprises (M.V. Konovalenko is the chief of sheet-rolling shop No. 1 of AO "ArselorMittal Temirtau", N.M. Kasenov is the chief of the forge and press shop of Management on production of spare parts of LLC "Kurylysmet", L.I. Senyuk. – Chief of technological department of LLC "Gordorservice-T", E.Zh. Otarov. – director of the Karaganda regional branch of Republican research institute of labor protection). On each EP the feedback or the review from the employer of the profile enterprise is written.

Analytical part

Results of monitoring and periodic assessment of EP are discussed at meetings of departments during which various decisions on their improvement are made (protocol No. 1 of 02.09.2019 (TM&T department), protocol No. 17 of 04.05.2020 (MIME department), minutes abstract No. 34 of 15.04.2019 (Metal forming department), protocol No. 1 of 02.09.2019 (CTandE department)). Informing on changes in EP are carried out at faculty meetings, educational and methodical councils, the Academic council of the university. However, *the commission of EEC notes lack of the mechanism* of informing on any planned or activity undertakens concerning EP of all interested persons outside the university. VUZ doesn't publish information on the changes made EP.

The commission of EEC notes need of strengthening of maintenance of EP 6B07108 "Forging and stamping production in mechanical engineering" and EP 6B07109 "Foundry technologies in mechanical engineering" use of software products for acquisition of profound skills of training in special programs at implementation of technical drawings and graphic works that was also noted by employers when interviewing.

Strengths / the best practice on the accredited EP aren't revealed.

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To the management of university to develop the mechanism on broad informing the public, employers, students and TS about all changes made to the accredited EP 6B07107

"TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS".

2. To the management of EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" to provide the publication on the website of the university about all made changes and actions taken concerning EP.

Additional recommendation of EEC for EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering":

3. To the management of EP 6B07108 "Forging and stamping production in mechanical engineering" and EP 6B07109 "Foundry technologies in mechanical engineering" to expand the list of the disciplines giving the chance more profoundly to study and use in the course of implementation of technical drawings of such software products as "Kompas-3D", "AutoCAD", "Autodesk Inventor", etc.

Conclusions of EEC:

According to the Permanent Monitoring and Periodic Assessment of Educational Programs standard 10 criteria from which 9 – have a satisfactory position, 1 are disclosed - assumes improvement.

6.5. Student-centered Training, Teaching and Gain Score standard

✓ *The management of EP has to provide respect and attention for various groups of students and their requirements, granting flexible trajectories of training to them.*

✓ *The management of EP has to provide use of various forms and methods of teaching and training.*

✓ *Important factor is availability of own researches in the field of a technique of teaching subject matters of EP.*

✓ *The management of EP has to show availability of a feedback system on use of various techniques of teaching and assessment of results of training.*

✓ *The management of EP has to show support of autonomy of students for the simultaneous management and the help from the teacher.*

✓ *The management of EP has to show availability of the procedure of response to complaints of students.*

✓ *The higher education institution has to provide the sequence, transparency and objectivity of the mechanism of assessment of results of training for each EP, including the appeal.*

✓ *The higher education institution has to provide compliance of assessment procedures of results of training of the studying EP in the planned results of training and the purposes of the program. Criteria and methods of assessment within EP have to be published in advance.*

✓ *higher education institution, mechanisms of ensuring development by each graduate of EP of results of training have to be defined and the completeness of their forming is provided.*

✓ *The evaluating persons have to own modern methods of assessment of results of training and regularly improve skills in this area.*

Evidential part

Management of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS provides respect and attention for various groups of students and their requirements, granting flexible trajectories of training to them.

Within EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS students are grouped in training languages (with Kazakh, training Russian, polylingual groups), in form of education (internal, correspondence, evening, with use of the remote training technologies), in the level of the previous education (based on an average or TiPO to the 2nd level inclusive, based on TiPO 3 levels above in case of coincidence of a profile of the educational program, based on the higher education).

Detection of needs of students begins already at their transfer in EP. For example, come by results of ENT to group of educational programs B064 "Mechanics and metal working" depending on the requirements can choose EP 6B07107 - TEI, 6B07108 - FSPME or 6B07109 - FTME. In training process in KarIU for detection of needs of students the questioning, meetings with the management is carried out. With the requirements the students can also address curators, managers to departments, in dean's office, for example, concerning granting

the place in hostels KarIU.

During training of KarIU the students can master additional competences studying disciplines according to the additional educational program (Minor). For example, students of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS can master competences on IT technologies, having chosen disciplines of Minor: "Bases of information security"; "Databases"; "Algorithmization"; "Internet technologiescomputer networks"; or enterprise competences, studying disciplines of Minor: "Management"; "Organizationplanning of production"; "Business planning"; "Labor economics".

the university it is provided implementation of comprehensive support of educational process of students with special needs according to the recommendations of service of medico-social examination. In particular, for a possibility of easy access of students with violations of the musculoskeletal device to the academic building before it the ramp is equipped. Also, development of the educational program on the basis of individualization of its contents taking into account features and educational needs of the specific student is possible. The organization of educational process for persons with special educational needs is regulated in the Academic policy of KarIU (https://drive.google.com/file/d/1ldCGH0lyB31r8y1QhTSwtTN3kHxlTDA1/view).

Management of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS provides use of various forms and methods of teaching and training. The interview with students confirmed availability of the mixed form of education at the time of the procedure of accreditation. Forms as online classes, and internal carrying out, with observance of all the basic of health requirements are used.

By training future specialists in educational process modern software products and IT technologies are applied. So, when teaching discipline "Computer graphics and a CAD" the studying EP 6B07107 - TEI, 6B07110 - HTCRM are actively used modern program complexes, such as "Kompas-3D", "AutoCAD", "Autodesk Inventor", and when teaching discipline "Mathematical modeling of the equipment and processes the Metal forming" the student 6B07108 - FSPME is used the system of modeling of technological processes "DEFORM-3D" intended for the analysis of three-dimensional (3D) behavior of metal at various processing by pressure.

2018 in higher education institution the interactive computer class "The Certified Equipment of Telephone Networks — Bank of Information" SOTSBI was open. The system of distance learning "SOTSBI-U" is interactive training courses which allow to gain knowledge of large audience of listeners. "SOTSBI-U" can be used as educational institutions of various level (universityS, colleges, training centers of the companies, etc.), and the individual users studying without separation from production activity and also physically disabled people. Access to the training courses of "SOTSBI-U" placed on the server of the Developer is performed through the Internet what the accounting record is provided to the user for. Class SOTSBI-U is developed according to current trends of technical education and includes a set of interactive electronic rates with feedback. The studying EP 6B11201 "IE&FS" successfully completed courses on studying information technologies for this system and received certificates.

Monitoring satisfaction of students and TS with methodical innovations is performed through the analysis of results of the questioning which is carried out according to QMS P-27-2-2019 "The provision on carrying out questioning on monitoring of quality of educational, educational and research processes at the Karaganda state industrial university". Results of questioning are reported to the management of the university which leads up information to deans and managers of departments. Deans and managers carry out discussion at meetings of departments.

The structures providing support of students in higher education institution are: Student's parliament of KarIU, Department on educational work and youth policy, Committee on affairs of youth. These structures are engaged in creation of conditions for forming of versatily

developed, competitive specialist having social activity, qualities of the patriotic citizen capable independently to increase the professional and intellectual potential during life, demanded at the national and international levels. Students have an opportunity to visit Sports club Temir, to publish the editions, articles through Press center "Student's messenger of KarIU".

KarIU, procedures of response to complaints of students are provided. The procedure of filing of applications with expression of requests and complaints on various questions is stated in QMS P 4.18-2018 "Provision on work with complaints of students". Complaints of students are accepted by deans, are considered at meetings of Council of curators, at meetings, meetings of various level, at meetings of students with the management of the university.

The mechanism of assessment of knowledge is reflected in internal document QMS StO II.10-01.01-2018 "Monitoring process (preparation and holding examinations) according to which the student not concordant with result of examination has the right to give on the appeal no later than the next day after holding examination. For this purpose for examinations (intermediate certification) the order of the head of higher education institution creates the appeal commission from among teachers whose qualification corresponds to a profile of the appealed disciplines. Results of the appeal are made out by the protocol and on the basis of its decision the individual examination sheet on the student (the doctoral candidate, the undergraduate) which is attached to the main examination sheet is formed. In case of a conflict situation for acceptance of examination by the order of the rector upon motivated written request of the student the special commission can be appointed.

KarIU provides compliance of assessment procedures of results of training of the studying EP in the planned results of training and the purposes of the program. Criteria and methods of assessment within EP are published on the website KarIU (https://kgiu.kz/education/sistema-ocenki-znaniy-studentovstudent-assessment-systemstudentterdi%D2%A3-bilimin-ba%D2%93alau-zh%D2%AFyesi/) and in the section "Policy of Exposure of Estimates"of syllabuses of disciplines.

The statistical data confirming achievement of EP 6B07107 by each graduate - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS the planned results of training in 2020-2021 academic year, are provided in table 13 (Results of protection of degree projects in 2019-2020 uch.).

Table 13 - Results of protection of degree projects of students of day form of education in 2019-2020 uch. to year

EP	Started protection	Defended the thesis (project)			In total protected DP
		Great	Good	Udovl.	
TMiO (TEI)	40	18	22	-	40
MS (FSPME)	14	3	10	1	14
MS (FTME)	18	4	14	0	18
TTTIT (HTCRM)	33	22	11	-	33
HS&EP (IE&FS)	3	3	-	-	3

The movement of the contingent and its safety from 1 rate it is shown on the example of a set of 2015 of full-time (with full term and based on TIPO) training in table 14 given below.

Table 14. Data on safety of the contingent of bachelors of set of 2015 of full-time (with full term and based on TIPO) training

EP	Academic year				
	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
TMiO (TEI)	-	28	25	24	24
MS (FSPME)	19	37	48	63	43
MS (LTMS)	3	2	3	12	18
TTTIT (HTCRM)	-	16	15	14	14
HS&EP (IE&FS)	1	2	2	2	5

The satisfaction of employers with level of training of students is evaluated in the form of questioning. Survey results of employers according to the level of professionally significant skills and competences of students of KarIU, carried out in 2019, are given in table 15. Also, 52% of the interviewed employers consider graduates of KarIU more professionally prepared in comparison with graduates of other higher education institutions working in their organizations.

Table 15. Survey results of employers according to the level of professionally significant skills and competences of students of KarIU

Professionally significant skills and competences	Assessment		
	Great	Good	Well
computer skills	44%	53%	3%
modern technologies	35%	53%	12%
ability to expect a problem	15%	31%	54%
communicativeness	60%	37%	3%
professional and ethical liability	26%	68%	6%
desire of professional improvement	46%	51%	3%
knowledge of branch specifics	44%	37%	19%
foreign language skills	8%	47%	45%
ability to make the decision	15%	34%	51%
professional competence in the specialty	48%	25%	27%

Teachers of the university fully own modern methods of assessment of results of training and regularly improve skills in this area.

2014 more than 90% of examinations in KarIU are held in the form of electronic testing with use of AIS "PLATONUS". At the same time the tests with split-level tasks allowing to estimate most objectively knowledge and abilities received by students in training process are used. Examination materials are prepared by the teachers fully owning material on this discipline. Results of electronic testing are automatically clearly demonstrated to the student at the time of the answer to the last question or the terminations of a limit of time for conducting testing that provides transparency of assessment procedure of knowledge. In case during electronic testing during the examination the technical failure which entailed loss more than 10% of time allowed for examination was allowed, the student has the right to a repeating an examination.

Analytical part

For successful development by the studying EP the teachers of the university use in educational process such training methods as: business and role-playing games, imitating trainings, discussions (cycle OOD), brainstorming method, situational games, registrations of a slideshow. Teachers of the University holding the presentations of training courses with application of interactive boards, multimedia projectors, use on classes of the language equipment (discipline – a foreign language), etc. practices.

KarIU it is conducted researches in the field of a technique of teaching subject matters of EP in which development own and adaptation of the available innovations, techniques and ways of training is performed. For example, at END department, initiative research work "Methodical and psychology and pedagogical aspects of improvement of teaching natural science disciplines of a credit system of training" was carried out. In KarIU the Republican scientific and methodical conference where teachers share experience and results of own researches of scientific and methodical character is periodically held. In the collection of works of the Republican scientific and methodical conference "Education transformation: contents, technologies, quality" (https://kgiu.kz/scintactivity/trudi-konferenciy/), taking place in KarIU on November 29, 2019, are published more than 30 reports of teachers of TM&T, Metal Forming, MIME and CTandE departments in which EP 6B07107 - TEI are implemented, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS.

As an example of successful realization of new developments in the field of training techniques within EP 6B07107 - TEI, 6B07110 - HTCRM it is possible to note an intensification of educational process when teaching discipline of "A basis of designing and a detail of cars" due to application of applied libraries of the Kompas-3D program that leads to activization of process of forming of design competences of bachelors.

During discussion and the analysis of open classes an assessment of expediency of the chosen methods, means and the innovation technologies is given, methodical components of separate methods and technologies, their efficiency in terms of objectives, extent of achievement of the goal of occupation come to light. The quality criterions of open classes used for the analysis are specified in QMS P 4-26-2018 "The provision on planning and holding open classes".

For implementation of monitoring of effectiveness and efficiency of application of innovations and use of active training methods open classes which holding are regulated by the internal document QMS P 4-26-2018 "The provision on planning and holding open classes" are used. In KarIU, methodical weeks of departments during which TS make the innovation proposals are spent, exchange experience and show introduction of the innovation offers in educational process.

Experts of EEC noted the good capacity of TS (experience of production activity, a pedagogical experience), necessary working conditions and availability of close interaction with the partner enterprises, availability of powerful results of initiative and economic contractual subjects in order that TS of department made use of the accumulated experience and knowledge in development of own, author's techniques of teaching more productively.

Strengths / the best practice on the accredited EP aren't revealed.

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To the management of university to hold an intra high school seminar on use of the innovation technologies of training, including also own researches. To the management of EP annually to carry out monitoring of the applied techniques of teaching profile disciplines for the purpose of improvement of quality of teaching; to prepare the plan for development and deployment in educational process of own researches TS in the field of a technique of teaching subject matters. Introduction of offers on introduction of new techniques of teaching to reflect in minutes of meetings of departments and also to provide distribution of information on results of own researches on a web resource of the university.

2. To the faculty to use results of economic contractual and initiative researches in educational process. Given to reflect in protocols of departments.

Conclusions of EEC:

According to the Student-centered Training, Teaching and Gain Score standard 10 criteria from which 9 - have a satisfactory position are disclosed and 1 - demand improvement.

6.6. Students standard

✓ *The higher education institution has to show policy of forming of the contingent of students in EP coal mine from receipt before release and provide transparency of its procedures. The procedures regulating life cycle of students (from receipt before end), have to be defined, approved, published.*

✓ *The management of EP has to show carrying out special programs of adaptation and support for just arrived and foreign students.*

✓ *The higher education institution has to show compliance of the effects of the Lisbon convention on recognition.*

✓ *The higher education institution has to cooperate with other organizations of education and the national centers "The European network of national information centers by the academic recognition and mobility / National academic Information Centres of Recognition" ENIC/NARIC for the purpose of ensuring comparable recognition of qualifications.*

✓ *The management of EP has to show availability and use of the mechanism by recognition of results of the academic mobility of students and also results of additional, formal and informal training.*

✓ *The higher education institution has to provide an opportunity for external and internal mobility of the studying EP and also render them assistance in receiving external grants for training.*

✓ *The management of EP has to apply the maximum number of efforts to providing students with places of practice, assistance to employment of graduates, maintenance of communication with them.*

✓ *The higher education institution has to provide graduates of EP with the documents confirming the received qualification including the achieved results of training and also a context, content and the status of the got education and the evidence of its end.*

✓ *Important factor is monitoring of employment and professional activity of graduates of EP.*

✓ *The management of EP has to stimulate actively students to self-education and development out of the main program (extracurricular activities).*

✓ *Important factor is availability acting associations/associations of graduates.*

✓ *Important factor is availability of the mechanism of support of gifted students.*

Evidential part

KarIU has policy of forming of the contingent of students in EP coal mine from receipt before release and provides transparency of its procedures. The procedures regulating life cycle of students (from receipt before end), are defined, approved, published in internal documents QMS STO II.8-01.01-2018 "Management of selection process of entrants", QMS STO II.8-02.02-2018 "Management of process of educational activity", QMS STO II.8-02.03-2018 "Management of educational process", the Academic policy of KarIU, etc.

Forming of the contingent of students is performed by Selection committee (Front office) which works according to QMS software 15-58-14.34-2019 "The provision on selection committee", QMS StO II.8-01.01-2018 "Management of selection process of entrants" and QMS software 15-58 – 14.34 – 2019 "The provision on selection committee". These Provisions defines the status of selection committee, its organizational structure, functional duties, a circle of powers (rights) and responsibility.

Forming of the contingent of students is performed by means of placement of the state educational order for training of specialists with the higher and postgraduate education and also payments of training at the expense of own means of citizens and other sources. In KarIU the persons having the general secondary, technical and professional, postsecondary, higher education are accepted.

Training in a bachelor degree is provided based on the general average, technical and professional, the highest (the highest professional) formations. Imposes requirements established by MES RK to the persons arriving on training in the educational program of a bachelor degree in the accredited EP KarIU - availability of the certificate of ENT with lowest passing score (50) or KTA (for graduates of colleges).

Informing students on requirements of the educational program and specifics of its realization is provided by means of carrying out professional orientation work, annually the university holds Open Day. Departments carry out active professional orientation work with schools and colleges of Temirtau and surrounding areas of the Karaganda region. During professional orientation work, fact-finding tours on the university are conducted, PTA meetings are attended, scientific circles will be organized. For promotion of a brand of the university the press center of KarIU cooperates both with the traditional mass media (MM), and with a media rileyshnz on the Internet. System professional orientation work is carried out on the basis of the Plans of professional orientation work which are annually approved by the rector.

On the website of the university (https://kgiu.kz/abiturient/priem-na-bakalavriat/) there is allnecessary information for arriving on a bachelor degree. On the page there is a list of educational programs of a bachelor degree, in the section of the Regulation of Admission there

is information on submission due dates of documents and their list is provided, information on quantity of grants in a section of groups of educational programs of KarIU is given.

The management of the university and the accredited EP is carried out by programs of adaptation and support for just arrived and foreign students .

For the purpose of the organization of the help in adaptation of first-year students to educational process at the university at the beginning of each academic year in KarIU the Week of the first-year student during which curators, the deans managing departments make explanation about the educational programs provided by the university about rules of the organization of educational process at the university, requirements of internal rules and procedures, working hours of various services, contact information on administration, dean's offices and other structural units, TS, information on placement of academic buildings, on the website of the university, etc. is spent. For the students studying at a paid basis information on a payment procedure for training is given.

KarIU there is a practice of recognition of qualifications of the higher education, the periods of training and the previous training, including recognition of informal and informal training which are based on ensuring actions according to the Lisbon Convention on recognition of the qualifications relating to the higher education in the European region. For the purpose of ensuring comparable recognition of qualifications the Department of science and innovations and Department of the international cooperation of KarIU is engaged in integration of the university into world educational and scientific systems and establishes cooperation with other higher education institutions and the national centers ENIC/NARIC, for example, the associate professor "Metal forming" E.A. Panin defended the dissertation on award of degree of PhD at the chemical and technological and metallurgical university Sofia (Bulgaria) which then was recognized in RK.

According to the Academic policy of KarIU Rules of translation and restoration of studying (QMS P 4-33-2019), the student has the right to reoffset of the disciplines which are earlier mastered by it in other educational institutions. Reoffset of disciplines is also performed at revenues to the reduced programs mastered based on the highest or based on technical and professional education.

The data characterizing the contingent of students for 2015-2020 are provided in table 16.

Table 16 – The created contingent of students in a section of the accredited EP on 01.10.2020

Academic year	Form of education	In total students	Students on a grant		Studying at a paid basis		Quantity of deducted students
			rus	kaz	rus	kaz	
6B07107 "Technological equipment of the industry" (5B072400 "Technological machines and equipment""							
2016-2017	Internal / distation	89/38	8/0	68/0	5/38	8/0	4/4
2017-2018	Internal / distation	90/52	5	71	8/52	6/-	5/4
2018-2019	Internal / distation	98/76	14	70	7/76	7/-	5/5
2019-2020	Internal / distation	59/87	17	31	10/87	1/-	2/6
2020-2021	Internal / distation	42/89	22	9	9/89	2/-	-
6B07108 "Forging and stamping production in mechanical engineering" (5B071200 "Mechanical engineering", trajectory "Theory and technology of forging and stamping production")							
2016-2017	Internal / distation	30/5	11/-	19/-	-/5	-	-
2017-2018	Internal / distation	31/13	7/-	22/-	2/13	-	1/-
2018-2019	Internal / distation	31/29	10/-	19/-	2/29	-	3/3
2019-2020	Internal / distation	16/30	6/-	6/-	3/30	1/-	3/1
2020-2021	Internal / distation	5/22	2/-	3/-	-/22	-	-
6B07109 "Foundry technologies in mechanical engineering" (5B071200 "Mechanical							

engineering", trajectory "Technology of foundry production")							
2016-2017	Internal / distation	47/-	5/-	33/-	7/-	2/-	-
2017-2018	Internal / distation	68/-	6/-	50/-	3/-	9/-	5/-
2018-2019	Internal / distation	56/-	-	49/-	-	7/-	3/-
2019-2020	Internal / distation	36/-	-	35/-	-	1/-	-
2020-2021	Internal / distation	23/-	-	23/-	-	-	-
6B07110 "Hoisting-and-transport, construction and road machines" (5B071300 "Transport, transport equipment and technologies ")							
2016-2017	Internal / distation	78/40	2	50	15/40	11/-	8/10
2017-2018	Internal / distation	95/50	2	70	16/50	7/-	-/5
2018-2019	Internal / distation	103/50	6	80	12/50	5/-	6/2
2019-2020	Internal / distation	63/94	5	43	10/94	5/-	1/8
2020-2021	Internal / distation	57/102	11	31	11/102	4/-	-
6B11201 "Industrial, environmental and fire safety" (5B073100 "Health and safety and environment protection")							
2016-2017	Internal / distation	7/28	-	-	3/28	4/-	-
2017-2018	Internal / distation	15/44	-	-	7/44	8/-	-
2018-2019	Internal / distation	9/64	-	-	2/64	7/-	-
2019-2020	Internal / distation	18/72	-	-	5/72	13/-	-
2020-2021	Internal / distation	18/88	-	2	6/88	10/-	-

Foreign students. At the university, full-time work on involvement of foreign students is carried out. Citizens of Russia, Uzbekistan study at the accredited EP. The dean's office and other relevant educational divisions of the university regularly hold meetings with them, the educational work directed to forming of the patriotic relation to the university, the serious relation to study, a healthy lifestyle, their active involvement in public life, acquaintance to history and the culture of Kazakhstan is carried out.

On the basis of the state order for persons of the Kazakh nationality, not being citizens of RK, the preparatory office of KarIU(Foundation programme rate – for further receipt in a bachelor degree).

Discounts, encouragement. Social support in the university means, first of all, performance of the Decree of the Government of the Republic of Kazakhstan of March 12, 2012 No. 320 (with changes and additions) "About the statement of the sizes, sources, types and Rules of providing social assistance to citizens which there is a social assistance" concerning orphan students: compensation for food, single allowance to students of 1 and 4 rates, compensation according to norms for regimentals, soft stock, the equipment, discounts for training, grants and grants of the university are provided to them.

Hostels provided 100% of students, including students according to the program " Mangilik El youth-to the industry!" - Serpin.

For material support of students from needy, large or incomplete families the allocation of grants of the Academic council of KarIU.

For development and satisfaction of creative, intellectual needs of students student's creative associations and collectives work: choreographic Altair ensemble; Kazakh and Russian leagues of debatny club; Student's newspaper "Bulletin of KSIU students"; Abadan debating club; intellectual club "That? Where? When?"; Kazakh and Russian leagues KVN; studio of vocalists; studio of leaders-comperes; volunteer club Kamkor; poetic club Parasat, etc.

Students of the accredited educational programs actively participate in public life of the university: will organize such actions as the creative competition "Two Stars", a gala concert by the International March 8, the holiday Nauryz, the interfaculty competition "Ms. of KSIU", "Mr. of KSIU", actions for the Victory Day in the Great Patriotic War, dedication in students and others.

For the purpose of the organization of system educational work with the students studying according to the program " Mangilik El youth-to the industry!" - Serpin, approved the

corresponding actions plan. For creation of conditions of social adaptation of the students studying according to this program the institute of mentors from among the oldest teachers aksakals of the university who on a system basis hold meetings, conversations with students is introduced.

The university there are mechanisms of continued support of talented and active youth. For well in time students of this category according to the decision of the Academic Council grants and grants of KarIU, single awards and grants are appointed. Contracts with the enterprises on allocation of grants for education and training of future professional staff are signed. For employment of student's youth and its employment annual fairs of graduates with the invitation of potential employers are held.

The talented student's youth is sponsored for participation in scientific conferences, the subject Olympic Games, creative competitions. For example, participation of team of 3 students of TM&T department (Dauletbay Shukir Zhanbolatuly, Myrzabekov Nursultan Abdigaparuly – TTTiT-16k; Rayymbek Nurkazy Nurzhanuly – TMiO-16k) under the leadership of the teacher K.A. Azimbayev in the Republican Olympic Games for discipline of "A basis of designing and a detail of cars" among higher education institutions of the Republic of Kazakhstan which passed since February 6-8, 2019 to Semey it is completely paid from means of the university. Following the results of the Olympic Games the team took the 2nd place.

*Employment. The percent*the number of employment of graduates of full-time courses on accredited by EP are specified in table 17.

Table 17 - Employment of the studying accredited EP

EP	Release									
	2015-2016		2016-2017		2017-2018		2018-2019		2019-2020	
	quantity	%	quantity	%	quantity	%	quantity	%	quantity	%
6B07107 "TEI"	6	100	12	100	11	100	20	100	40	62.5
6B07108 "FSPME" (5B071200 "MS")	2/1	50.0	1	100	4	100	16/13	81.0	14/13	93.0
6B07109 "FTME"	3	100	2	100	3	100	11	91.6	12	66.7
6B07110 HTCRM	6	100	12	100	12	100	15	100	33	70
6B11201 "IE&FS"	7	100	4	100	8	100	14	100	14	100

Analytical part

Mobility. The higher education institution provides an opportunity for external and internal mobility of the studying EP. Students and TS can find information on programs of external and internal mobility on the website KarIU (http://kgiu.kz/scintactivity/mezhdunarodnoe-sotrudnichestvo-i-akademicheskaya-mobilnost-international-cooperation-and-academic-mobility/), consult with the curator, at department, in dean's office. Coordination of programs of the academic mobility at the university is performed by the Department of the Academic Policy (DAP) and the Department of the International Cooperation (DIC). According to situation, the system of reoffset of the credits of ECTS is based on result with application of coefficient according to the number of class periods. The main criteria of the direction of students within internal academic mobility is the progress and characteristic of department and faculty.

Besides, the management of higher education institution carries out purposeful work on providing conditions of learning English by target groups of students, during the interview the students told about carrying out free 4-month English language courses. The main selection

criterion of students on training in the academic mobility abroad is availability of the certificate of the international standard (for example, IELTS, TOEFL) or successful test passing at the university (advanced level).

However, despite the good organizational moments, experts *of EEC note* weak indicators on the actual program implementation of the academic mobility (Table 18).

Table 18 - The academic mobility on the accredited EP of a cluster for 2015-2020.

EP	entering	outgoing
6B07107 "TEI"	-	3
6B07108 "FSPME"	-	3
6B07109 "FTME"	-	-
6B07110 HTCRM	-	-
6B11201 "IE&FS"	-	-

Research, grants, competitions, sport

For the reporting period from 2015 to 2020 training the accredited EP took part in research work and other projects. Data on participation are provided in table 19.

Table 19 - Data on participation of students of the accredited EP in research, etc. during 2015-2020 .

EP	quantity				
	Number of the published articles	Participation in research, economic contracted works with TS	Participation in scientific projects	Participation in grant programs and competitions, FPP, Erasmus, Tempus, DAAD, Bolashak, etc.	Participation in the international conferences
6B07107 "TEI"	32		8		19
6B07108 "FSPME"		3	-	-	1
6B07109 "FTME"	137	7	12	10	188
6B07110 HTCRM	23		6		9
6B11201 "IE&FS"	8	-	2	-	1

Participation of students in various competitions, the Olympic Games, projects and other actions is confirmed with availability by the certificate, diplomas, diplomas. Data on availability of prize-winning places of the studying accredited EP in a section of 2015-2020 are provided in table 20.

Table 20 - Data on availability of prize-winning places of the studying accredited EP in a section of 2015-2020.

Full name student	Competition	EP	Academic year	Achievement
A.Sh. Kusainov	Republican competition NIRS	TTTIT (HTCRM)	2015-2016	Diploma 3 degrees
E.Zh. Balabas.	Republican competition NIRS	TTTIT (HTCRM)	2016-2017	Diploma 3 degrees
A.V. Zimovets.	Competition "Future Experts of Computer 3D Modelling" (Russia)	TMiO (TEI)	2016-2017	The diploma in the nomination "for successful use of decisions of ASKON

				in scientific and technical creativity
A.V. Zimovets.	Republican competition NIRS	TMiO (TEI)	2017-2018	Diploma of 1 degree
T.T. Ziyada.	Republican competition NIRS	HS&EP (IE&FS)	2017-2018	Diploma 2 degrees

However, experts of EEC note unstable indicators of participation of students in international contests on receiving external grants.

Association of graduates. Following the results of an interview of graduates information on Association of graduates isn't published. The lack of activity of activity of this Association is observed. Information isn't posted on the website.

Strengths / the best practice on the accredited EP aren't revealed.

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines"), 6B11201 "Industrial, environmental and fire safety":

1. According to the development strategy of the university for 2017-2021 to the management of EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" to include indicative indicators in development plans for educational programs, in work plans of departments and to realize points: "participation of students in the program "external and internal academic mobility", "participation of students in competitions in receiving external grants for training" .
2. To the management of university to develop and implement the comprehensive program on the organization of the academic mobility of students (external and internal) in online or training offline modes with fund-raising from various sources of financing.
3. To the management of EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS", according to the development strategy of the university for 2017-2021 to include indicative indicators in development plans for educational programs, in work plans of departments and to realize points of participation of students in research work, participation in competitions on grant financing of MES RK, the World Bank, social projects, competitions of Fund of the First President of Kazakhstan, the programs Erasmus, Tempus, etc.
4. To the management of higher education institution to make the work plan of Association of graduates and to carry out informing graduates of the university on activity of association through all possible information sources.

Conclusions of EEC:

According to the Students standard 12 criteria from which 10 – have a satisfactory position2 - demand improvement.

6.7. Faculty standard

✓*The higher education institution has to have the objective and transparent personnel policy, including in EP coal mine, the professional competence of all state including hiring, professional growth and personnel development, providing.*

✓*The higher education institution has to show compliance of personnel capacity of TS of the development strategy of higher education institution and specifics of EP.*

✓*The management of EP has to show awareness of responsibility for the workers and providing for them favorable conditions for work.*

✓*The management of EP has to show change of a role of the teacher in connection with transition to studentocentrirovanny training.*

✓*The higher education institution has to define contribution TS EP to implementation of the strategy for the development of higher education institution, etc. strategic documents.*

✓*The higher education institution has to give opportunities of career development and professional development of TS EP.*

✓*The management of EP has to involve in teaching practicians of the relevant industries.*

✓*The management of EP has to provide purposeful actions for development of young teachers.*

✓*The higher education institution has to show motivation of professional and personal development of teachers of EP, including encouragement to both integration of scientific activity and formation, and application of the innovation methods of teaching.*

✓*Important factor is active application of TS EP of information and communication technologies in educational process (For example, on-line of training, an e-portfolio, MOOS, etc.).*

✓*Important factor is development of the academic mobility within EP, involvement of the best foreign and domestic teachers.*

✓*Important factor is the involvement of TS EP into life of society (a role of TS in an education system, in development of science, the region, creation of the cultural environment, participation in exhibitions, creative competitions, programs of charity, etc.).*

Evidential part

The university has the objective and transparent personnel policy, including in EP coal mine, the professional competence of all staff of the university including hiring, professional growth and personnel development, providing.

Basic provisions of the personnel policy of the university are:

- Provision on qualification characteristics of positions of scientific and pedagogical workers of KarIU, QMS P 4-20-2018.
- The provision on regulations for TS and employees of KarIU, QMS P 4-21-2018; (http://kgiu.kz/qms/polozheniyaprovisions-erezheler/).

Criteria at employment of TS are established on the basis of the Provision on qualification characteristics of positions of scientific and pedagogical employees of the Karaganda state industrial university (https://kgiu.kz/qms/polozheniyaprovisions-erezheler/).

the activities for reception of employees, appointment to the post, dismissal, discharge from teaching activity of KarIU(with changes and additions as of 01.01.2020), the Labor Code of RK No. 414-V of 23.11.2015, the Charter a RSE on PHV "Karaganda State Industrial University", the Provision on qualification characteristics of positions of scientific and pedagogical workers of KarIU (QMS P4-20-2018), the Rule of competitive replacement of positions of the faculty and scientists of KarIU (QMS P4-19-2018) is guided by the Law of the Republic of Kazakhstan "About Education" of 27.07.2007 No. 319-III (with changes and additions as of 11.01.2020), the Law of the Republic of Kazakhstan "About Science" No. 407-IV of 18.02.2011 (with changes as of 28.10.2019), the Law of the Republic of Kazakhstan "About Anti-corruption" No. 410-Vot 18.11.2015.

A competition on replacement of positions of the faculty of KarIU is held according to the Provision "Rules of Competitive Replacement of Positions of the Faculty and Scientists of the Karaganda State Industrial University" of http://kgiu.kz/qms/polozheniyaprovisions-erezheler/).

The announcement of competitive replacement of vacancies is published in the periodic printing editions distributed throughout the Republic of Kazakhstan, Internet resources, not less than for thirty calendar days before date of completion of documents acceptance and on the website of the kgiu.kz university.

Employee transfers (reception, transfer, dismissal, etc.) are made according to the Labor code of RK and other regulations, at respect for the principles of transparency, a meritocracy and nepotism, availability and an exception of the facts of corruption, for further development of the personnel policy of the university .

All possible reasons for leaving are registered in position of QMS P 4-21-2018 (http://kgiu.kz/qms/polozheniyaprovisions-erezheler/). Cancellation the termination of the employment contract is made out by the order of the rector.

TS is formed, proceeding from the needs for effective implementation of the educational program providing a possibility of the choice for students and also proceeding from the total amount of an academic load on one regular teacher and the contingent of students.

Selection and placement in KarIU is carried out on the basis of requirements analysis of educational programs in compliance of QMS StO II.7-01.01-2018 "Human resources management" by results of which the competition on replacement of vacancies is announced.

Qualification requirements concerning TS of educational programs are based on the following regulatory legal acts and other regulations:

- Law of RK "About Education" of July 27, 2007 N 319-III with changes and additions of 11.01.2020;
- Standard rules of organization activity of formation of the corresponding types (order of the Minister of Education and Science of RK No. 595 of October 30, 2018);
- QMS P 4-20 – 2018 the Provision on qualification characteristics of positions of scientific and pedagogical employees of the Karaganda state industrial university;
- Charter of the University.

table 21 the quantitative and qualitative list of teachers of the accredited EP is provided.

Table 21 – The structure of TS of the accredited departments as of 01.10.2020.

Rank	Quantity			
	TM&T	METAL FORMING	MIME	CTandE
Doctor of science	-	-	2	1
Candidate of science	6	3	5	5
Doctor of PhD	1	2	3	1
Master	1	3	3	3
Without degree	3	1	-	
Degree level, %	66.7%	55.5%	76%	70%
including:				
Professors, people (%):	1 (9.1%)	0	5 (45.5%)	1 (10%)
The associated professors, the people (%):	0	0	0	1 (10%)
Associate professors, people (%):	3 (27.3%)	3 (33.3%)	1 (9.1%)	4 (40%)
Acting associate professors, people (%):	2 (18.2%)	1 (11.1%)	0	0
Senior teachers, people (%):	3 (27.3%)	5 (55.5%)	3 (27.3%)	2 (20%)
Teachers, people (%):	2 (18.2%)	0	2 (18.2%)	3 (30%)
Part-time workers, people (%)	2 (18.2%)	1 (11.1%)	9 (81.9%)	0
Average age of TS on department, years	55	43.9	49.3	49.6
In total the person in staff of department	**11**	**9**	**11**	**10**

Conditions for work of TS. The management of EP realizes responsibility for the workers and provides for them favorable conditions for work. Within EP the head of the department is responsible for workers. Understanding of responsibility for workers is enshrined in the provision of QMS P4-21-2018 where it is defined concepts of responsibility for workers and functions of the management of EP are stated (https://kgiu.kz/qms/polozheniyaprovisions-erezheler/).

the university for TS and employees favorable conditions for work are created that is expressed in the corresponding equipment of jobs at departments and offices with respect for sanitary standards and requirements, ensuring educational and working process with necessary hardware of new generation and also participation in the solution of a number of social problems of TS – a discount to employees and their children for training, rendering financial support in difficult life situations, etc.

The concept of favorable conditions for work within educational programs consists in

granting TS of all necessary resources for ensuring successful teaching performance: personal computers with availability of necessary programs, laboratories, scientific and methodical literature, library stock and free Internet access. Within EP the periodic inspection of the equipment, monitoring of laboratories for the purpose of creation of safe working conditions of teachers and employees is made.

Calculation of an academic load for academic year is performed by department according to the working educational plan of specialty and the contingent of students. Distribution of an academic load is made taking into account qualification of teachers. Lecture classes are given by professors, associate professors, doctors of PhD and the senior teachers. The academic load of teachers is defined according to the list of disciplines of EP, the contingent of students, forms and types of classes. The plan and the actual performance of loading are fixed in the individual plan of each teacher, in annual reports of TS. Differentiation of loading is carried out according to posts.

The annual volume of study of TS on departments is established by the academic council, proceeding from the approved standard for academic year, staff of TS and taking into account need of performance of all types of the study following from curricula.

Distribution of an academic load is carried out taking into account professionalism, experience and taking into account orientation on specializations. Average academic load of TS of higher education institution of 800-820 classroom hours.

The analysis of qualitative indexes of the teachers performing the accredited EP showed the sufficient level of an degree level that allows to perform successfully educational activity on all education levels. Heads of EP pay attention to rejuvenation of personnel. Updating of faculty members by young shots from among young teachers with academic degrees is observed.

For the reporting period of TS of the departments which are releasing the accredited EP were replenished with young PhD (G.E. Akhmetova. – OMD department, E.A. Panin. – OMD department, V.A. Kunayev. – TM&T department, Arbuz G. C. – CTandE department, I.E. Volokitina. – OMD department, A.V. Volokitin – OMD department). In target doctoral studies on the accredited EP 5 people – departments "OMD", " CTandE" study. In 2020 the teacher of TM&T department S. Habidolda came to target doctoral studies. All young teachers of department annually are trained to teaching skill .

System of stimulation of TS. Creation of conditions of personal development of teachers is promoted by a package of measures of social support. The trade-union committee of the university renders financial support according to paragraphs of the Collective agreement of KarIU to employeesanniversaries, for treatment, performing transactions, sanatorium treatment, etc. The hostel at availability is provided for TS and employees in it. Needs of workers are defined by means of questioning. (https://www.survio.com/survey/w/F5N3Y3H9K4Z9C3N3Y).

The efficiency of financial motivation of teachers and employees is defined by quality of work of TS and employees and is provided due to economy of own means of the university. The system of financial motivation existing in higher education institution includes:

- one-time awarding (rewarding) the caused a stir workers (the moral factors characterizing conscientious attitude of the worker to work, his initiative, creative approach to business, etc.)
- the awarding dated for national, public and professional holidays;
- remuneration following the results of work in a year (taking into account results of work of the worker and (or) length of service).

According to the decision of the Academic Council of costs of TS at execution of requests for an invention the university completely covers financial expenses.

The provision on a grant of the rector provided a discount for training of children and members of families of staff of higher education institution and also training in a magistracy of the employee of higher education institution is supported.

The system of recognitions and awards connected with results of work and social activity of workers belongs to non-financial motivation of TS. The system of awards includes corporate awards and distinctions of higher education institution and also the state and departmental awards.

*Research of TS.*2015-2020 TS of the TM&T, Metal Forming, MIME and CTandE departments which are releasing the accredited EP took part in performance of the research financed from the government budget:

1) Development and a research of the innovation technology of hot rolling for receiving a high-quality rod iron at the minimum material and power inputs – Metal forming department, 54,266,666 tenge, contract No. 259ot 04.02.2014 with MES RK ;

2) Development of the system of automatic control and complex protection of energy saving electromagnetic lifting installation – TM&T department, 13,511,000 tenge, contract No. 0115PK00975 of 6.10.2017, MES RK;

3) Development of foundry and deformation technology of receiving composite materials on the basis of an aluminum matrix with use of carbon-bearing ultradispersed raw materials is Metal forming department, 11 million tenge, contract No. 536 of 07.04.2015 with MES RK;

4) Development of scientifically based bases of management of forming of a cross profile and planeness of thin strips when rolling on broadband mills for expansion of the rolled range – Metal forming department, 17,500,000 tenge, the contract No. 6-091 of 15.08.2017 with the Lipetsk state technical university;

By orders of the enterprises research and development was conducted:

1) Development of the production technology of a range of wire products in the conditions of LLC "Kaz-Metiz" (by request of LLC "Kaz-Metiz") is Metal forming department, 180,000 tenge, contract No. 14/06-1 of 14.06.2017;

2) Development of technology of receiving the modified coke-chemical pitch from smolosoderzhashchy waste (by request of LLC "KUAN-INVEST") is CTandE department, 3 million tenge. contract No. 06/09-18 of 28.09.2018;

4) Approbation of technology of smelting of technical silicon with use of the bricketed mix on the basis of microsilicon dioxide and eliminations of carbonaceous reducer (by request of LLC "Tau-Ken Temir") – MiM department, 10 million tenge, contract No. 276611/2019/1 of 24.04.2019.

For the considered period at departments initiative *researches were also carried out:*

1) Development of a technique of a research and design of technological machines and the transport equipment with application of modern computer systems of the engineering analysis – TM&T department;

2) A research of properties and structure of nepreryvnolity metal for the purpose of development of recommendations about increase in its quality – Metal forming department; (01.01.2017-30.12.2018, registration 23.04.2018 No. 0118RKI0230).

3) Improvement of technological process of enrichment of coal for coking; CTandE department (01.01.2017-30.12.2018, registration 23.04.2018 No. 0118RKI0235).

4) Determination of parameters of a processing line for receiving road-building materials from industrial wastes is TM&T department.

TS personal computer. The higher education institution gives opportunities of career development and professional development of TS EP. Now developing the skills of pedagogical shots at the university is performed in the following directions:

- skills development in structural units of other higher education institutions of MES RK having the state accreditation, the scientific institutions or the organizations having the license for the right of conducting educational activity in the sphere of additional education;
- training within multilateral cooperation of KarIU the leading industrial enterprises and scientific research institute;
- training at the internal rates and seminars of skills development (organized based on KarIU).

By results of scientific research by teachers scientific articles and reports are regularly published in various periodicals and works of the international and republican conferences. During 2015-2020 the faculty of departments published more than 300 articles and theses of reports in various scientific publications and collections of works. For the reporting period the teachers of the departments which are releasing the accredited EP registered more than 10 intellectual property items. Statistical data on printing activity of TS of departments of the accredited EP are provided in table 22.

Table 22 - Scientific publications TS of departments of the accredited EP for 2015-2020 .

	Publications	**2016**	**2017**	**2018**	**2019**	**2020**
TM&T department	Publications: a nonzero impakt-factor, etc.					
	WoS, Scopus	21	1		2	1
	RSCI	4				
	KKSON	2	2		3	2
	- magazines of the university and dr RK editions	15	18	31	37	8
	Patents	5	7	1	6	4
	Textbooks, manuals	7	4	3	3	2
	Monographs			2		
Metal forming department	**Publications**	**2016**	**2017**	**2018**	**2019**	**2020**
	Publications: a nonzero impakt-factor, etc.					
	WoS, Scopus	5	6	1	6	3
	RSCI	2	2	2		1
	KKSON	1	4	4	3	5
	- magazines of the university and dr RK editions	3	5	4	3	3
	Patents	1	2	1	5	5
	Textbooks, manuals	2	1	2	2	1
	Monographs	1	4	1	1	2
MIME department	**Publications**	**2016**	**2017**	**2018**	**2019**	**2020**
	Publications: a nonzero impakt-factor, etc.					
	WoS, Scopus	5	3	2	4	5
	RSCI	3		2	1	
	KKSON			1		12
	- magazines of the university and dr RK editions	11	21	12	26	34
	Patents	3	1		1	3
	Textbooks, manuals	25 (from them 7 el. grant)		23	14 (from them 3 el. grant)	17 (from them 3 el. grant)
	Monographs			1		
CTandE department	**Publications**	**2016**	**2017**	**2018**	**2019**	**2020**
	Publications: a nonzero impakt-factor, etc.					
	WoS, Scopus	5	1	2	4	2
	RSCI	9	5	2	4	
	KKSON	6	3		3	6
	- magazines of the university and dr RK editions	13	6	17	23	17
	Patents	5		2	4	5

	Textbooks, manuals	5	7	3	3	6
	Monographs	1	1		1	4

KarIU creates necessary conditions for training, retraining and developing the skills of workers. The university organizes advanced training courses, training for TS. Terms of training are established according to the annual plan of advanced training courses and training. TS improves skills at the RK universities, the leading foreign universities and the organizations. The management of the university finances developing the skills of TS in whole or in part.

Qualification requirements to foreign and domestic TS within the academic mobility are defined in the provision of QMS P4-2-2018 (https://kgiu.kz/qms/polozheniyaprovisions-erezheler/). Foreign teachers can be invited in the University for a period of up to 1 academic year for scientific work and lecturing within program implementation of the academic mobility.

The decision on the invitation of the foreign teacher or the employee within program implementation of the academic mobility accepts DNiI and VHI of the university in coordination with faculties and departments in the presence of the documents submitted to the provision on the academic mobility of QMS P4-24-2018 (https://kgiu.kz/qms/polozheniyaprovisions-erezheler/). Foreign teacherscan be invited in the University for a period of up to 1 academic year for scientific work and lecturing within program implementation of the academic mobility. At the university, foreign teachers from the foreign and neighboring countries periodically give lectures. The following foreign TS took part in realization of the accredited EP:

- EP 6B07108 "Forging and stamping production in mechanical engineering" - 2016, d.t.s. Alexander Maksimovich Zolotov, professor of Technology and Researches of Materials department, FGAOOU HE Sankt-Peterburg the polytechnical university, Institute of metallurgy, mechanical engineering and transport, the Russian Federation, disciplines: Technology of plastic processing of metals;

- EP 6B07108 "Forging and stamping production in mechanical engineering" - 2016, PhD Krzysztof Naplokho, the Wroclaw technological university Republic of Poland, discipline "Foundry became also alloys";

- for all EP - 2018, professor of the Lublin technological university Marek Miloš (Lublin, Poland). The visit purpose – lecturing to students of the university. Including students of specialty "Mechanical engineering" were listeners of these lectures of foreign professor;

- EP 6B07108 "Forging and stamping production in mechanical engineering" - 2018, PhD, professor of Riad Taha Mutleq Al-Kasasbeh, the place of the main work: Al-Balqa Applied University (BAU) Jordan, the taught discipline: "Digital electronics" (Digital electronic);

- EP 6B07108 "Forging and stamping production in mechanical engineering" - 2018, PhD, professor of Marek Milosz, Lublin University of Technology, Poland, the taught disciplines of "Human-Computer Interaction", "Preparation of Scientific Publications".

Analytical part

High level of professional competence of teachers provides representative office of the university in various actions of MES RK, akimats of regional, city and regional value, NurOtan party, Assembly of the people of Kazakhstan, cultural institutions, etc. Also the efficiency and the quality of teaching estimated by carrying out open studies, mutually visit of classes acts as confirmation of level of competence of teachers. However, *the commission of EEC noted insufficient* activity of application of TS of information and communication technologies in educational process and the actual lack of use of programs relevant today, such as e-portfolio, MOOS, etc.

Mobility of TS. Within the international activity in higher education institution the program of the academic mobility assuming training and scientific activity of teachers of the university in partner higher educational institutions in Kazakhstan or abroad and also training of teachers of partner higher education institutions in KarIU, according to the basic principles of the Bologna

declaration functions. Rules and recommendations about the organization of the academic mobility of teachers and students are provided in the Provision on the academic mobility (http://kgiu.kz/scintactivity/mezhdunarodnoe-sotrudnichestvo-i-akademicheskaya-mobilnost-international-cooperation-and-academic-mobility/akademicheskaya-mobilnost/). The Karaganda industrial universityconducts active work in the field of expansion of the international contacts. Stable relations on carrying out scientific and study with the leading higher education institutions of the CIS which list is provided on the website (https://kgiu.kz/scintactivity/mezhdunarodnoe-sotrudnichestvo-i-akademicheskaya-mobilnost-international-cooperation-and-academic-mobility/parcontracts/) are established.

The academic mobility of TS is generally provided by means of the exchange Erasmus+ KA1 programs and memorandums with higher education institutions of Kazakhstan. For example, in 2018 3 teachers of Technological Machines and Transport department" passed a training according to the ERASMUS+ programUniversitat Politecnica de Catalunya (Spain) .

However, the commission of EEC notes that at departments of the accredited EP "availability and dynamics of development or the development plan *for the academic* mobility of TS isn't traced, there is no information on availability or the plan *of involvement* of the best foreign and domestic teachers for carrying out joint researches in a section of each accredited EP. The teachers implementing the accredited educational programs poorly realize a possibility of exchange of experience in higher education institutions of Kazakhstan though the high level of their professional competence is demanded and will be effective in other higher education institutions. In the course of holding an interview with TS the answer about the nonparticipation reasons was given, it is influence of family circumstances, weak level of knowledge of foreign languages, lack of financing.

Higher education institution, konsortsialny agreements on mutually beneficial cooperation with the higher education institutions having laboratories of an engineering profile on the base work:

- RGKP "Atyrau Institute of Oil and Gas";
- RGKP "Karaganda State University of Buketov";
- RGKP "Karaganda State Technical University";
- Kazakh national technical university of K. Satpayev.

The commission of EEC notes the good potential of participation of TS of the accredited departments together with the partner enterprises in international contests and grant programs which, unfortunately, at the moment isn't implemented.

Strengths / the best practice on the accredited EP aren't revealed.

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To the management of higher education institution to develop regulatory requirements on application of TS of information and communicative technologies in educational process, including use of MOOS, an e-portfolio, etc., to develop and provide realization of developing the skills of TS on the accredited EP in the field of use of information and communication technologies in educational process.

2. According to the development strategy of the university for 2017-2021 to the management of EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" to include indicative indicators in development plans for educational programs and in work plans of departments and to realize point: "participation of TS in the program "external and internal academic mobility", "participation in international contests, grant programs", "invitation of the Kazakhstan and foreign scientists, public and political figures".

Conclusions of EEC:

According to the Faculty and Efficiency of Teaching standard 12 criteria from which 11 - have a satisfactory position1 are disclosed - assumes improvement.

6.8. Educational Resources and Systems of Support of Students standard

✓ *The management of EP has to show sufficiency of material resources and infrastructure.*

✓ *The management of EP has to show availability of procedures of support of various groups of students, including informing and consultation.*

✓ *The management of EP has to show compliance of information resources to specifics of EP, including compliance:*

- *technological support of students and TS according to educational programs (for example, online training, modeling, databases, programs of the analysis of data);*
- *library resources, including fund of educational, methodical and scientific literature for the general education, basic and main subjects on paper and electronic media, periodicals, access to scientific databases;*
- *examination of results of research, final works, theses on plagiarism;*
- *access to educational Internet resources;*
- *functioning of WI-FI in the territory of the organization of education.*

✓ *The higher education institution has to aspire to that the educational equipment and software used for development of educational programs were similar with used in the relevant industries.*

✓ *The higher education institution has to provide compliance to safety requirements in training process.*

✓ *The higher education institution has to seek for accounting of needs of various groups of students for EP coal mine (the adults working, foreign students and also students with limited opportunities).*

Evidential part

Requirement of the University for material resources is defined by design capacity of higher education institution. Design capacity of the Karaganda state industrial university – 4500 students.

The needs for information and material resources are defined with Standard rules of organization activity of formation of the corresponding types (order of the Minister of Education and Science of RK of October 30, 2018 No. 595). All buildings of higher education institution conform to Sanitary and epidemiologic requirements to the objects of education approved by the Order of the Minister of Health of the Republic of Kazakhstan of August 16, 2017 No. 611. Hostels according to Position of QMS "About the Dormitory of the Karaganda State Industrial University" are provided to students and TS of the university.

The university possesses the sufficient material, information and library resources used for the organization of training process and education of students.

The university has 6 educational and laboratory cases with a total area of 44.01 thousand sq.m. where educational audiences, specialized offices and laboratories, the museum of the university, the Center of information technologies and telecommunications, 20 computer classes, including the CISCO center and the information and communication center "SOTSBI" are placed. The sports complex of the university, with a total area of 2300 sq.m., includes 6 game halls and 2 open areas.

The park of modern computer facilities makes more than 400 units. Modernization of the computer park is regularly conducted. The volume of annual expenses on acquisition of computers and other means of information training grows.

Constantly application of the licensed packages of application computer programs extends. For students of all specialties all types of studies, including settlement, course both theses and projects are supported by modern software packages - Mathcad, Matlab, Photoshop, CorelDraw, KOMPAS, DEFORM, etc. For the software of educational process the following products of the licensed software of Autodesk are used: AutoCAD, AutoCAD Civil 3D, AutoCAD Mecanical, AutoCAD RastarDesign, Autodesk 3ds Max, Autodesk Alias Automotive, Autodesk Alias Design, Autodesk Invertor Pro, Autodesk Showcase, Autodesk

Simulation Multiphysics, 1C – accounts department which are established at departments of KarIU.

The university there is a free Internet connection for students, teachers and employees, the zones Wi-fi, the website of the university - http://kgiu.kz/ works.

One of the main advantages of the university is availability of the modern educational and scientific laboratory base including the only trial sites in RK with semi-industrial units and installations reproducing the closed cycle of metallurgical processes and processing of metals pressure.

Based on the university the Laboratory of the engineering profile "Electronic Microscopy and Nanotechnologies" works. In 2018 the 3D laboratory - engineering and the information and communication center "SOTSBI" was open.

each academic building of the university there is a system of video surveillance and an electronic gating system with two types of access, on an electronic key and on a fingerprint. The movement of students, TS and staff of the university through a turnstile is fixed in the separate database.

The university has 2 hostels on 890 beds. Accommodation in the hostel for students is free.

Within introduction of inclusive education, the Actions plan on the level of availability to persons with special educational needs for 2019-2021 on the basis of which it is executed is developed:

– ramp device;
– device of contrast marking of the first and last steps of ladder marches;
– the device of hand-rail for physically disabled people in a bathroom;
– the device of hand-rail on ladder marches the increased and rounded off departure;
– the device of a tactile tile for orientation in the movement of visually impaired people;
– the room equipment under library with division of zones for pupils with limited opportunities;
– installation in audiences of a light signaling device of a call.

The TM&T, Metal Forming, MIME and CTandE departments which are releasing the accredited EP have sufficient material and technical resources which allow completely will provide with a laboratory workshop all studied disciplines. At departments there are laboratory and research stands as leading producer companies, and TS made by forces and students.

Information on laboratory base for realization of EP on departments .

The Technological Machines and Transport department which is releasing EP 6B07107 - TEI, 6B07110 - HTCRM. TM&T department has the material and technical resources (classroom fund, computer classes, laboratories, instrument providing, share materials) meeting the operating sanitary standards and providing carrying out all types of theoretical and practical preparation provided by the educational plan and also effective implementation research and experimental research of the undergraduate.

The total area of educational and laboratory premises of TM&T department is 600 sq.m. Are a part of these rooms: educational laboratories, teaching, educational audiences, computer class, metalwork workshop.

Specialized laboratories of department are equipped with the laboratory stands and the equipments necessary for realization of goals of EP 6B07107 - TEI, 6B07110 - HTCRM:

1) Laboratory of hoisting-and-transport and construction machines - audience of N-003.

2) Laboratory of metallurgical machines and equipment, hydraulic actuator and technology of mechanical engineering - audience of IV-104.

3) Laboratory of repair, installation and operation of machines and equipment - audience of IV-102.

4) Laboratory of computer graphics and CAD - audience of N-110.

5) Specialized audience of technological machines – audience of N-006.

6) The 3D laboratory of Engineering is audience of N-113.

7) The laboratory of the transport equipment is the Building Blyukhera, 3.

laboratories of department the operating stands are installed: hoisting-and-transport cars (bridge and console cranes; tape conveyor); crushing and sorting equipment (shchekovy, conical, roll and molotkovy crushers, vibration roar); technological machines (mixers, feeders, qualifier; vibrosite); metallurgical equipment (converter, rolling cage); hydraulic drive; metal-cutting machines, etc. In 2018 in KarIU laboratory "3D engineering" which is equipped with modern oborudovaniye and devices, such as 3D printer, 3D scanner, laser and milling machines with the CNC is created. The main objective of new laboratory is the research and studying perspective technologies of digital production, such as 3D modeling, 3D printing, reverse engineering, design of technology and production of products on CNC machines.

The Metal Forming department is placed in the main building of the university, in the new case and building "A". Are a part of premises of department: educational and research laboratories, 3 educational audiences, a computer class, 9 offices with computers, 3 workshops, 3 warehouse rooms, archive of department.

the main building of the university are: 6 offices with computers, mechanical workshop, 2 educational audiences, a computer class, teaching and warehouse rooms, archive of department and also an office for undergraduates.

The laboratory of the main building is adapted for mechanical material tests and is used in educational process when performing laboratory works on resistance of materials. In mechanical workshop of the main building there are tool-grinding and drilling machines, table vises. In it small repair work is performed. Also it is used as a warehouse. In rolling laboratory there are operating laboratory mills – models of real mills: slabbing, mill duo, mill quart. On them the rolling of lead preparations modeling conditions of hot rolling of carbon steel and also preparations from aluminum, copper at an actual temperature of rolling of these materials is possible.

Laboratory mills are equipped with devices, tensometric sensors for measurement of kinematic parameters, efforts, the rolling moments. By means of photosensitive oscillographs, tensometric amplifiers the record of these and other parameters on photographic paper is possible. 3 more laboratory mills are placed in laboratory of the new case: the universal mill (reconstructed under Duo), profilegibochny and a mill - Duo.

At the disposal of department there is a semi-industrial bar-rolling mill placed in laboratory building "B" of the university. He allows to conduct researches and laboratory works in the field of calibration of rolling rolls and the production technology of preparations and high-quality rolled metal.

Rolling laboratory (A-100) there is also semi-industrial drawing mill, a mill of cross and screw rolling, a one-rack-mount hydraulic press and heating furnaces. Rolling mills are provided with sets of rolling rolls of various design.

Forge and press laboratory of department, hydraulic presses are established by effort of 125 and 625 tons. The listed equipment and the corresponding forge and press tool allows to investigate various forge and forming transactions with use both aluminum and lead, and steel preparations. Since 2017 transported to building B (the site "Metal forming") the pneumatic forging hammer with MPCh of 50 kg of M-4127 model is actively used both in research, and as demonstration of production of a full metallurgical cycle.

Laboratories there are original devices manufactured in the course of performance of scientific research by students, undergraduates and graduate students and intended for studying new types of Metal Forming: briskly, realizing deformation with shift; the tool for the draft of preparations with floating baizes; devices for the draft of preparations with torsion, etc.

All modern equipment at OMD department is used not only in educational process when carrying out laboratory works on disciplines: "Technology of drawing production", "Technology of hot rolling", "Technology of cold rolling", "Technology of forging", "Technology of cold stamping", "the Theory a Metal forming", "Technological properties of

metals", etc. when training bachelors of specialties: "Technology of processing of materials pressure", "Mechanical engineering" and other specialties of the university.

Also for implementation of educational and research process of training of bachelors on EP "Mechanical engineering" at the University there is a laboratory of the engineering profile "Electronic Microscopy and Nanotechnologies" equipped with the equipment corresponding to a profile.

Metallurgy and Materials Science department.

For realization of the accredited EP 6B07109 "FTME"implementation of educational process and vocational training of students at Metallurgy and Materials Science department there are the 7th subject audiences; 2 laboratories, "Laboratorny building "B". For improvement of quality and efficiency of scientific research at department the laboratory of the engineering profile "Electronic Microscopy and Nanotechnologies" (LEP of "EMiN") which functions more than 200 million tenge are spent for creation. Possibilities of laboratory:

- the organization and carrying out basic, basic and applied scientific research for a profile of laboratory according to the approved plan;
- realization of project developments and contracted works on subject of LIP of "EMiN";
- organization of experiments for implementation of modern management technologies in educational process by results of scientific works;
- organization and realization of scientific research in an initiative order and also according to grant support, the budgetary and off-budget contracts.

At Chemical Technologies and Ecology department the laboratory on labor protection and safety measures, emergency and first aid functions. The commissions of EEC were provided information stands in the directions of preparation of the accredited EP 6B11201 "IE&FS". A practical training and research works are also carried out based on branch of department - the Karaganda regional branch of Republican research institute on labor protection. At department there are laboratory stands for carrying out the analysis of air and water, also the department has necessary quantity of the means of individual and collective protection necessary for carrying out a practical training.

All laboratories of departments are passported, provided with means of fire extinguishing. For students and personnel are held primary and repeated personnel safety notification during the work to laboratories, passing of instructing is fixed in the special magazine. In laboratories the control of a condition of communications and the equipment is regularly carried out. All premises of laboratories have natural and artificial lighting.

For the last 5 years it was acquired materials and the equipment for realization of the accredited *EP for the amount of 134,858,964.1 tenge*, from them: 2015 – 16,073,452.39 tenge, 2016 – 18,178,308.12 tenge, 2017 – 14,750,228 tenge, 2018 - 55,580,712 tenge, 2019 – 30,276,263 tenge, including at the expense of the financed researches, grant researches for the total amount of 105,988,000 tenge.

Web portal, Wi-Fi. The web portal of the university contains information on sections: about the university, the entrant 2020, education, science and the international activity, faculties, educational work, smk. On the website of department it is possible to obtain information: about department, the structure of department, the taught disciplines, educational and methodical activity, scientific activity, material and technical resources, contacts of the management.

On the page of the portal the updated KED, MEP, etc. are attached in open access (https://kgiu.kz/education/).Information in tabs is relevant.

In all buildings of the university there are points of access of Wi-fi with free connection.

Internet access is provided with two points:

1. the TTK fiber-optic linethe allocated IP address at speeds: up to 26 Mbps entering and 26 Mbps outgoing;
2. the send-receive station of satellite communication PPENT (only for the ENT point).

Internet access in hostel No. 1 is provided with phone line of TTK ADSL2. In academic buildings "Main", "New" and "Building A" functions 8 points of wireless distribution of the Internet of Wi-fi. In hostel No. 1 1 point of distribution of the Internet of Wi-fi functions. Now in the central server 3 servers which are used for ensuring work of the educational DALLES and PLATONUS portals, control the Internet of traffic and replication of the valuable data function.

Library stock. The university has modern library and the reading room in which fund there are more than 260 thousand copies of educational, educational and methodical, scientific literature on Kazakh, Russian and foreign languages. More than 30 names of newspapers and magazines are annually written out. The library of the university is in the main academic building of higher education institution. In the hall of the periodical press which is located in the subscription there are 12 computerized seats, with a possibility of Internet connection and access to electronic resources of library. The reading room is calculated on 42 reader's places. The fund of the reading room is located in 2 tiers in a systematic order that provides completeness of disclosure of funds and their availability to readers.

For convenience of readers on the subscription and in the reading room there is an access of Wi-fi.

For 01.01.2020 the fund of Scientific library of the university makes 274,556 copies of units of storage. From them in a state language of-102,999 copies, in English of-1163 pieces. Including on electronic media of-55,975 pieces. The area of library is 1219 sq.m.

The library of the university has alphabetic, systematic, alphabetic and office and also electronic catalogs. On computers of library the specialized library IRBIS-64 program which systematically is replenished is installed.

The library in the work is closely connected with the leading libraries of the area. These are scientific libraries of KarGTU, the HAG, regional scientific library of Gogol.

library, permanent book exhibitions are organized: "The higher education in Kazakhstan", "For the aid to the student", "Literature novelties", "New literature in English", "Works of teachers of the university", "Nursultan Nazarbayev: a portrait of the person and politician", "Independence tops" and many others which are systematically updated. All book exhibitions are issued in 3 languages. In order that teachers and students directly got acquainted with new literature are organized: Open viewings books, Days of information, Days of the specialist. In process of receipt of new literature the bulletins "Literature Novelties", reviews of scientific and technical magazines, photo reports of novelties of literature of https://kgiu.kz/scintactivity/library-2/ become.

Literature is completed by means of purchase, viewing "Price lists" of publishing houses and book-selling organizations, due to replenishment of textbooks and study guides of teachers of KarIU published from means of the university. Partially NB fund is replenished at the expense of the publishing center of Association of universityS of RK. Besides, the university in 2017-2018 academic year received gratuitously 1485 copies (17 names) of books from public fund for the 100 best textbooks of the world in Kazakh program and in 2018-2019 academic year of 1260 copies (30 names).

The digitized library which includes a large number of electronic resources of electronic copies of statistical editions, scientific research, articles from scientific magazines, materials on a learning of foreign languages develops.

Table 23 – Data on library resources of higher education institution, in a section of the accredited EP as of October 1, 2020

№	Name of an indicator	Indicator
1	Total number of seats *in library*, including computer classes	240 places
2	Total number of copies of educational, educational and methodical and scientific literature in library for the studying accredited EP for the last 10 years	70092/44701

	EP 6B07107 "TEI" (TMO) / including on kaz.yaz EP 6B07108 "FSPME" (MS)/, including on kaz.yaz EP 6B07109 "FTME" (MS) / including on kaz.yaz EP 6B07110 "HTCRM" (TTTIT) / including on kaz.yaz EP 6B11201 "IE&FS" (HS&EP) / including on kaz.yaz	19476/13602 pieces. 5704 / 3292 pieces. 3561 / 1992 pieces. 23967/15985 pieces. 17384/9830 pieces.
3	The means spent 2019-2020 for acquisition of traditional periodicals on all accredited EP From them the means spent for the following EP: - 6B07107 "TEI" (TMO) - - 6B07108 "FSPME" (MS) - - 6B07109 "FTME" (MS) - - 6B07110 "HTCRM" (TTTIT) - - 6B11201 "IE&FS" (HS&EP) -	797,402 tenge 209420 tenge 162592 tenge 89560 tenge 159,425 tenge 176405 tenge
4	Knigoobespechennost on 1 student of the brought contingent of EP - 6B07107 "TEI" (TMO) – - 6B07108 "FSPME" (MS) – - 6B07109 "FTME" (MS) – - 6B07110 "HTCRM" (TTTIT) – - 6B11201 "IE&FS" (HS&EP) –	 147.5 units 200 units 159 units 150.7 units 153.8 units

Table 24 - Information of library stock on the TS editions (textbook, manuals, monographs, UMP) usededucational process in EP coal mine, training languages

EP	Total number of copies	On training languages		
		state. language	Russian yaz	inostr. languages
6B07107 "TEI"	14560	6648	7828	84
6B07108 "FSPME"	276325	104563	170593	1168
6B07109 "FTME"	83	20	60	3
6B07110 HTCRM	15489	6975	8453	61
6B11201 "IE&FS"	2357	924	1433	64
Total:	308814	119130	188367	1380

Readers of library can use free of charge electronic resources of Republican Interuniversity electronic library. The scientific library of KarIU has access to such international information resources as, Scopus, Web of Science that considerably expands the range of use of electronic resources.

Branches of department. The studying accredited EP have a possibility of obtaining practical skills on branches of departments of the partner organizations:

Table 25 - The organization of educational process and research activity on branches of departments of the partner enterprises.

EP	Organization	The mortgaged modules, disciplines, uch. year, rate, semester
6B07107 "TEI"	LLC "Gordorservice-T", contract of 19.09.2019	2020-2021 uch. year Repair of technological machines, the 3rd rate, the 6th semester
6B07108 "FSPME"	AO "ArselorMittal Temirtau",	2020-2021 uch. year

	contract of 07.11.2016	Theory Metal forming, the 2nd rate, the 3rd semester Technological processes of machine-building production, the 3rd rate, the 6th semester
6B07109 "FTME"	LLC "Kurylysmet"	Practice, the 3rd rate, the 6th semester; participation SAC
6B07110 HTCRM	LLC "Gordorservice-T", contract of 19.09.2019	Repair of the transport equipment, 2020-2021 uch. year, the 3rd rate, the 6th semester
6B11201 "IE&FS"	The Karaganda regional branch of Republican research institute on labor protection	Practice, the 3rd rate, the 6th semester; participation SAC

Professional practice. The total amount of professional practice for specialties of a bachelor degree is not less than 6 credits. All types of professional practice for specialties of a bachelor degree are implemented according to the standard and working educational plan in the terms determined by the academic calendar. It is possible to study the provision on practice and also the calendar of passing and bases the practician on the website of the University: https://kgiu.kz/centr-kareracenter-careerkarera-ortali%d2%93i/centr-kareracenter-careerkarera-ortali%d2%93i/praktikapracticepraktika. Students of the university do trainingbased on such companies as AO "ArselorMittal Temirtau", AO "TEMK", LLC "Kurylysmet", etc. (https://kgiu.kz/centr-kareracenter-careerkarera-ortali%d2%93i/centr-kareracenter-careerkarera-ortali%d2%93i/praktikapracticepraktika/polozhenie-o-praktike/) where they can put into practice knowledge and skills concerning the equipment and software received during laboratory works.

For passing professional the practician of students are available the cooperation agreement (contracts are provided to experts of EEC), on which data are provided in table 26.

Table 26 - The organization of passing professional the practician of the studying accredited EP.

EP	Organization, contract No., duration of the agreement
6B07107 "TEI"	AO "ArselorMittal Temirtau", contract of 07.11.2016, LLC "Tekhol T", contract No. 2019/24 of 22.12.2016, LLC "Tekeliysky gorno-pererabatyvayushchy komplex", contract No. 2488/2019 of 27.05.2019, LLC "Prommashkomplekt", memorandum of cooperation, LLC "Kurylysmet", contract No. 7/19 of 30.10.2019, LLC "Gordorservice-T", contract of 19.09.2019 ,
6B07108 "FSPME"	AO "ArselorMittal Temirtau", contract of 07.11.2016, "Tekeliysky mining and processing complex", contract No. 2488/2019 of 27.05.2019, LLC "Prommashkomplekt", memorandum of cooperation, LLC "Kurylysmet", contract No. 7/19 of 30.10.2019, LLC "KMK Trade Company", contract 2020/1 of 06.01.2020.
6B07109 "FTME"	AO "ArselorMittal Temirtau", contract of 07.11.2016, LLC "Tekhol T", contract No. 2019/24 of 22.12.2016, LLC "Tekeliysky gorno-pererabatyvayushchy komplex", contract No. 2488/2019 of 27.05.2019, LLC "Prommashkomplekt", memorandum of cooperation, LLC "Kurylysmet", contract No. 7/19 of 30.10.2019, LLC "KazEnergoUchet", contract No. 18 of 13.08.2016.
6B07110 HTCRM	AO "ArselorMittal Temirtau", contract of 07.11.2016, "Tekeliysky mining and processing complex", contract No. 2488/2019 of 27.05.2019, LLC "Prommashkomplekt", memorandum of cooperation, LLC "Kurylysmet", contract No. 7/19 of 30.10.2019, LLC "Gordorservice-T", contract of 19.09.2019
6B11201 "IE&FS"	AO "ArselorMittal Temirtau", the contract of 07.11.2016, "the

	Tekeliysky mining and processing complex", contract No. 2488/2019 of 27.05.2019, LLC "Prommashkomplekt", the memorandum of cooperation, the Karaganda regional branch of Republican research institute on labor protection

The provided contracts with the partner enterprises, online visit of bases the practician were confirmed by availability of a possibility of the choice of the place of passing professional the practician of students and all necessary conditions for obtaining professional competences.

Anti-plagiarism. Examination of results of research, final works, theses on plagiarism is made by means of the Antiplagiat system created by the Russian company AO "Antiplagiat" especially for higher educational institutions. (Contract No. 9-01-35/193 of 10.10.2019. Works till 2031). By results of the carried-out expertize the document which copy is stored at department is issued.

Analytical part

KarIU aspires to that the educational equipment and software used for development of educational programs were similar with used in the corresponding industries. At development of the accredited EP the students study methods of works in a CAD of "KOMPAS-3D" of the ASKON company who is used by more than 11,000 industrial enterprises and the project organizations in the CIS countries (https://ascon.ru/company/).

Experts of EEC note that the management of EP 6B07108 "Forging and stamping production in mechanical engineering" and EP 6B07109 "Foundry technologies in mechanical engineering" all necessary conditions for development of video lectures by the student, including on branches of departments and also a possibility of creation of the automated virtual laboratories with remote access for the organization have training online.

Also, after studying laboratory base of CTandE department, visit of base the practician, an interview with graduates, the commission of EEC I noted need of equipment of laboratory of higher education institution devices for carrying out practical and laboratory works on disciplines "Production sanitation and occupational health", "Methods and control devices of measurements", "Labor protection", "Safety measures bases", "The analysis of working conditions", "Certification of production facilities under the terms of work" the studying EP 6B11201 "IE&FS" for definition of temperature condition, noise, lighting, the thermal mode, dust content and gas contamination and other standard indicators for providing normal working conditions in production and also devices for carrying out ecological researches of water, air, the soil, etc.

University the fund of educational, methodical and scientific literature for the general education, basic and main subjects of educational programs on paper and electronic carriers is created; renewability of funds of literature according to the norms determined by qualification requirements when licensing. However, *the Commission of EEC notes* the insufficient level of work on the UML edition in English teachers, the realizing EP 6B07109 "Foundry technologies in mechanical engineering" (table 24).

Questioning of students showed positive data on questions of providing with training materials in training process (100%), financialadministration services of educational institution (91%), availability of services of health care (100%), level of availability of library resources (98.9%), the existing educational resources of higher education institution (96.6%).

Strengths / the best practice on the accredited EP aren't revealed.

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety:

1. To the management of higher education institution to develop the long-term plan for completion of specialized laboratories the modern equipment and the software similar with used in industries on a profile of the accredited EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS".

Additional recommendation of EEC for EP 6B11201 "Industrial, environmental and fire safety":

2. To the management of EP 6B11201 "Industrial, environmental and fire safety" (5B073100 "Health and safety and environment protection") to carry out the analysis of the available material resources regarding analogousness to the equipment and devices used in the relevant industries, to define the list of necessary devices and to submit the application for their acquisition.

Additional recommendation of EEC for EP 6B07109 "Foundry technologies in mechanical engineering":

3. To the management of EP 6B07109 "Foundry technologies in mechanical engineering" to include concrete indicators in the development plan for EP according to the publication of own editions in 3 languages.

Additional recommendation of EEC for EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering":

4. To the management of EP 6B07108 "Forging and stamping production in mechanical engineering" and EP 6B07109 "Foundry technologies in mechanical engineering" to include in the development plan for EP for 2020-2023 a number of actions for development and record of video lectures, to opening of virtual laboratories on an activity.

Conclusions of EEC:

According to the Educational Resources and Systems of Support of Students standard 10 criteria from which 10 - have a satisfactory position are disclosed.

6.9 Informing Public standard

✓ *Information published by higher education institution within EP has to be exact, objective, relevant and has to include:*

- *the implemented programs, with the indication of the expected results of training;*
- *information on a possibility of assignment of qualification on the termination EP;*
- *information on teaching, training, estimated procedures;*
- *data on lowest passing scores and the educational opportunities given to students;*
- *information on opportunities for employment of graduates.*

✓ *The management of EP has to use various methods of distribution of information, including media, information networks for informing the general public and interested persons.*

✓ *Informing the public has to provide support and explanation of national development programs of the country and the system of the higher and postgraduate education.*

✓ *The higher education institution has to publish on own web resource the audited financial statements, including in EP coal mine.*

✓ *The higher education institution has to show reflection on a web resource of information characterizing higher education institution in general and in a section of educational programs.*

✓ *Important factor is availability of adequate and objective information about TS EP, in a section of a personnel.*

✓ *Important factor is informing the public on cooperation and partner interaction within EP, including with the scientific/consulting organizations, business partners, social partners and the organizations of education.*

✓ *The higher education institution has to place information and references to external resources by results of procedures of external assessment.*

✓ *Important factor is participation of higher education institution and the realized EP in various procedures of external assessment.*

Evidential part

KarIU, purposeful work on informing the public informing the public on activity of the organization of education, conditions and features of realization of EP is carried out.

The publication order about activity of higher education institution is regulated by the internal document QMS P-4-27-2019 "The provision on informing the public".

Frequency of informing the public is defined by the Provision on informing the public.

The management of EP uses various methods of distribution of information, including media, information networks for informing the general public and interested persons. Instruments of informing are: Republican magazine "Vestnik Karagandinskogo Gosudarstvennogo Industrialnogo Universiteta"; "KarMIU studentteryn habarshysy" newspaper, website of the http://kgiu.kz/ university;social networks (https://www.facebook.com/profile.php?id=100022651051239, https://ok.ru/profile/579438130734, https://www.instagram.com/kgiu_kz/, https://www.youtube.com/channel/UCxgobaOnSnEzI78E4sb4xOA?view_as=subscriber); printedmaterials (brochures, booklets, bulletins etc.); reports; posters, stands; letters; thematic articles in media; press releases in media; media advertizing; polls; days of "Open doors"; excursions; seminars, conferences; exhibitions, fairs, expositions; an interview in media, on radio or television; presentations; personal contacts with concerned parties, etc.

Informing the public provides support and explanation of national development programs of the country and the system of the higher and postgraduate education. For example, on the website of KarIU the National program "Ruhani zhangyru" (https://kgiu.kz/ruxani-zha%D2%A3%D2%93iru/)the anti-corruption strategy of the Republic of Kazakhstan for 2015-2025 (https://kgiu.kz/abuniv/korrupciey/antikorrupcionnaya-strategiya-respubliki-kazaxstan-na-2015-2025-gody/) is explained. Also, the websitecontains references to MES RK'S resources the lighting development programs of a system of the higher and postgraduate education.

The audited financial statements are submitted at meetings of Scientific and Supervisory councils of KarIUare posted on the website of the https://drive.google.com/file/d/11BUcN9bm-4llWuJFAwVoOLw1fxPwWRAn/view university.

KarIU reflects in a web resource of information characterizing higher education institution in general and in a section of educational programs.

Official representative office of the university on the Internet is the website (https://kgiu.kz/). The principles of construction and structure of the information materials posted on the official information website of the university "The provision on the official site of a KSIU" which also regulates technology of its creation and functioning is defined by the internal document QMS P 4-26-2018. Official information on the main fields of activity of the university is posted on the website (educational, scientific, educational, public); about faculties, colleges, departments, laboratories, departments, the centers, departments and other divisions; about the news and events happening in the university. On the website information services, such as "News and announcements", "The blog by the rector", "The history of higher education institution", "A mission and the Strategy of higher education institution", "Faculties and other structural units of higher education institution are realized. The website contains references to significant information resources of the university, MES RK'S structures, full text electronic information systems and other resources, useful to educational and scientific process. Information is posted on the website on three languages: state – Kazakh, Russian and English.

Information published by higher education institution within EP is exact, objective, relevant and includes:

- the implemented programs, with the indication of the expected results of training (https://kgiu.kz/education/modulnie-obrazovatelnie-programmi/);
- information on a possibility of assignment of qualification on the termination EP (https://kgiu.kz/education/modulnie-obrazovatelnie-programmi);

- information on teaching, training, estimated procedures "Guide of the Student" (https://kgiu.kz/student/putevoditel-studenta-kgiu/;

https://kgiu.kz/education/sistema-ocenki-znaniy-studentovstudent-assessment-systemstudentterdi%d2%a3-bilimin-ba%d2%93alau-zh%d2%afyesi);

- data on lowest passing scores and the educational opportunities given to students (https://kgiu.kz/student/putevoditel-studenta-kgiu/; https://kgiu.kz/education/sistema-ocenki-znaniy-studentovstudent-assessment-systemstudentterdi%d2%a3-bilimin-ba%d2%93alau-zh%d2%afyesi);

- information on opportunities for employment of graduates (https://kgiu.kz/centr-kareracenter-careerkarera-ortali%d2%93i/centr-kareracenter-careerkarera-ortali%d2%93i/trudoustroystvoemploymenttrudoustroystvo).

The satisfaction of interested persons as the obtained information and in its completeness is investigated by carrying out questioning in the online mode (https://kgiu.kz/anketi-oprosniki). For example, in the questionnaire by determination of level of satisfaction of students of higher education institution on rendering support to them, results of training, on creation of conditions for personal development and education set questions: "As far as ensuring educational process with information maintenance satisfies you?", whether "You are provided with various information reference books (the guide, the academic calendar, catalogs of elective disciplines and another)", etc.

On the website of KarIU it is published adequate and objective information on TS EP, in a section of a personnel. Information on TS contains data on education, academic degrees and ranks, the taught disciplines, a contact information, etc.

KarIU informs the public on cooperation and partner interaction within EP, including with the scientific/consulting organizations, business partners, social partners and the organizations of education. For example, are given the list of the leading higher education institutions of the CIS and with which world are concluded the cooperation agreement (https://kgiu.kz/scintactivity/mezhdunarodnoe-sotrudnichestvo-i-akademicheskaya-mobilnost-international-cooperation-and-academic-mobility/parcontracts/), the list of the signed contractsmemorandums with the city-forming enterprises, representatives of large and medium business for practical training of students of the Karaganda state industrial university (https://kgiu.kz/centr-kareracenter-careerkarera-ortali%d2%93i/centr-kareracenter-careerkarera-ortali%d2%93i/praktikapracticepraktika/polozhenie-o-praktike/) in the website. Also, information the new facts of cooperation and interaction is published in a news feed of the website and social networks.

KarIUthe realized EP take part in the various procedures of external assessment which are carried out by various organizations, in particular National chamber of businessmen of the Republic of Kazakhstan of Atameken, Independent quality assurance agency in education (IQAA), the Independent Agency of accreditation and rating (IAAR). The university undergoes the given procedures of external estimates on a voluntary basis. Results of external estimates are published in open sources and are available according to the links https://atameken.kz/ru/services/44-rejting-obrazovatel-nyh-programm-vuzov, https://iqaa-ranking.kz/, http://www.iaar.kz/ru/rejting/rejting-vuzov-2019/respublika-kazakhstan.

The quality management system of KarIU is certified by LLC "Center of Certification "Natsionalny standart" on compliance to requirements of ST of RK ISO 9001-2016 (ISO 9001:2015) "A quality management system. Requirements" in relation to educational activities for training in the sphere of technical, professional, postsecondary, higher and postgraduate professional education (https://kgiu.kz/qms/).

The questioning of students which is carried out during the visit of EEC IAAR showed that the satisfaction with usefulness of the website of the university and informing students on rates, EP and the academic degrees makes 97.8 and 97.7%.

Analytical part

On the website of KarIU it is published information on TS in a section of a personnel of the releasing departments. Information on TS contains data on education, academic degrees and ranks, the taught disciplines, a contact information, etc. For example, information on TS EP 6B07108 - FSPME (5B071200 – MS, a trajectory "Theory and technology of forge and forming production" (MS-TiTOMD)) Metal forming departments is available according to the link https://kgiu.kz/faculty/fmis/chairs/omd/structure/, however,the commission of experts notes that this informationTS doesn't reflect the complete list of the teachers servicing this EP, that is not in full characterizes the accredited EP. All provided data characterize only the releasing department though MEP "Forge and Forming Production in Mechanical Engineering" contains such modules as "All-engineering disciplines", "Natural science disciplines", etc. which teachers is the staff of other departments. Thus in the section the department isn't completely provided information on TS, realizing all EP modules.

Strengths / the best practice on the accredited EP aren't revealed.

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To the management of the accredited EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" for providing full and objective information about TS of the realizing EP during the entire period of training to include in the description of TS of departments of the link to the serving departments on teaching general education and basic disciplines.

Conclusions of EEC:

According to the Informing Public standard 13 criteria from which 13 - have a satisfactory position.

6.10 Standards in a Section of Separate Specialties standard

NATURAL SCIENCES, TECHNICAL SCIENCE, AND TECHNOLOGIES

Evidential part

For the purpose of acquaintance of students with the professional environment and topical issues in the field of specialization and also for acquisition of skills on the basis of theoretical preparation of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS include the disciplines and actions directed to obtaining practical experience and skills in the specialty in general and to the main subjects.

The student of the accredited EP will organize excursions to the enterprises in the field of specialization, in particular in AO "ArselorMittal Temirtau" which is the enterprise, largest in the country, in the metallurgical industry with the corresponding material and technical resources on a profile of preparation of EP.

On branches of departments it is held separate classes in the main subjects of the accredited EP according to table 25 of the Educational Resources and Systems of Support of Students standard.

Implementation of academic year and degree projects on the accredited EP is directed to solutions of the practical tasks relevant for the enterprises in the field of specialization. For example, the subject of the EP 6B07107-TEI degree projects generally covers issues of modernization of metallurgical machines and units of AO "ArselorMittal Temirtau" for the

purpose of increase in their reliability and efficiency. Degree projects of some students are implemented in production, for example, there is an act of integration of laboratory smelting together with Chemical and metallurgical institute of Zh. Abishev and the act of introduction in educational process of results of degree design on the subject "Laboratory Installation for Trambovochno-forming Works" of the student of MS-14 group D.A. Sapozhnikov. (head of degree design V.L. Lekhtmets.).

The faculty involved in the education program includes the regular teachers having long experience as the staff member at the enterprises in the field of specialization of the education program. For example, for students of the accredited EP such experts teachers as give lectures:

- 6B07108 "FSPME" - V.L. Lekhtmets, the metallurgical engineer; Zhuman Kalykovich Amanzholov, metallurgical engineer, modeller;

- 6B07107 "TEI", 6B07110 of "HTCRM", 6B07109 "FTME" - Novels by V.I. - the metallurgical engineer of AO "ArselorMittal Temirtau";

- 6B11201 "IE&FS" - MD, professor I.A. Amanzhol, Republican research institute on labor protection the Ministry of Labour and Social Protection of the population of RK, the National center of occupational health and occupational diseases of MZ RK.

Maintenance of the main subjects of EP 6B07107 - TEI, 6B07108 - FSPME, 6B07109 - FTME, 6B07110 - HTCRM, 6B11201 - IE&FS to some extent is based and includes accurate interrelation with the maintenance of fundamental natural sciences as mathematics, chemistry, physics. In particular, for the majority of the basic disciplines which are a basis for studying the main subjects as prerekvizit the mathematics, chemistry, physics are appointed.

The management of the accredited EP provides preparation of the modern information technologies studying in a scope. When studying discipline "Computer graphics and a CAD" the studying EP 6B07107 - TEI, 6B07110 - HTCRM have an opportunity will learn use modern program complexes, such as "Kompas-3D", "AutoCAD", "Autodesk Inventor" in professional activity and studying EP 6B07108 - FSPME receive skills of use of a system of modeling of technological processes of "DEFORM-3D" intended for the analysis of three-dimensional (3D) behavior of metal at various processing by pressure during studying discipline "Mathematical modeling of the equipment and processes a Metal forming". Also, students of the accredited EP can master additional competences on IT technologies, having chosen disciplines of Minor: Bases of information security; Databases; Algorithmization Bases; Internet technologies and computer networks, in particular.

However, visit of classes of students of the accredited EP 6B07109 – "Foundry technologies in mechanical engineering" indicates the need of strengthening of work in the field of use of modern ICT in educational process.

Analytical part

The management of the accredited EP is provided by measures for strengthening of practical preparation in the field of specialization that is confirmed by data of the Educational Resources and Systems of Support of Students standard, a conversation with students and visits of bases the practician and branch of department. However, *the interview* students, graduates and employers of the accredited EP testifies to need of carrying out purposeful work on strengthening and ensuring obtaining practical skills of students with introduction of elements of dual training, the systematic organization of meetings at a round table by representatives from employers and students.

Strengths / the best practice on the accredited EP aren't revealed.

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire

safety":

1. To the management of the accredited EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" to develop the plan and to begin purposeful work on introduction of elements of a system of dual training at bases of the partner enterprises since 2021-2022 uch.

2. To provide systematic involvement of practicians from production for holding master classes and exchange of experience in the field of applied use of knowledge for realization of praktikooriyentirovanny training.

Additional recommendation of EEC for EP 6B07109 "Foundry technologies in mechanical engineering":

3. To provide within the accredited EP 6B07109 "Foundry technologies in mechanical engineering" teaching on the basis of modern achievements of science and practice in the field of modern information technologies.

Conclusions of EEC:

According to the Standards in a Specialty Section standard 5 criteria from which 5 - have a satisfactory position.

(VII) THE REVIEW OF STRENGTHS / THE BEST PRACTICE ACCORDING TO EACH STANDARD

Management of the Educational Program standard
Aren't observed

Management of Information and Reporting standard
Aren't observed

Development and Approval of Educational Programs standard
For EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":
- The qualification received on end of the accredited EP is accurately defined, explained and corresponds to the NSK levels.

Permanent Monitoring and Periodic Assessment of Educational Programs standard
Aren't observed

Student-centered Training, Teaching and Gain Score standard
Aren't observed

Students standard
Aren't observed

Faculty standard
Aren't observed

Educational Resources and Systems of Support of Students standard
Aren't observed

Informing Public standard
Aren't observed

Standards in a section of separate specialties
Aren't observed

(VIII) REVIEW OF THE RECOMMENDATION ABOUT IMPROVEMENT OF QUALITY ON EACH STANDARD

Management of the Educational Program standard

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To develop uniform requirements for forming of development plans for educational programs of the university, having provided questions:

- compliances of the development plan for EP of the Development strategy of higher education institution;
- regular revision of the development plan for EP in connection with possible changes of regulations in the higher education system;
- involvement of employers, students and TS to scheduling of development of EP;
- determination of identityuniqueness of the development plan for EP;
- reflections of qualitative results of execution of the development plan for EP.

2. To the management of university to develop a technique of the analysis and introduction of the innovation offers and innovation management within the accredited EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS". To define mechanisms of support and stimulation of initiatives of commercialization of the scientific projects having the innovation focus.

The additional recommendations of EEC for EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering, 6B11201 "Industrial, environmental and fire safety":

3. To the management of university to organize passing of advanced training courses of heads of EP 6B07108 "FSPME", 6B07109 "FTME", 6B11201 "IE&FS" according to the program of management of education current academic year.

Management of Information and Reporting standard

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Development and Approval of Educational Programs standard

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07109 "Foundry technologies in mechanical engineering", 6B11201 "Industrial, environmental and fire safety":

1. To carry out the analysis of contents of educational programs of EP 6B11201 "Industrial, environmental and fire safety", 6B07107 "Technological equipment of the industry", 6B07109 "Foundry technologies in mechanical engineering" regarding harmonization of modules and development of joint EP with the foreign organizations of education.

Additional recommendation of EEC for EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines":

2. To consider possibility of financing for realization of joint EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines" with partner higher education institutions.

Additional recommendation of EEC for EP 6B07107 "Technological equipment of the industry", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

3. To the management of EP 6B07107 "Technological equipment of the industry", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety" to develop the plan and to start the organization of training of students for professional certification.

Additional recommendation of EEC for EP 6B07107 "Technological equipment of the industry":

4. When developing EP 6B07107 "Technological equipment of the industry" it is necessary to conduct works on filling of the program as relevant information, to apply the international experience in area of the transport systems, the modern industrial equipment corresponding to modern development of science and technology.

Permanent Monitoring and Periodic Assessment of Educational Programs standard

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To the management of university to develop the mechanism on broad informing the public, employers, students and TS about all changes made to the accredited EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS".

2. To the management of EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" to provide the publication on the website of the university about all made changes and actions taken concerning EP.

Additional recommendation of EEC for EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering":

3. To the management of EP 6B07108 "Forging and stamping production in mechanical engineering" and EP 6B07109 "Foundry technologies in mechanical engineering" to expand the list of the disciplines giving the chance more profoundly to study and use in process implementation of technical drawings such software products as "Kompas-3D", "AutoCAD", "Autodesk Inventor", etc.

Student-centered Training, Teaching and Gain Score standard

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety ":

1. To the management of university to hold an intra high school seminar on use of the innovation technologies of training, including also own researches. To the management of EP annually to carry out monitoring of the applied techniques of teaching profile disciplines for the purpose of improvement of quality of teaching, to prepare the plan for development and deployment in educational process of own researches TS in the field of a technique of teaching subject matters. Introduction of offers on introduction of new techniques of teaching to reflect in minutes of meetings of departments and also to provide distribution of information on results of own researches on a web resource of the university.

2. To the faculty to use results of economic contractual and initiative researches in educational process. Given to reflect in protocols of departments.

Students standard

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines"), 6B11201 "Industrial, environmental and fire safety ":

1. According to the development strategy of the university for 2017-2021 to the management of EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" to include indicative indicators in development plans for educational programs, in work plans of departments and to realize points: "participation of students in the program "external and internal academic mobility", "participation of students in competitions in receiving external grants for training" .

2. To the management of university to develop and implement the comprehensive program on the organization of the academic mobility of students (external and internal) in online or training offline modes with fund-raising from various sources of financing.

3. To the management of EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS", according to the development strategy of the university for 2017-2021 to include indicative indicators in development plans for educational programs, in work plans of departments and to realize points of participation of students in research work, participation in competitions on grant financing of MES RK, the World Bank, social projects, competitions of Fund of the First President of Kazakhstan, the programs Erasmus, Tempus, etc.

4. To the management of higher education institution to make the work plan of Association of graduates and to carry out informing graduates of the university on activity of association through all possible informative sources.

Faculty standard

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To the management of higher education institution to develop regulatory requirements on application of TS of information and communicative technologies in educational process, including use of MOOS, an e-portfolio, etc., to develop and provide realization of developing the skills of TS on the accredited EP in the field of use of information and communication technologies in educational process.

2. According to the development strategy of the university for 2017-2021 to the management of EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" to include indicative indicators in development plans for educational programs and in work plans of departments and to realize point: "participation of TS in the program "external and internal academic mobility", "participation in international contests, grant programs", "invitation of the Kazakhstan and foreign scientists, public and political figures".

Educational Resources and Systems of Support of Students standard

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety:

1. To the management of higher education institution to develop the long-term plan for completion of specialized laboratories the modern equipment and the software similar with used in industries on a profile of the accredited EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS".

Additional recommendation of EEC for EP 6B11201 "Industrial, environmental and fire safety":

2. To the management of EP 6B11201 "Industrial, environmental and fire safety" (5B073100 "Health and safety and environment protection") to carry out the analysis of the available material resources regarding analogousness to the equipment and devices used in the relevant industries, to define the list of necessary devices and to submit the application for their acquisition.

Additional recommendation of EEC for EP 6B07109 "Foundry technologies in mechanical engineering":

3. To the management of EP 6B07109 "Foundry technologies in mechanical engineering" to include concrete indicators in the development plan for EP according to the publication of own editions in 3 languages.

Additional recommendation of EEC for EP 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering":

4. To the management of EP 6B07108 "Forging and stamping production in mechanical engineering" and EP 6B07109 "Foundry technologies in mechanical engineering" to include in the development plan for EP for 2020-2023 a number of actions for development and record of video lectures, to opening of virtual laboratories on an activity profile.

Informing Public standard

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To the management of the accredited EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" for providing full and objective information about TS of the realizing EP during the entire period of training to include in the description of TS of departments of the link to the serving departments on teaching general education and basic disciplines.

Standards in a section of separate specialties

Recommendations of EEC for EP 6B07107 "Technological equipment of the industry", 6B07108 "Forging and stamping production in mechanical engineering", 6B07109 "Foundry technologies in mechanical engineering", 6B07110 "Hoisting-and-transport, construction and road machines", 6B11201 "Industrial, environmental and fire safety":

1. To the management of the accredited EP 6B07107 "TEI", 6B07108 "FSPME", 6B07109 "FTME", 6B07110 of "HTCRM", 6B11201 "IE&FS" to develop the plan and to begin purposeful work on introduction of elements of a system of dual training at bases of the partner enterprises since 2021-2022.

2. To provide systematic involvement of practicians from production for holding master classes and exchange of experience in the field of applied use of knowledge for realization of praktikooriyentirovanny training.

Additional recommendation of EEC for EP 6B07109 "Foundry technologies in mechanical engineering":

3. To provide within the accredited EP 6B07109 "Foundry technologies in mechanical engineering" teaching on the basis of modern achievements of science and practice in the field of modern information technologies.

(IX) REVIEW OF THE RECOMMENDATION ABOUT EDUCATION ORGANIZATION DEVELEPMENT

- Harmonization of maintenance of EP of higher education institution with the foreign organizations of education, purposeful work on development of joint educational programs with partner Higher education institutions.
- Development of the international relations with the foreign organizations of education with attraction to process of all interested persons, including employers.
- Development of strategy of PR-management of higher education institution for the purpose of strengthening of competitiveness in education market.

Appendix 1. The estimated table "PARAMETERS of the SPECIALIZED PROFILE" (for EP 6B07107 Technological equipment of the industry (5B072400 Technological machines and the equipment); 6B07110 Hoisting-and-transport, construction and road machines (5B071300 Transport, transport equipment and technologies); 6B07109 Foundry technologies in mechanical engineering (5B071200 Mechanical engineering); 6B07108 Forging and stamping production in mechanical engineering (5B071200 Mechanical engineering); 6B11201 Industrial, environmental and fire safety (5B073100 Health and safety and environment protection)

p\p	№ p\p	Evaluation criteria	Position of the organization of education			
			Strong	Satisfactory	Assumes improvement	Unsatisfactory
Management of the Educational Program standard						
1	1.	The higher education institution has to have the published policy of quality assurance.		+		
2	2.	The policy of quality assurance has to reflect communication between scientific research, teaching and training .		+		
3	3.	The higher education institution has to show quality assurance cultural development, including in EP coal mine.		+		
4	4.	The commitment to quality assurance has to belong to any activity which is carried out by contractors and partners (outsourcing) including at realization of joint/two-degree education and the academic mobility.		+		
5	5.	The management of EP provides transparency of plan development of development of EP on the basis of the analysis of its functioning, real positioning of higher education institution and orientation of its activity on satisfaction of needs of the state, employers, interested persons and students.			+	
6	6.	The management of EP shows functioning of mechanisms of forming and regular revision of the development plan for EP and monitoring of its realization, assessment of achievement of the goals of training, compliance to needs of students, employers and society, the decision-making directed to permanent improvement of EP.			+	
7	7.	The management of EP has to involve representatives of groups of interested persons, including employers, students and TS in forming of the development plan for EP.			+	
8	8.	The management of EP has to show identity and uniqueness of the development plan for EP, its consistency with national priorities of development and the development strategy of the organization of education.			+	
9	9.	The higher education institution has to show accurate definition responsible for business processes within EP, unambiguous distribution of functions of personnel, differentiation of functions of collegiate organs.		+		
10	10.	The management of EP has to produce the evidence of transparency of a control system of the educational program.		+		
11	11.	The management of EP has to show successful functioning of an internal system of ensuring quality of EP including its design, management and monitoring, their improvement, decision-making on the basis of the facts.		+		

12	12.	The management of EP has to exercise risk management.		+		
13	13.	The management of EP has to provide participation of representatives of interested persons (employers, TS studying) as a part of collective management bodies with the educational program and also their representativeness at decision-making concerning management of the educational program.		+		
14	14.	The higher education institution has to show innovation management within EP, including the analysis and introduction of the innovation offers .			+	
15	15.	The management of EP has to show proofs of openness and availability to students, TS, employers and other interested persons.		+		
16	16.	The management of EP has to be trained according to programs of management of education .		+		
17	17.	The management of EP has to aspire to that the progress made since the last procedure of external quality assurance was taken into account by preparation for the following procedure.		+		
		Total according to the standard		**12**	**5**	
Management of Information and Reporting standard						
18	1.	The higher education institution has to provide functioning of a system of a fee, the analysis and management of information on the basis of application of modern information and communication technologies and software.		+		
19	2.	The management of EP has to show system use of the processed, adequate information for improvement of an internal system of quality assurance.		+		
20	3.	Within EP there has to be a system of the regular reporting which is reflecting all levels of structure, including assessment of effectiveness and efficiency of activity of divisions and departments, scientific research.		+		
21	4.	The higher education institution has to establish frequency, forms and methods of assessment of management of EP, activity of collegiate organs and structural units, the top management, implementation of scientific projects.		+		
22	5.	The higher education institution has to show definition of an order and ensuring information security, including definition of responsible persons for reliability and timeliness of the analysis of information and providing data.		+		
23	6.	Important factor is involvement of students, workers and TS in processes of a fee and the analysis of information and also decision-making on their basis.		+		
24	7.	The management of EP has to show availability of the mechanism of communication with students, workers and other interested persons, including availability of mechanisms of conflict resolution .		+		
25	8.	The higher education institution has to provide measurement of degree of satisfaction of requirements of TS, personnel and students within EP and to show proofs of elimination of the found shortcomings.		+		
26	9.	The higher education institution has to estimate effectiveness and efficiency of activity, including in EP coal mine.		+		
		The information collected and analyzed by higher education institution has to consider:				
27	10.	key performance indicators;		+		
28	11.	to the loudspeaker of the contingent of the forms and types studying in a section;		+		
29	12.	level of progress, achievement of students and assignment;		+		

30	13.	satisfaction of students with realization of EP and quality of training in higher education institution;		+		
31	14.	availability of educational resources and systems of support to students;		+		
32	15.	employment and career development of graduates.		+		
33	16.	Students, workers and TS have to document the consent to processing of personal data.		+		
34	17.	The management of EP has to promote all necessary information in the respective areas of sciences.		+		
		Total according to the standard		**17**		
Development and Approval of Educational Programs standard						
35	1.	The higher education institution has to define and document procedures of development of EP and their statement at the institutional level.		+		
36	2.	The management of EP has to provide compliance of the developed EP to the established purposes, including expected results of training.		+		
37	3.	The management of EP has to provide availability of the developed models of the graduate of EP describing results of training and personal qualities.		+		
38	4.	The management of EP has to show conducting external examinations of EP.		+		
39	5.	The qualification received on end of EP has to be accurately defined, explained and correspond to the NSK certain level.	+			
40	6.	The management of EP has to define influence of disciplines and professional the practician on forming of results of training.		+		
41	7.	Important factor is the possibility of training of students for professional certification.		+		
42	8.	The management of EP has to produce the evidence of participation of students, TS and other stakeholders in development of EP, ensuring their quality.		+		
43	9.	The labor input of EP has to be accurately defined in the Kazakhstan credits and ECTS.		+		
44	10.	The management of EP has to provide the maintenance of subject matters and results of training in training level (bachelor degree, a magistracy, doctoral studies).		+		
45	11.	structure of EP it is necessary to provide the different types of activity corresponding to results of training.		+		
46	12.	Important factor is availability of joint EP with the foreign organizations of education.			+	
		Total according to the standard	**1**	**10**	**1**	
Permanent Monitoring and Periodic Assessment of Educational Programs standard						
47	1.	The higher education institution has to carry out monitoring and periodic assessment of EP to provide achievement of the goal and to meet needs of students and societies. Results of these processes are directed to permanent improvement of EP.		+		

		Monitoring and periodic assessment of EP have to consider:				
48	2.	contents of programs in the light of the last achievements of science for specific discipline for ensuring relevance of the taught discipline;		+		
49	3.	changes of requirements of society and professional environment;		+		
50	4.	loading, progress and release of students;		+		
51	5.	efficiency of procedures of estimation of students;		+		
52	6.	expectations, requirements and satisfaction of students with training in EP;		+		
53	7.	educational environment and support services and their compliance to the purposes of EP.		+		
54	8.	The higher education institution and the management of EP have to produce the evidence of participation of students, employers and other stakeholders in revision of EP.		+		
55	9.	All interested persons have to be informed on any planned or activity undertakens concerning EP. All changes made to EP have to be published.			+	
56	10.	The management of EP has to provide revision of contents and structure of EP taking into account market changes of work, requirements of employers and social request of society.		+		
		Total according to the standard		**9**	**1**	
Student-centered Training, Teaching and Gain Score standard						
57	1.	The management of EP has to provide respect and attention for various groups of students and their requirements, granting flexible trajectories of training to them .		+		
58	2.	The management of EP has to provide use of various forms and methods of teaching and training.		+		
59	3.	Important factor is availability of own researches in the field of a technique of teaching subject matters of EP.			+	
60	4.	The management of EP has to show availability of a feedback system on use of various techniques of teaching and assessment of results of training.		+		
61	5.	The management of EP has to show support of autonomy of students for the simultaneous management and the help from the teacher.		+		
62	6.	The management of EP has to show availability of the procedure of response to complaints of students .		+		
63	7.	The higher education institution has to provide the sequence, transparency and objectivity of the mechanism of assessment of results of training for each EP, including the appeal.		+		
64	8.	The higher education institution has to provide compliance of assessment procedures of results of training of the studying EP in the planned results of training and the purposes of the program. Criteria and methods of assessment within EP have to be published in advance.		+		
65	9.	higher education institution, mechanisms of ensuring development by each graduate of EP of results of training have to be defined and the completeness of their forming is provided.		+		
66	10.	The evaluating persons have to own modern methods of assessment of results of training and regularly improve skills in this area.		+		

		Total according to the standard		**9**	**1**	
Students standard						
67	1.	The higher education institution has to show policy of forming of the contingent of students from receipt before release and provide transparency of its procedures. The procedures regulating life cycle of students (from receipt before end), have to be defined, approved, published.		+		
68	2.	The management of EP has to show carrying out special programs of adaptation and support for just arrived and foreign students.		+		
69	3.	The higher education institution has to show compliance of the effects of the Lisbon convention on recognition.		+		
70	4.	The higher education institution has to cooperate with other organizations of education and the national centers "The European network of national information centers by the academic recognition and mobility / National academic Information Centres of Recognition" ENIC/NARIC for the purpose of ensuring comparable recognition of qualifications.		+		
71	5.	The management of EP has to show availability and use of the mechanism by recognition of results of the academic mobility of students and also results of additional, formal and informal training.		+		
72	6.	The higher education institution has to provide an opportunity for external and internal mobility of the studying EP and also render them assistance in receiving external grants for training.			+	
73	7.	The management of EP has to apply the maximum number of efforts to providing students with places of practice, assistance to employment of graduates, maintenance of communication with them.		+		
74	8.	The higher education institution has to provide graduates of EP with the documents confirming the received qualification including the achieved results of training and also a context, content and the status of the got education and the evidence of its end .		+		
75	9.	Important factor is monitoring of employment and professional activity of graduates of EP.		+		
76	10.	The management of EP has to stimulate actively students to self-education and development out of the main program (extracurricular activities).		+		
77	11.	Important factor is availability acting associations/associations of graduates.			+	
78	12.	Important factor is availability of the mechanism of support of gifted students.		+		
		Total according to the standard		**10**	**2**	
Faculty standard						
79	1.	The higher education institution has to have the objective and transparent personnel policy including hiring, professional growth and personnel development, providing professional competence of all state.		+		
80	2.	The higher education institution has to show compliance of personnel capacity of TS of the development strategy of higher education institution and specifics of EP.		+		
81	3.	The management of EP has to show awareness of responsibility for the workers and providing for them favorable conditions for work.		+		
82	4.	The management of EP has to show change of a role of the teacher in connection with transition to studentocentrirovanny training .		+		
83	5.	The higher education institution has to define contribution TS EP to implementation of the strategy for the development of higher education institution, etc. strategic documents.		+		

84	6.	The higher education institution has to give opportunities of career development and professional development of TS EP.		+		
85	7.	The management of EP has to involve in teaching practicians of the relevant industries .		+		
86	8.	The management of EP has to provide purposeful actions for development of young teachers.		+		
87	9.	The higher education institution has to show motivation of professional and personal development of teachers of EP, including encouragement to both integration of scientific activity and formation, and application of the innovation methods of teaching.		+		
88	10.	Important factor is active application of TS of information and communication technologies in educational process (for example, on-line of training, an e-portfolio, MOOC, etc.).		+		
89	11.	Important factor is development of the academic mobility within EP, involvement of the best foreign and domestic teachers.			+	
90	12.	Important factor is the involvement of TS EP into life of society (a role of TS in an education system, in development of science, the region, creation of the cultural environment, participation in exhibitions, creative competitions, programs of charity, etc.).		+		
		Total according to the standard		**11**	**1**	
Educational Resources and Systems of Support of Students standard						
91	1.	The management of EP has to show sufficiency of material resources and infrastructure.		+		
92	2.	The management of EP has to show availability of procedures of support of various groups of students, including informing and consultation.		+		
		The management of EP has to show compliance of information resources to specifics of EP, including compliance:				
93	3.	technological support of students and TS according to educational programs (for example, online training, modeling, databases, programs of the analysis of data);		+		
94	4.	library resources, including fund of educational, methodical and scientific literature for the general education, basic and main subjects on paper and electronic media, periodicals, access to scientific databases;		+		
95	5.	access to educational Internet resources;		+		
96	6.	examination of results of research, final works, theses on plagiarism;		+		
97	7.	functioning of WI-FI in the territory of the organization of education.		+		
98	8.	The higher education institution has to aspire to that the educational equipment and software used for development of EP were similar with used in the relevant industries.		+		
99	9.	The higher education institution has to provide compliance to safety requirements in training process.		+		
100	10	The higher education institution has to seek to consider needs of various groups of students for EP coal mine (the adults working, foreign students and also students with limited opportunities).		+		
		Total according to the standard		**10**		
Informing Public standard						
		Information published by higher education institution within EP has to be exact, objective, relevant and has to include:				

101	1.	the implemented programs, with the indication of the expected results of training;		+		
102	2.	information on a possibility of assignment of qualification on the termination EP;		+		
103	3.	information on teaching, training, estimated procedures;		+		
104	4.	data on lowest passing scores and the educational opportunities given to students;		+		
105	5.	information on opportunities for employment of graduates .		+		
106	6.	The management of EP has to use various methods of distribution of information (including media, web resources, information networks other) for informing the general public and interested persons.		+		
107	7.	Informing the public has to provide support and explanation of national development programs of the country and the system of the higher and postgraduate education.		+		
108	8.	The higher education institution has to publish the audited financial statements on own web resource.		+		
109	9.	The higher education institution has to show reflection on a web resource of information characterizing higher education institution in general and in EP coal mine.		+		
110	10.	Important factor is availability of adequate and objective information about TS EP, in a section of a personnel.		+		
111	11.	Important factor is informing the public on cooperation and partner interaction within EP, including with the scientific/consulting organizations, business partners, social partners and the organizations of education.		+		
112	12.	The higher education institution has to place information and references to external resources by results of procedures of external assessment.		+		
113	13.	Important factor is participation of higher education institution and the realized EP in various procedures of external assessment.		+		
		Total according to the standard		**13**		
Standards in a section of separate specialties						
NATURAL AND TECHNICAL SCIENCE						
		*Educational programs for the directions "Technical science", for example, such as "**Technological equipment of the industry", "Hoisting-and-transport, construction and road machines", "Foundry technologies in mechanical engineering", "Forging and stamping production in mechanical engineering", "Industrial, environmental and fire safety", etc.**, have to meet the following requirements:*				
114	1.	For the purpose of acquaintance of students with the professional environment and topical issues in the field of specialization and also for acquisition of skills on the basis of theoretical preparation the education program has to include the disciplines and actions directed to obtaining practical experience and skills in the specialty in general and to the main subjects in particular including: *- excursions to the enterprises in the field of specialization (plants, workshops, research institutes, laboratories, educational-experimental farms , etc.),* *- holding separate classes or the whole disciplines at the enterprise of specialization ,* *- holding seminars for the solution of the practical tasks relevant for the enterprises in the field of specialization, etc.*		+		
115	2.	The faculty involved in the education program has to include the regular teachers having long experience as the staff member at the enterprises in the field of specialization of the education program.		+		
116	3.	Content of all disciplines of EP has to be based and include to		+		

		some extent accurate interrelation with the maintenance of fundamental natural sciences as mathematics, chemistry, physics.				
117	4.	The management of EP has to provide measures for strengthening of practical preparation in the field of specialization.		+		
118	5.	The management of EP has to provide preparation of the modern information technologies studying in a scope.		+		
		Total according to the standard		**5**		
		IN TOTAL	**1**	**106**	**11**	