REPORT

**on the results of the External Expert Panel (EEP) assessment
of the compliance of the specialized accreditation procedure of the
educational programmes**
5B072000 - Chemical technologies of non-organic substances
6M072000 - Chemical technologies of non-organic substances
5B012000 - Vocational training

**Kazakh National Research Technical University named after
K.I.Satpayev**

June 1-3, 2016

Almaty city 2016

Addressed to the
IAAR Accreditation Council

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Almaty city   **June 3, 2016**

Based on the Order of the Independent agency for accreditation and rating (hereinafter – IAAR) no. 26-16-OD as of 30/05/2016 external expert panel during June 1-3, 2016 evaluated the compliance of the academic programs: 5B072000–Chemical technologies of non-organic substances; 6M072000–Chemical technologies of non-organic substances; 5B012000-Vocational training with the specialized accreditation standards of IAAR.

The Report of the external expert panel (EEP) contains an assessment of the educational programs' compliance to the IAAR criteria, as well as EEP recommendations for further improvement of academic programmes and parameters of the academic programs' profile at the Kazakh National Research Technical University named after K.I.Satpayev.

EEP membership:

1. **Panel Chair** - Yury Pak**,** Doctor of technical sciences, Professor, Karaganda State Technical University;

2. **International expert** - Dagnija Blumberga**,** Dr. habil. sc. Ing, prof., Rizhskiy Technical University, Institute of Ecology and energy systems, Expert of the Academic Information Center (AIC) (Riga city, Latvia);

3. **International expert** - Senya Terzieva, PhD, Associate professor, Chemical-technological and metallurgic university (Sophia city, Bolgaria);

4. **Expert** – Ibadullyaeva Saltanat, Doctor of Biological sciences, Professor Kyzylorda State University named after Korkyt-Ata (Kyzylorda city);

5. **Expert** – Turebaeva Klara, Doctor of Education, Aktyubinskiy Regional State University named after K.Zhubanova (Aktobe city);

6. **Expert** – Omarov Rustem, Ph.D. in Biology, Eurasian National University named after L.N.Gumilyev (Astana city);

7. **Expert** – Sarkenov Berik, Ph.D. in technical sciences, Associate Professor, Karaganda State Technical University (Karaganda city);

8. **Expert** – Shomanova Janat, Candidate of Chemical Sciences, Doctor of Technical sciences, Pavlodarskiy State Pedagogical Institute (Pavlodar city);

9. **Expert** – Dzhangulova Gulnar, Ph.D. in technical sciences, Associate Professor, Kazakh National University named after Al-Farabi (Almaty city);

10. **Expert** – Besimbayeva Olga, Ph.D. in technical sciences, Associate Professor, Karaganda State Technical University (Karaganda city);

11. **Expert** – Babasov Saduakhas – **employer**, Director, "Center for information and technology" LLP, Mayor house of the Almaty city;

12. **Representative of student community** – Nadirova Bella, student of the Kazakh automobile and road Academy named after L.B.Goncharova (Almaty city);

13. **Observer from the Agency** – Timur Kanapyanov, Head of international projects and public relations (Astana city).

CONTENT

(I) INTRODUCTION OF THE KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY NAMED AFTER K.I.SATPAYEV

The non-commercial joint-stock company Kazakh National Research Technical University named after K.I. Satpayev (hereinafter - NJSC "KazNRTU") acts on the basis of the Charter approved by the order of the Chairman of the Committee of State Property and Privatization of the Ministry of Finance of the Republic of Kazakhstan as of January 12, 2015 No. 19, the certificate of state reincorporation of a legal entity № 9387-1910-01-AO as of January 14, 2015.

The first National Research Technical University - the KazNRTU named after K.I. Satpayeva, was founded in 1934 as the Kazakh Mining and Metallurgical Institute (KazMMI), in 1960 it was reorganized into the Kazakh Polytechnic Institute (KazPTI). In 1994 KazPTI was transformed into the Kazakh National Technical University (KazNTU).

For the special merits in the training of engineering and technical personnel of the country on September 22, 1999, by the Governmental Decree of the Republic of Kazakhstan, the Kazakh National Technical University was given the name of outstanding scientist Academician Kanysh Imantaevich Satpayev. On July 5, 2001 by the Decree of the President of the Republic of Kazakhstan. H.E. N.Nazarbayev No. 648 "On Granting a Special Status to the Selected State Higher Educational Institutions" KazNTRU named after K.I. Satpayev was given a special status.

Governmental Decree of the Republic of Kazakhstan as of December 19, 2014 No. 1330 "On the issues of incorporation of a non-profit joint-stock company" Kazakh National Research Technical University named after K.I. Satpayev the university was reorganized in the "KazNTRU "named after K. I. Satpayev.

The staff potential of KazNTRU (including subsidiaries) accounts for 251 doctors and 697 Ph.D., 53 Doctors, 342 Masters of Science, including 7 academicians and 3 corresponding members of the National Academy of Sciences of the Republic of Kazakhstan. The resultant students' population includes: in a bachelor degree program – 9805 individuals, in a master degree course – 1378 individuals, in doctoral studies - 238 persons. The university employs 1,206 full-time teachers.

In the educational sector of the university, the proportion of full-time faculty (hereinafter - faculty) accounts for 89%, the share of teaching staff with academic degrees and titles is 64%. The average age of the faculty staff engaged in scientific research is 46 years, but in the next 3 years with the involvement of young people in R & D it is expected that the staff in scientific and innovative activities of KazNTRU will be rejuvenated, and the average age will be 43 years.

In 2011, the Concept note for the Development of the Distance Learning System at the University (approved by the order No. 127-p as of March 14, 2011) was adopted for the period until 2020. The Institute of Distance Learning (IDE) was established.

The fundamental principle of the organization of educational work at the university is the formation of a new Kazakhstan patriotism and promotion of the values of "Mangilik El". The work of the Council for Education, student self-governance, the school of young leaders and clubs on interests is organized at a qualitatively new level.

Student self-governance is actively developing, and conditions are created for realizing the personal potential of students. The number of students' clubs increased from 53 in 2012 to 125 in 2016. More than 4,000 students actively participate in 28 sports sections and 8 amateur art groups, 30 student self-governance bodies, 6 interest clubs, 3 student squads (Zhasyl El, SSS, SOP), as well as the university branch of MC Zhas Otan.

Since August 2005 KazNTRU named after K.I. Satpayev has had a certified quality management system IQNet, the effectiveness of which is annually confirmed by experts in the course of inspection and recertification audits. In 2014, the company was recertified for compliance with the international standard ISO 9001: 2008, the certificate is valid for 2014 -

2017.

The certificate of institutional accreditation of the National Accreditation Center under the Ministry of Education and Science of the Republic of Kazakhstan has been awarded. A certificate of institutional accreditation of the IQAA of the Republic of Kazakhstan has been awarded as well. The International Institutional Assessment in the European Association of Universities has been completed according to the International Evaluation Program (IEP, International Evaluation Program, 2014).

The leader among Kazakhstan universities in the Euro-2013-2013 (Academic ranking of world universities-European standard, ARES);

In 2012 - 2014 KazNTRU was the only one among the universities of Kazakhstan, which was included in the catalogue of higher educational institutions of the world "The Thomson Reuters".

In 2012-2015 KazNTRU has been the second among the best technical universities of Kazakhstan according to the IQAA ranking (Independent Quality Assurance).

In 2015, in QS World University Rating, KazNRTU took the position (501+) among the 800 strongest universities of the world, improving the indicator of 2014 in 100 positions. KazNTU was included in the list of eight universities of Kazakhstan, included in the Top 150 QS University Rankings: Developing Europe and Central Asia 2014/15, winning 54th position.

In 2015, the World Ranking of University Websites (Ranking Web of Universities (Webometrics) KazNRTU was 2458th in the published list of 12,000 universities.

Throughout 2015 - 2016 academic year, KazNTRU has launched a university program to support the State Program for Industrial and Innovative Development of the Republic of Kazakhstan for 2016 - 2019, within the framework of which the training of the master students by area of specializiation on academic programs "Innovative Technologies and Equipment in Mechanical Engineering", "Petrochemicals and Refining" and "Automation of production processes" under the specialties 6M071200 "Mechanical Engineering", 6M072100 "Chemical Technologies of Organic Substances" and 6M070200 "Automation and management" are conducted.

The KazNTRU is systematically analyzing the state and long-term development of industrial branches of the Republic of Kazakhstan, the annual Addresses of the President of the country, H.E. N.A. Nazarbayev to the people of Kazakhstan with the goal of adjusting the content of the academic programs and ensure training specialists' compliance to the labor market requirements.

The results of the analysis are used to develop proposals for strategic planning for the development of institutions and the university as a whole.

(II) GENERAL ASSESSMENT OF ACADEMIC PROGRAMS

The Kazakh National Research Technical University named after K.I. Satpayev carries out activities under the State license for the right to provide educational services No. KZ 56LFF00005304, issued on 11.07.2015 by the Ministry of Education and Science of the Republic of Kazakhstan. Academic programs 5B072000–Chemical technologies of non-organic substances; 6M072000– Chemical technologies of non-organic substances; 5B012000-Vocational training (state license series AB No. 0137395 as of 03.02.2010) are implemented under the State Program for the Development of Education of the Republic of Kazakhstan for 2011-2020, the State Compulsory Educational Standards of the Republic of Kazakhstan, the University Development Strategy-2020.

The content of academic programs is developed taking into account modern achievements of science and technology and production requirements. Annually the catalogue of elective disciplines (CED) and working curricula are updated.

Evaluation of academic progress and the level of preparation of students, master level students, is provided through the application of a score-grading system. Ensuring the required quality of training specialists is carried out with the use of modern educational technologies, the main educational processes are implemented by the highly qualified teaching staff. Planning, management and implementation of academic programs is carried out in accordance with the perspective development plans of the university. Training of specialists in academic programs 5B072000–Chemical technologies of non-organic substances; 6M072000–Chemical technologies of non-organic substances; 5B012000- Vocational training is carried out full-time and in distance learning formats in Kazakh and Russian languages.

The content of academic programs is shaped in accordance with the requirements of the State General Education Standard of Higher and Postgraduate Education, approved by the Governmental Decree of the Republic of Kazakhstan No. 1080 as of August 23, 2012, envisages the study of the cycle of educational, basic and core disciplines, the internship attachments in the relevant specialties.

Academic programs 5B072000–Chemical technologies of non-organic substances; 6M072000–Chemical technologies of non-organic substances; 5B012000- Vocational training have the following positive aspects:

- Plans for the development of academic programs are coordinated with representatives of all stakeholders and approved by the Training and Methodological Council of the core institute;
- the University is the only national research technical university in Kazakhstan;
- compliance of the faculty with qualification requirements, level and specificity of the academic program;
- a learning environment that reflects the specifics of academic programs, which includes: personalized interactive resources (with access also during the extra-curricular time), including teaching materials and tasks, providing opportunities for trial self-assessment of students through the remote access to the portal (site) of the university;
- the focus of the content on the formation of practice-oriented training of students;
- cooperation with employers during the educational process, questionnaire survey of employers to identify their views on the quality of educational services;
- automation of knowledge control and recording of students' learning achievements;
- functioning of e-library with unlimited access to the library resources;
- availability of free WI-FI;
- availability and completeness of the learning kit for all disciplines of academic programs.

(III) OUTLINE OF THE EEP VISIT

**Information about employees and students
who attended meetings with the IAAR's EEP**

Category of attendees	Quantity
Rector	1
Vice-rectors	3
Institute directors	2
Heads of departments	5
Department Directors and heads of divisions	18
Teachers	44
Students, master degree students, doctors	78
Graduates	50
Employers	41
Total	**242**

During the visit members of the EEP visited museum of the KNRTU named after K.I. Satpayev, the mineralogical museum, the Scientific Library, the training ground of the Mining and Metallurgical Institute, the National Scientific Laboratory of Information and Space Technologies for the collective use, the laboratory of the engineering profile, they also carried out visual inspection of 39 educational laboratories, computer class, the office of the head of Department, 3 professor' classrooms and lecture room, laboratory "Mechanical equipment of metallurgical plants, reliability and repair", laboratories "Special methods of welding and cutting", laboratory "Contact welding and soldering methods", Research laboratory of innovative geospatial technologies in geodesy, cartography and mine surveying, class rooms named after Professor A. Mashanov, Analytical Laboratory, Laboratory of Powder and Composite Materials, Laboratory of Physical and chemical research, Laboratory of the theory of metallurgical processes, laboratory of mass exchange processes, pyrometallurgy laboratories, heat engineering and furnace equipment laboratories, as well as the internship venues: the Hydrometeorological Monitoring Center, the Almaty Department of Ecology, the Almaty College of Telecommunications and Engineering, the Talgar Polytechnic College, the Institute of Chemical Sciences named after A.B. Bekturov, National Center for Complex Processing of Mineral Resources of the Republic of Kazakhstan, Almaty city Hydrometeorological Monitoring Center, Technological park (Taraz Process Laboratory). In total 50 venues were visited.

At the relevant departments EEP studied the material and technical facilities, educational and methodical security of the educational process for the accredited academic programs, graduate bachelor's dissertation papers and master's theses.

The events planned within the framework of the visit of the IAAR EEP facilitated the detailed familiarization of experts with the university's educational infrastructure, material and technical resources, faculty, representatives of employers' organizations, students and graduates. This allowed the IAAR EEP members to conduct an independent assessment of the compliance of the data set out in the self-assessment reports of the university's academic programs to the criteria of the specialized accreditation standards of the IAAR.

During the visit, the EEP members studied the internship venues: Professional lyceum # 8, State-owned enterprise "Almaty multidisciplinary college, the Institute of Organic Catalysis and Electrochemistry named after D.V. Sokolovskiy".

As part of the planned program, the recommendations on improving the University's activities developed by the EEP on the results of the examination were presented at a meeting with the management on June 3, 2016.

(IV) RECOMMENDATIONS TO THE HIGHER EDUCATIONAL INSTITUTION

- to increase the amount of book-keeping and educational-methodical literature in Kazakh language according to the accredited academic program;
- to work on improving the content of the academic program with a similar academic program of leading foreign and domestic educational organizations;
- to strengthen the work in the field of teaching methods for the specialized disciplines of the academic program 5B012000 - "Vocational training".
- to intensify the work of external and internal academic mobility for students and teaching staff for academic programs;
- to assist in attracting foreign teachers to conduct joint research with the faculty of accredited academic programs;
- to promote the publication of research results in quoted scientific publications;
- to intensify the work on the implementation of the research results of the teaching staff in the educational process;
- to regularly conduct discussion and implementation of the newest innovative training technologies in the field of education.
- to carry out work on the organization of branches of the department at the production;
- to strengthen the work of the "Career" center for the employment of graduates;
- to increase the volume of funded contractual and budgetary research work.

(V) PARAMETERS OF THE SPECIALIZED PROFILE

№	№	Evaluation Criteria	Position of the educational organization			
			Strong	Satisfactory	Needs improving	Unsatisfactory
Standard "Educational Program Management"						
1	1	The HEI must have a published quality assurance policy.	+			
2	2	The policy of quality assurance ought to reflect the relation between research, teaching and learning.	+			
3	3	The HEI must demonstrate the development of a quality assurance culture.		+		
4	4	Quality assurance policy should also refer to any activity, conducted by the partners (outsourcing).		+		
5	5	The university demonstrates development of EP based on the analysis of its performance, real-positioning of HEI and its narrowness to meet the needs of the state, employers, stakeholders and students.	+			
6	6	The HEI determines mechanisms of formation and regular review of the EP's development plan, and monitoring of their implementation, assessment of the achievement of learning objectives, meeting the needs of students, employers and society, decision-making, aimed at continuous improvement of the educational program.		+		
7	7	The HEI must demonstrates the transparency of the processes of formation of the EP's development plan. The HEI provides the awareness of stakeholders on the con-tent of the mission and strategy and processes of their formation.		+		
8	8	The institution must involve representatives of stakeholder groups, including students, academic staff and employers in the formation of the EP's development plan.		+		
9	9	The university must demonstrate individuality and uniqueness of EP's development plan, its consistency with national development priorities and development strategy of the EO.	+			

10	10	The HEI must ensure compliance of the EP's development plan with available resources (including financial, information, human resources, material and technical base).	+			
11	11	In the EO all major business processes governing the implementation of the EP should be documented.		+		
12	12	The HEI must demonstrate an accurate designation of those responsible for business processes, a clear allocation of staff duties, and delimitation of responsibili-ties of collegial bodies that participated in the EP implementation.		+		
13	13	The institution systematically analyzes the information on the implementation of the educational program and conducts self-examination with all areas to assess the success of the development strategy implementation of the educational program through indicators such as the "productivity" and "efficiency."		+		
14	14	The EP management must demonstrate the evidence of transparency of the management system of the EP.		+		
15	15	The EP management must demonstrate successful functioning of in-house quality assurance system, including designing, management, monitoring and improvement of EP, making decisions on the basis of facts.		+		
The EP Management is expected to include:						
16	16	activity management through processes;		+		
17	17	mechanisms of planning, development and continuous improvement;		+		
18	18	risk assessment and identification the ways to reduce these risks;		+		
19	19	monitoring, including creation of reporting processes, which allows to determine the dynamics in the activities and the implementation of plans;	+			
20	20	analysis of the revealed discrepancies, the implementation of the corrective and preventive actions;		+		
21	21	analysis of the effectiveness of change;		+		
22	22	assessment of productivity and efficiency of activity of divisions and their interaction;		+		
23	23	interaction with the employers.	+			
24	24	The institution must involve representatives of stakeholder groups, including students, AS and employers as part of collegial bodies of education program management, and ensure their representation in decision-making in terms of the educational program management.		+		
25	25	The EP management must ensure measurement of the satisfaction degree of needs of AS, employees and	+			

		students, and demonstrate the evidence of elimination of defects detected within the measuring process.				
26	26	The EP management must demonstrate the evidence of the openness and accessibility of the management and administration to students, faculty and employers (office hours regarding personal questions, e-mail communication, etc.).	+			
27	27	The HEI must demonstrate that availability of the communication channel through which any interested person can make innovative proposals in order to improve the activities of the management of the EP. The university must demonstrate examples of the analysis of these proposals and the implementation of such proposals.	+			
		Subtotal	**10**	**17**	**0**	0
		Standard "Development and Approval of the Educational Program"				
28	1	The university should define and document the procedures for the quality of the educational program development and evaluation, set the frequency, forms and methods of assessing the quality of educational programs.		+		
29	2	The university should establish a procedure for periodic review and monitoring of educational programs.		+		
30	3	The institution must determine the requirements for the educational programs according to their specificities, levels of education, as well as the technologies used, including remote ones.		+		
31	4	The university must demonstrate that developed educational program graduate models, including knowledge, skills and professional competence.	+			
32	5	The institution must demonstrate the participation of the faculty, employers and students in the development of educational programs, ensuring their quality, to provide evidence that employers are typical representatives of employers.		+		
33	6	The institution must provide an external examination of the educational program and its approval by the collective bodies.		+		
34	7	EP management must clearly define the EP objectives.	+			
35	8	EP management should demonstrate the logic of curricula and training programs compilation, in particular the reasons for the inclusion of a list of subjects in the curriculum, the reasons for assigning the post or prerequisites.	+			
36	9	EP management should ensure that the names and content of the disciplines are relevant to areas of study in science / society, etc.	+			

37	10	The institution should determine the content, scope, logic of constructing student's individual educational trajectory.	+			
38	11	EP management must demonstrate the continuity of the content of educational programs at different levels, including the logic of the relationship of academic disciplines, their consistency and continuity.		+		
39	12	EP management must provide an annual revision of the content of curricula and training programs, taking into account changes in the market, employers', students' and teachers' needs.		+		
40	13	EP management must demonstrate the impact of disciplines on the formation of students' professional competence.	+			
41	14	The complexity of the EP must be clearly defined in the Kazakhstani credits and ECTS.	+			
42	15	The structure of the EP must provide a variety of activities, the contents of which should contribute to the formation of professional competence of students.	+			
43	16	The institution must demonstrate the effectiveness of the organization and conduct of professional internship.	+			
44	17	The institution must ensure that the content of academic disciplines to the planned learning outcomes. The list of subjects and content must be available to the students.	+			
45	18	An important factor is the harmonization of the content of educational programs with similar educational programs of leading international and Kazakhstani educational organizations.			+	
46	19	An important factor is the presence of joint educational programs with foreign educational institutions.			+	
47	20	An important factor is the cooperation and exchange of experience with other educational organizations implementing similar educational programs.		+		
48	21	EP management must ensure that research elements are included in the content of EP.		+		
		Subtotal	**10**	**9**	**2**	**0**
Standard "Student-Centered Learning, Teaching and Progress Evaluation"						
49	1	EP management must provide equal opportunities to all students, regardless of the language of instruction on the formation of individual educational program aimed at the formation of professional competence.	+			
50	2	EP management should ensure the harmonious development of students in view of intellectual development and individual characteristics.		+		
51	3	EP management must ensure the implementation and effectiveness of active and innovative learning	+	+		

		methods.		+		
52	4	EP management must ensure its own developments in the field of academic disciplines teaching methodology.		+		
53	5	EP management must demonstrate the existence of feedback system for the use of various methods of learning and knowledge control.		+		
54	6	EP management must monitor the student's independent work control and the adequate evaluation of its results in the process of implementation of the educational program.		+		
55	7	EP management must monitor the satisfaction of students by passing the professional internship.	+			
56	8	EP management must demonstrate decision making process on the basis of the results of students' feedback and the assessment of their satisfaction.		+		
57	9	EP management must prove the existence of a monitoring system for the improvement of the student on the educational trajectory and achievements of the learners.	+			
58	10	EP management must ensure the availability and efficiency of the mechanism of objective assessment of the learning outcomes of the collective appeal mechanism, transparent criteria and assessment tools.	+			
59	11	EP management must ensure that the level of students' knowledge assessment matches the planned learning outcomes and objectives of the program on the criteria and evaluation methods.	+			
60	12	EP management must provide the conditions for inclusive education.			+	
		Subtotal	**5**	**6**	**1**	**0**
Standard "Students"						
61	1	Management of EP should demonstrate policy of EP formation of the students' contingent starting from admission to graduation and ensure the transparency of the procedures. The procedures governing the cycle of the students study period must be approved and published.	+			
62	2	Admission and enrollment in the educational program must be accompanied by an introductory course that contains information about the organization of education and specific education program.	+			
63	3	Management of EP should foresee the special adaptation and support program for foreign students.		+		
64	4	Management of the EP must demonstrate the conformity to the actions of the Lisbon Recognition Convention.	+			
65	5	The institution should cooperate with other organizations and national education centers "European Network of National Information Centers		+		

		on Academic Recognition and Mobility / National Academic Recognition Information Centres" in order to provide a comparable recognition of qualifications.				
66	6	Management of the educational program must demonstrate the existence and effectiveness of the mechanism for the recognition of the results of academic mobility of students, as well as results of additional, formal and informal learning.		+		
67	7	EP management must demonstrate the effectiveness of the monitoring of academic achievements of students.	+			
68	8	EP management must demonstrate awareness of the main roles (professional, social) of the students based on learning outcomes.	+			
69	9	EP management must contribute to professional certification of students.			+	
70	10	EP management must ensure the involvement of students in research work and consulting.		+		
71	11	The university and EP management must provide an opportunity for internal and external mobility of students and assist them in obtaining external grants for training.			+	
72	12	The university must provide graduates with the documents confirming the qualification, including learning outcomes achieved, as well as the context, content and status of education and a certificate of its completion.	+			
73	13	EP management must provide graduates with employment measures, the systematic monitoring of employment of graduates, their career development and improvement of the efficiency of alumni associations.		+		
74	14	EP management must enable students to exchange and expression of their opinions – for example, through the Internet forum and student organizations.	+			
75	15	EP management must demonstrate the operation of the feedback system support for students, including the prompt submission of information on the results of assessment of students.		+		
76	16	EP management must demonstrate the existence and effectiveness of the mechanism of support for gifted students.		+		
		Subtotal	**7**	**7**	**2**	
Standard "Academic Staff"						
77	1	The University must have an objective and transparent staff policy, including employment, professional development, ensuring the professional competence of all staff.		+		
78	2	The administration of educational program must demonstrate the compliance of HR capacity of academic staff with the eligibility requirements, levels and the uniqueness of educational program on	+			

		the basis of the recruiting system.				
79	3	The administration of EP (educational program) must demonstrate the awareness of liability for its employees and their favorable working environment.		+		
80	4	The administration of educational program must demonstrate the changing role of teacher in the context of transition to student-centered education.	+			
81	5	The University must provide the public with the access to information about academic staff, including academic staff directories and posting questionnaires on the university website.	+			
82	6	The administration of educational program must provide the monitoring of academic staff activity, a systematic assessment of the competence of teachers, a comprehensive assessment of the quality of teaching, including the assessment of satisfaction of teachers and students.		+		
83	7	The administration of EP must provide the completeness and adequacy of individual planning work of academic staff for all activities, performance monitoring and the effectiveness of individual plans, and to demonstrate the evidence of teacher performance of all projected workload.	+			
84	8	The university administration must show the support for research activities of academic staff, and provide a link between research and teaching.		+		
85	9	The university administration must show the existence of professional and personal development of academic and administrative staff, as well as the compliance of professional and personal development of faculty with strategy development.		+		
86	10	The administration of EP must involve experienced experts , as well as outstanding scientists, public and political figures.			+	
87	11	The Administration of EP must ensure the concerted action on the professional development of young teachers.		+		
88	12	The administration of EP must ensure the system of professional and personal development of faculty and staff.		+		
89	13	The Administration of EP must ensure monitoring of academic staff satisfaction.		+		
90	14	The Administration of EP must involve the academic staff into the practical activity in the field of specialization on a permanent basis.		+		
91	15	The Administration of EP must demonstrate IT-competence of academic staff, the conditions of motivation for the use of innovative methods and forms of education, information and communication technologies in the educational process.		+		
92	16	An important factor is the development of academic mobility of teachers, to attract the best foreign and			+	

		local lecturers and conduct joint researches.				
93	17	An important factor is the participation of academic staff in social life (academic staff's role in the system of education, in the development of science, region, creating a cultural environment, participation in exhibitions, creative competitions, charity programs, etc.).	+			
94	18	The administration of EP demonstrates the compliance of the priorities of consulting, research work, implemented academic staff with the topical issues of the economy, the priorities of government development, the state national policy in the sphere of education, science and innovation development.		+		
		Subtotal	**5**	**11**	**2**	
Standard "Educational Resources and Student Support System"						
95	1	The university must demonstrate the sufficiency of material, financial and human resources.	+			
96	2	The university must demonstrate the effectiveness of the students support services and the availability of support procedures.	+			
97	3	The university must identify the support needs of different groups and categories of students.	+			
98	4	The university must ensure the existence and effective functioning of information and feedback system focused on students, staff and others.	+			
99	5	The university must demonstrate the effectiveness of the regular analysis of the adequacy of resources and support systems for students, including the competence of the involved staff.		+		
		The university must create learning environment that reflects the specifics of the educational programs, which includes:				
100	6	technological support of students and the teaching staff in accordance with EPs (e.g. on-line education, database, data analysis program);	+			
101	7	personalized interactive resources (with the access in extracurricular time), including teaching materials and assignments, ensuring the possibility of self-assessment of students' knowledge through remote access to the university portal;	+			
102	8	interactive academic consultations to help students plan and develop the educational programs, including personified interactive resources;	+			
103	9	professional guidance, assistance in choosing and achieving career paths;	+			
104	10	the sufficient number of classrooms, equipped with modern technological means of teaching, educational and research laboratories, educational and training grounds, technoparks with modern equipment, complied with EPs, sanitary-epidemiological norms and requirements;	+			

105	11	the sufficient number of computer classes, reading halls, multimedia, language and scientific-methodical classrooms, the number of seats in them;	+			
106	12	the book fund, including the fund of educational, methodical and scientific literature on general disciplines, basic courses and majors in print, electronic versions, periodicals in the context of learning languages;	+			
107	13	structured information in the context of disciplines. For example, presentation materials, videos, lecture notes, compulsory and additional literature, practical tasks, etc.;	+			
108	14	the availability of scientific databases and electronic scientific journals;	+			
109	15	the availability of electronic versions of published journals;	+			
110	16	plagiarism expertise of research work results, graduation papers, dissertations;	+			
111	17	free WI-FI and access to educational online resources, throughout the territory of the institution.	+			
112	18	The administration of EP must ensure the copyright compliance when publishing educational and methodical materials in open access.	+			
113	19	Leaning equipment and programs must comply with modern requirements.	+			
		Subtotal	**17**	**1**	**1**	
Standard «Information Management»						
114	1	The university should provide proper functioning of information collection system, information analysis and management on the basis of up-to-date information technologies and software.	+			
115	2	The university decides on the amount and structure of periodically updated information and the personnel responsible for reliability and timelines of the information in accordance with the university development strategy.	+			
116	3	The university provides up-to-date, reliable and full information and its storage.	+			
117	4	Educational program leaders should show the evidence of making decisions based on the analysis of the facts.		+		
118	5	The system of information collection, its analysis and management should be used for maintaining the quality of the educational program.		+		
		The information collected and analyzed by educational organizations should take into consideration the following:				
119	6	dynamics of student contingent in the context of its forms and types;	+			
120	7	students' progress, achievements and dismissals;	+			

121	8	students' satisfaction with the educational program and quality of education at university;	+			
122	9	availability of the resources and support system for students;	+			
123	10	employment and career advancement of the alumni.		+		
124	11	Leaders of the educational program should show the ability of the information analysis for revealing and predicting risks.		+		
125	12	The university should provide effective functioning of the informing and feedback systems for students, staff and stakeholders.	+			
126	13	Students, employees and teachers must confirm their consent to personal data processing.		+		
127	14	Involvement of students, staff and the faculty in information collection, its analysis and making decisions on its basis is a very important factor.		+		
		Subtotal	**8**	**6**	**0**	
Standard «Informing of the Public»						
128	1	The university should publish the information about its activity in general and educational programs, in particular. The information should be clear, concise, objective, up-to-date and comprehensible.	+			
129	2	Leaders of the EP should use various means of informing the general public and stakeholders, information networks, in particular.	+			
		The university should demonstrate the information that characterizes the university in general and educational programs, in particular, on the web-site, and effectiveness of the web-site for the improving the process of education. The web-site should have the following information:				
130	3	full and objective information about educational programs, including existing student support systems, main learning outcomes and qualifications;	+			
131	4	adequate and objective information about the faculty, personal sites, in particular;	+			
132	5	transparent information about complaint handling and virtual complaint book;		+		
133	6	information about cooperation with other scientific / consulting organizations and educational organizations suggesting the same educational programs;		+		
134	7	information and links to the results of the external evaluation.	+			
135	8	Participation of the EP in ranking and ratings is the important factor.	+			
		Subtotal	**6**	**2**	**0**	**0**
Standard "Standards for individual EP"						
TECHNICAL SCIENCES AND TECHNOLOGIES			+			

EPs in the fields of "Technical sciences and technologies" such as "Geodesy and cartography", "Cartography", "Geodesy", "Mine surveying", "Metallurgy" etc. are obliged to comply with the following requirements:						
136	1	EP is obliged to include subjects and activities aimed at obtaining practical experience and skills for the whole profession and majors in particular in order to get students introduced to professional environment and current issues in the field of their specialization as well as for the acquisition of skills through theoretical training education program.: - excursions to enterprises in the field of specialization (plants, workshops, research institutes, laboratories, etc.) - conducting lessons and seminars at the enterprise of specialization; - conducting seminars to solve practical tasks relevant to enterprises in the field of specialization, etc.	+			
137	2	The teaching staff must consist of at least one full-time teacher who has a long experience of working at enterprises in the field of specialization.;		+		
138	3	The contents of all the disciplines within the EP must be based and include a clear correlation with the contents of fundamental natural sciences such as Mathematics, Chemistry, Physics;	+			
139	4	The EP management should provide measures to strengthen practical training in the field of specialization;	+			
140	5	The management of the EP should ensure the training of students in the field of application of modern information technologies.		+		
		Subtotal	**3**	**2**	**0**	**0**
EDUCATION						
EPs in the direction of "Education" are obliged to comply with the following requirements:						
141	1	EP administration is obliged to ensure the theoretical knowledge of graduates in the field of psychology and communication skills as well as analysis of personality and behavior, methods of preventing and conflict resolution, learners' motivation;	+			
142	2	EP administration is obliged to demonstrate the literacy of graduates in Information Technology program.	+			
143	3	EP administration is obliged to display the programs containing innovative methods of teaching and learning planning including interactive methods of teaching with the high level of student engagement and motivation (games, case- study, use of		+		

		multimedia resources);				
144	4	EP administration is obliged to demonstrate the students ability to train the skills of self-learning;	+			
145	5	EP should focus on different types of practices: - attending lectures and seminars conducted by teachers; - conducting special seminars and discussing the innovative methods and technologies of teaching; - students must have possibilities to attend at least one course in the sphere of their specialization taught by an expert.	+			
146	6	Students of the EP should be given the knowledge and skills of pedagogical systems and methods in the world, as well as the knowledge in the sphere of education management.				
		Subtotal	**5**	**1**	**0**	
		SUBTOTAL IN GENERAL	**74**	**58**	**14**	

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