REPORT
on the Results of the Work of an External Expert Commission
for Assessing the Compliance with the Requirements of Specialized
Accreditation Standards of educational programs
5B070100 Biotechnology
5B072800 Technology of processing industries (by industry)

Kazakh University of Technology and Business

Site-Visit Dates: May 02-03, 2019

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING
External Expert Commission

Addressed
Accreditation
the Council of the IAAR

АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ
ТӘУЕЛСІЗ АГЕНТТІГІ

НЕЗАВИСИМОЕ АГЕНТСТВО
АККРЕДИТАЦИИ И РЕЙТИНГА

INDEPENDENT AGENCY FOR
ACCREDITATION AND RATING

REPORT

on the Results of the Work of an External Expert Commission
for Assessing the Compliance with the Requirements of Specialized Accreditation
Standards of educational programs

5B070100 «Biotechnology»
5B072800 «Technology of processing industries (by industry)»

KAZAKH UNIVERSITY OF TECHNOLOGY AND BUSINESS

from «02» to «03» may 2019 y.

g. Nur Sultan   **«03» may 2019 year**

CONTENT

(I)   A LIST OF SYMBOLS AND ABBREVIATIONS

JSC - joint stock company;
EOD - external evaluation of learning achievements
UNIVERSITY - higher education institution;
WEC - External Commission
SAC - state certification Commission;
SES RK - state obligatory standard of education of the Republic of Kazakhstan;
DOT - distance educational technologies;
The UNT - unified national testing;
ICT - information and communication technologies;
KVN - club of cheerful and resourceful;
CPC - Committee on educational programs;
KTA - comprehensive testing of the applicant;
WHO - credit learning technology;
CAD - catalogue of elective disciplines;
MES - Ministry of education and science of the Republic of Kazakhstan;
MOS - modular educational programs;
ISO-international standard of the International organization for standardization
MTB - material and technical base;
IAAR - Independent Agency for accreditation and rating
R & d - research work;
R & D / R & d - research work of the student;
NPA - legal act;
OP - Educational program;
GED - General education;
Registrar's OFFICE;
Teaching staff - faculty;
RSEP on PVC - the Republican state municipal enterprise on the right of economic management
RK - Republic of Kazakhstan;
RMEB - Republican interuniversity electronic library;
RUE - working curriculum;
Media - media;
QMS - quality management system;
SSS - student scientific society;
SRO/SRS - independent work of the student/student;
SRSP - independent work of the student with the teacher;
TUP - model curriculum
LLP - limited liability partnership;
OIA - training and support staff;
Umkd - educational and methodical complex of discipline;
UMKS - educational and methodical complex of specialty;
UMS - educational and methodical Council;
WILK – Educational and research laboratory complex
Up - curriculum;
HR and the PMO - manage the planning and organization of the educational process;
US - the scientific Council;
The FDO - Faculty of distance learning;
EB - electronic library.

(II) **INTRODUCTION**

In accordance with the order № 29-19-OD from 20.03.2009 of the Independent Agency of accreditation and rating from 2 to 3 may 2019, the external expert Commission assessed the compliance of JSC "Kazakh University of technology and business" with the standards of specialized accreditation of IAAR (from "24" February 2017 № 10-17-OD, fifth edition).

The report of the external expert Commission (EEC) contains an assessment of the compliance of the Kazakh University of technology and business within the framework of specialized accreditation with the IAAR criteria, recommendations of the EEC on further improvement of the parameters of educational programs and the parameters of the profile of educational programs.

The composition of the WEC:

1. **Chairman of the Commission** – Tamenova Saltanat Sarsenbaevna, Ph. D., associate Professor, Turan University (Almaty);

2. Foreign expert – Toshmatov Mahmud Negmatovich, Ph. D., Professor, Technological University of Tajikistan (Dushanbe, Republic of Tajikistan);

3. The expert – Isayeva Kuralay Smetkanovna, candidate of technical Sciences, Pavlodar state University named after S. Toraigyrov (Pavlodar);

4. Expert – Rakhimov Murat Amanzholovich, Ph. D., associate Professor, Karaganda state technical University (Karaganda);

5. Employer – Baibosynov Zharas Omirbekovich, head of the human capital development Department of the Chamber of entrepreneurs of Nur Sultan (Nur Sultan);

6. Student - Nozimova Dilyafruz Shuhratovna, 2nd year student of the University "Astana" (G. Nur-Sultan);

7. Student – Zhaumitova Nursaule Nurlankyzy, 3rd year student of S. Seifullin Kazakh Agrotechnical University. (g. Nur Sultan);

8. Observer Agencies – Kydyrmina Nurgul Alimovna, head of information-analytical project of the IAAR (g Nur-Sultan).

(III) **REPRESENTATION OF THE ORGANIZATION OF EDUCATION**

JSC "Kazakh University of technology and business" was founded on the basis of the branch of Almaty University of technology and business in Astana.

Since 2003 began to act as an independent University as Akmola University of technology and business, March 26, 2008 was renamed into JSC "Kazakh University of technology and business".

The activity of the University is carried out on the basis of the current State license for the right to conduct educational activities (№ KZ29LAA00008797 of 18.04.2017).

The University has a multi-level system of training: technical and vocational education (College) – higher education (bachelor), postgraduate education (master).

The structure of the University includes 3 faculties: technical, economic and distance learning. The faculty consists of 7 departments, training staff in 17 specialties of bachelor's degree, 5 specialties of master's degree.

The contingent of students of the University on may 1, 2019 amounted to 2404 people.

The total number of teaching staff of the University is 163, 145 of them are full-time. Doctors of Sciences - 13, professors - 9, candidates of Sciences - 67, associate professors - 30, PhD - 8. The percentage of University degree is 54 %.

Training of students on accredited educational programs of bachelor degree 5B070100 – "Biotechnology", 5B072800 – "Technology of processing industries" is carried out in accordance with the current legal documents of the Republic of Kazakhstan, legal acts of the Ministry of education, Strategic development plan of OP, coordinated with the Strategic development plan of JSC "Kazakh University of technology and business" for 2019-2023, in accordance with the mission, vision and strategy of the University.

Producing Department OP 5B070100 – "Biotechnology", 5B072800 – "Technology of processing industries" is the Department of "Technology and standardization".

Kazutb carries out scientific activity on the basis of the Certificate of accreditation as the subject of scientific and (or) scientific and technical activity (the certificate of a Series of MK No. 003978 of April 9, 2014) issued by Committee on control in the field of education and science.

JSC "Kazakh University of technology and business" 07.06.2016 g received a certificate of institutional accreditation for a period of three years, with registration number IA №0072.

In 2011, the University began the construction of the campus. The construction of the complex is divided into 4 stages – educational and administrative building, dormitory, educational building №2, as well as the building, including a library, an Assembly hall, a cafe-dining room and a gym. Currently completed the first phase of construction and work is underway on the delivery of the administrative building and operating the square 24457,4 m2.

In 2016, the QMS was recertified for compliance with ISO 9001:2008 standards of EUROASIA MS LLP. Certificate of conformity KZ0 was issued.02.133 KSS №0054861 for a period of 3 years from 09.06.2016 to 09.06.2009

In 2018, according to the results of the rating of NU "Independent Agency of accreditation and rating" (IAAR), the University took the 15th position in the Republic.

(IV) DESCRIPTION OF THE VISIT OF THE EEC

The work of the WEC was carried out on the basis of the Program of the visit of the expert Committee for institutional accreditation of the Kazakh University of technology and business in the period from 02 till 03 may 2019.

In accordance with the requirements of the standards, the Program of the visit covered meetings with the rector, Vice-rectors, heads of departments, deans, heads of departments of the University, teachers, students, graduates, employers and employees from various departments, interviewing and questioning of teachers and students. In total, 197 people took part in the meetings (table 1).

Table 1 - Information about employees and students who took part in meetings with VEK IAAR:

Category of participants	Number
Rector	1
Pro-rector	3
Heads of structural units	14
Dean of faculty	2
Head of department	2
Teachers	41
Graduates	15
Employers	7
Studying	54
Just	139

Vec members attended training sessions:
- on the subject "Biotechnology of milk and dairy products", the theme "Development of processed cheese with vegetable additives", 3rd year, specialty 5B070100-Biotechnology, teacher – PhD, senior lecturer Tarlykov PV (audience 3/213);
- on the subject "Biotechnology fermentation production", the theme of "Tandy organically Isildur NDRs. Lemon Iselin NDRs technologies", the 3rd course, specialty 5B070100-"Biotechnology", lecturer – master, senior lecturer G. I. turehanova bn (audience 3/215);

- on the subject "Astyk inmodern zapasy," theme "Astyk spasini Anita", 2 year;

- on the subject "Food chemistry", the theme of "Gmirta and gmirta saposin Anita", 2 course, specialty 5B070100-"Biotechnology", lecturer – master, senior lecturer K. A. Mukanova (audience 3/113).

During the tour, Vek members got acquainted with the state of the material and technical base, visited the conference hall, Kazutb library, Assembly hall, laboratory of food biotechnology, laboratory of biotechnology and bioengineering, laboratory of Microbiology and Virology, laboratory of food quality control assessment, laboratory of food preparation technology, laboratory of technology of processing industries.

The activities planned within the framework of the visit of the VEK IAAR contributed to the familiarization of experts with the bases of practices. The expert group visited LLP "Akbidai -Astana" – the leading enterprise in the evaluation and monitoring of grain quality. LLP "Akbidai -Astana" there is a branch of the Department of accredited OP, where every Friday classes for 3 courses in the discipline "De ndron technologies", the teacher Kashurina B. S.

In accordance with the accreditation procedure, 41 teachers and 54 students were surveyed, including Junior and senior students.

In order to confirm the information provided in the self-assessment Report, the University's working documentation was requested and analysed by external experts. Along with this, the experts studied the official website of the University http://www.kazutb.kz ahhh!

All conditions were created for the work of VEK, access to all necessary information resources was organized. From the staff of the Kazutb was provided with the presence of all the people mentioned in the visit, in accordance with the established time period.

(V) THE STANDARDS OF SPECIALIZED ACCREDITATION

5.1. Standard «educational program Management»

- ➢ The University must have a published quality assurance policy.
- ➢ Quality policy should reflect the link between research, teaching and learning.
- ➢ The University should demonstrate the development of a culture of quality assurance, including in the context of OP.
- ➢ Commitment to quality assurance should apply to all activities carried out by contractors and partners (outsourcing), including joint/double-degree education and academic mobility.
- ➢ The management of the OP ensures transparency of the development plan of the OP based on the analysis of its functioning, the real positioning of the University and the focus of its activities to meet the needs of the state, employers, stakeholders and students.
- ➢ Guide OP demonstrates the functioning of the
- ➢ formation and regular revision of the development plan of the OP and monitoring its implementation, evaluation of the achievement of learning objectives, compliance with the needs of students, employers and society, decision-making aimed at continuous improvement of the OP.
- ➢ The management of the OP should involve representatives of stakeholder groups, including employers, trainees and PPP, in the development of the OP.
- ➢ The leadership of the OP should demonstrate the individuality and uniqueness of the development plan of the OP, its consistency with national development priorities and the development strategy of the organization of education.
- ➢ The University should demonstrate a clear definition of those responsible for business processes in the framework of the OP, a clear distribution of duties of staff, the division of functions of collegial bodies.
- ➢ The management of the OP must provide evidence of transparency in the management of the educational program.
- ➢ The management of the OP should demonstrate the successful functioning of the internal quality assurance system of the OP, including its design, management and monitoring, their improvement, fact-based decision-making.
- ➢ Guide OP should manage risks.
- ➢ The management of the OP should ensure the participation of representatives of interested persons (employers, teachers, students) in the collegial management bodies of the educational program, as well as their representativeness in decision-making on the management of the educational program.
- ➢ must demonstrate innovation management within the OP, including analysis and implementation of innovative proposals.
- ➢ The EP management should demonstrate evidence of openness and accessibility to learners, faculty, employers and other stakeholders.
- ➢ Guide OP should pass the training management education.
- ➢ The management of the OP should strive to ensure that the progress made since the last external quality assurance procedure is taken into account in preparing for the next procedure.

The evidence part

Development and management of OP specialties 5B070100 – "Biotechnology", 5B072800 "Technology of processing industries (by industry)" is carried out in accordance with the Dublin descriptors agreed with the European qualification framework. The activity of the Department "Technology and standardization" - further "Tis" is organized in accordance with the stated mission, vision, goals and objectives, as well as the development strategy of Kazutb for 2019-2025 and is aimed at their implementation. Quality assurance policy of the University, Mission and Vision, posted on an open resource http:// www.kazutb.kz thus, available to employees, students, employers, stakeholders and other stakeholders.

Directly organization, development of documents, management, control of implementation, monitoring and other operational issues in the field of quality of educational activities are engaged in specially created in Kazutb structures and appointed persons (Vice-rector for educational, educational and methodical work and academic mobility, Vice-rector for science, innovative technologies and external relations, Vice-rector for educational work), educational and methodical Council; Department of educational process planning, Department of educational process planning, Department of organization and control of educational process).

The mechanism of formation of OP is established by the Provision "On development of educational programs". The management of the OP monitors the implementation of the development plan of the OP and the effectiveness of the implementation of the plan in accordance with the procedure of monitoring and evaluation of the OP. Regulations on monitoring the quality of the educational program consists of several stages: "Preparation of documentation of the educational program"; "External evaluation of OP"; "Internal evaluation of OP"; "Analysis of quantitative and qualitative indicators of OP"; "Monitoring of practice (study

on practical training)"; "Preparation of monitoring report»; "Revision of the development plan of OP". External evaluation of the OP is carried out with the involvement of stakeholders.

Representatives of employers ' organizations, whose activities are directly related to the specifics of the OP, such as: LLP "Akbiday-Astana", RSE on PCV "Republican collection of microorganisms", Akmola branch of "Kazakh research veterinary station", which Express the interests and views characteristic of the majority of employers in this area, take part in the design and implementation of accredited OP on accredited specialties.

In order to develop a risk assessment mechanism for the implementation of educational programs, a Regulation on risk management was developed, which provides for the identification, assessment and analysis of risks; planning and implementation of necessary measures to eliminate risks, risk analysis (Kazutb scientific Council decision of January 14, 2019, Protocol No. 4/1).

In General, the uniqueness and individuality of the accredited OP 5B070100 "Biotechnology", 5B073200 "Technology of processing industries" is that they are aimed at training specialists taking into account the needs of the labor market of the food industry of Akmola region, which is consistent with national development priorities and development strategy Kazutb.

For the purpose of effective management, control, accounting and analysis of educational and other processes at the University operates AIS "Platonus". This system serves as a "single window" of access to the results of students ' progress, including current and midterm control, intermediate and final certification of students.

Web site Kazutb (http:// www.kazutb.kz) submitted by units of pages and personal pages of faculty, sub-sites of the rector, prospective student, student. The site provides information through the publication of news, announcements and review of events.

Website http//:www.kazutb.kz is used for feedback using the comment form, the peculiarity of which is that you do not need to register on the site to start commenting, just select any social network in which the user is registered, and write on behalf of the profile of this social network.

The University participates in the annual national ranking of universities, conducted by NU "Independent Agency of accreditation and rating". In 2018, kazutb JSC took a stable 15th position among 58 universities in the General ranking OF the top -20 universities of the Republic. (http://www.iaar.kz/ru/rejting/rejting-vuzov-2018).

As a result of the purposeful work carried out, the number of employed graduates according to the rating of Atameken for 2018 is 86% in the specialty "Technology of processing industries", in the specialty 5B070100 - Biotechnology - 68% (https://atameken.kz/uploads/content/files/2Биотехнология.pdf).

Analytical part

However, the following issues relating to this standard are not fully reflected in the self-report and were not confirmed during the visit of the EEC.

The link between research, teaching and learning is not sufficiently expressed in the quality policy.

VEK notes that the question of the mechanism of innovation management in the framework of OP 5B070100 "Biotechnology", 5B072800 Technology of processing industries" is not sufficiently confirmed, This opinion was confirmed during the interview of the heads of OP, PPP, students and employers and in the analysis of the submitted documentation.

Also, in the course of the work, VEK did not receive confirmation of the work of the OP management on risk management. Risks are prescribed only in the Regulations, there are no documents on the analysis and measures to prevent risks.

It should be noted that there is no implementation of joint educational programs with foreign partner universities.

According to the results of the survey PPP:

- 65.6 % of respondents noted that the University provides an opportunity for continuous

development of PPP potential

- 53.1 % of PPP noted their involvement in the process of management and strategic decision-making

- 3.1 % low estimate the perception of management and administration of the University criticism;

- 50 % satisfied with PPP feedback with management;

- 53.1%) of respondents assessed the adequacy of the recognition of the potential and abilities of teachers.

According to the results of the survey, the level of availability and responsiveness of the University management is "fully satisfied" - 75 %, "partially satisfied" - 25 % of students.

Strengths/best practices:
- Mops contain elective courses that reflect modern requirements in the field of training.

The recommendations of the WEC:
- provide for the possibility of developing and implementing joint educational programs with foreign partner universities;

- specify the risk management system for accredited OP.

Conclusions of the EEC on the criteria of the standard "Management of the educational program" for OP 5B070100 "Biotechnology", 5B072800 "Technology of processing industries (by industry)": strong - 5, satisfactory – 10, requiring improvement - 2.

5.2. Standard «information Management and reporting»

➢ The University should ensure the functioning of the system of collection, analysis and management of information through the use of modern information and communication technologies and software.

➢ OP leadership must demonstrate the system using the processed, adequate information for improving the internal quality assurance system.

➢ There should be a system of regular reporting within the OP, reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of departments and research activities.

➢ The University should establish the frequency, forms and methods of evaluation of management of OP, the activities of collegial bodies and structural units, senior management, implementation of research projects.

➢ The University must demonstrate the definition of the order and ensure the protection of information, including the identification of responsible persons for the accuracy and timeliness of information analysis and provision of data.

➢ An important factor is the involvement of students, employees and teaching staff in the collection and analysis of information, as well as decision-making based on them.

➢ OP leadership must demonstrate a mechanism of communication with students, employees and other stakeholders

➢ persons, including the existence of conflict resolution mechanisms.

➢ The University shall be provided to measure the degree of satisfaction of needs of faculty, staff and students within the framework of OP and demonstrate evidence of elimination of the found shortcomings.

➢ The University should evaluate the effectiveness and efficiency of activities, including in the context of OP.

➢ Information collected and analysed by the University in the framework of the OP should consider:
- key performance indicators;
- dynamics of the contingent of students in the context of forms and types;
- the level of academic progress, student achievements and contributions;
- satisfaction of students with the implementation of OP and the quality of education at the University;
➢ - availability of educational resources and support systems for students;
- employment and career growth of graduates.
➢ Students, employees and teaching staff must document their consent to the processing of personal data.

➢ The guidebook of the OP should facilitate the provision of all necessary information in the relevant fields of science.

The evidence part
The University has implemented information management processes, including collection and analysis

Information management within the official portal of the University https://www.kazutb.kz responsible is the head of the Department of Information technology and software.

The portal provides information and communication to students, teachers and other interested persons. The site provides information about the management of educational, methodical, scientific, educational processes, there are web pages of individual departments: faculties, departments.

Separate sections of the site are focused on different categories of users: applicants, students, masters, graduates and faculty. The site has a blog of the rector, a news section with posted video content, there are links to the addresses of the University in social networks. Site management is centralized.

A personal account of the student http://cabinet. includes academic calendar, guide-guide, links to the catalog of elective disciplines, a list of databases of practices in the field. Also in the personal account of the student there are information about the current progress of the student, about the results of exams, about the ratings and information about the payment by the student of training.

The library has access to the following databases: Republican Interuniversity electronic library (RMEB) - www.rmebrk.kz; Electronic library of the publishing house "LAN" – www.e.lanbook.com; Thomson Reuters: http.//it-science.thomsonreuters.com; agreement on joining the "Kazakhstan open Consortium" ("Kazakhstan Open Consortium"), as well as users are granted access to full-text databases via the Internet: Springer, "Scopus" (Sci Verse Scopus) www.KazakhstanVSL.org/authentication ahhh!

The University ensures the openness and availability of information to all stakeholders, as well as the existence of an existing mechanism of communication with students, employees and other stakeholders.

The information collected under this monitoring, in particular, takes into account:
- key performance indicators;
- availability of educational resources and support systems for students;
- employment and career growth of graduates.

The safety of information is ensured by the distribution of roles and functions in the information systems used; the presence of installed anti-virus programs; system administration of servers; backup system on servers; restriction of access of individuals to the premises with servers; technical equipment of premises with servers to ensure the safety of work.

The reporting system includes annual reports of structural units, reports on R & d and R & d, financial statements.

The kazutb information collection, analysis and management system is used to ensure the quality of the OP implementation, which is confirmed by the relevant internal regulations.

The system of information and feedback is aimed at students and employees, and includes information stands at the departments, the functioning of the official website of the University in three languages.

The main forms of feedback are:
- direct mail of the rector in the form of boxes of complaints and suggestions placed in each academic building;
- feedback forms posted on the University website;
- rector's blog posted on the University website;
- survey of consumers of educational services and staff.

Representatives of students who are members of the Academic Council, have the opportunity to make a complaint or claim directly at the meeting of the Academic Council and get an answer about the timing and methods of solving the problem.

Students and faculty, employers are involved in the process of collection and analysis of information through questionnaires, interviews, and decision-making on their basis during the meetings of departments, faculty of UMS, UMS and Academic Council of the University.

Analytical part
The Commission of the WEC notes that the structure and amount of information collected, the sources, frequency, time slot, the responsible person for the accuracy and timeliness defined

by the internal normative documents of University, the job descriptions of Department heads. At the same time, experts note that there are no rules for updating the information pages of the departments and personal pages of the faculty, requires updating the list of scientific publications of the faculty, the English version of the site is not fully presented.

Vek members note that, despite the presence of distance learning system in the University, there is no real possibility of asynchronous communication between students and teachers (offline).

According to the results of the survey, 92.7 % of students are fully satisfied with the usefulness of the website of educational institutions in General and faculties in particular. The level of feedback from management is fully or partially satisfied at 100 % PPP. Full satisfaction of students with the level of availability of the Dean's office is 92.7 %, availability and responsiveness of management - 87%, availability of academic counseling – 83.6 %, availability of counseling on personal problems – 81.8 %.

Strengths/best practices

- The University uses a developed system of communication with students, teachers and employees, used, among other things, to resolve conflicts.
- Within the framework of the organized meetings of the EEC, regular monitoring of the satisfaction of the needs of the PPP, staff and students was confirmed. The information collected and analyzed by the University is effectively used in the educational and scientific activities of the University.

The recommendations of the WEC

- it is recommended to place on the main page of the University website full information about the PPP, serving data OP.
- provide measurable indicators of key performance indicators and the effectiveness of the implementation of the OP.

 to implement asynchronous communication of students with teachers (in offline mode) in technology distancionnogo training.

Conclusions of the EEC on the criteria of the standard "information Management and reporting" for OP 5B070100 "Biotechnology", 5B072800 "Technology of processing industries (by industry)": strong-7, satisfactory - 8, require improvement - 2.

5.3. Standard «Development and approval of the educational program»

➢ The University should define and document the procedures for the development of OP and their approval at the institutional level.
➢ The OP manual should ensure designed OP objectives, including expected learning outcomes.
➢ The OP guide should ensure that the developed models of the OP graduate describing learning outcomes and personal qualities are available.
➢ OP leadership must demonstrate the conduct of external examinations OP.
➢ Qualifications obtained at the end of the OP should be clearly defined, explained and consistent with a certain level of NSC.
➢ Guide OP should determine the influence of the disciplines and professional practices in shaping learning outcomes.
➢ An important factor is the possibility of training students for professional certification.
➢ The management of the OP should provide evidence of the participation of students, faculty and other stakeholders in the development of the OP, ensuring their quality.
➢ The labor intensity of the OP should be clearly defined in Kazakhstan loans and ECTS.
➢ The management of the OP should ensure the content of academic disciplines and learning outcomes at the level of education (bachelor, master, doctoral).
➢ The structure of the OP should provide for different activities corresponding to the learning outcomes.
➢ An important factor is the presence of joint OP with foreign educational organizations.

The evidence part

Development and approval of educational programs at the University is carried out in accordance with the provisions of legal acts in the field of higher education, as well

documentation developed by the University to ensure transparency and clarity of implementation of the development strategy.

Along with the results of internal monitoring of academic performance and sociological surveys of students, analyzed the official feedback of practitioners and employers (supervising professional practice, the chairmen of the SAC in the process of final certification of graduates, reviewing the final work, etc.).

The achievement of competence in the field of professional activities OP 5B070100 "Biotechnology" contribute to the disciplines: "Safety of food products", "Biotechnology of milk and milk products", "Fundamentals of biotechnology", "Biotechnology of microorganisms", etc. Professional competences are formed in the framework of the disciplines introduced in the curriculum on the recommendations of employers and taking into account the influence of the labour market. An example is the following disciplines: "Design of biotechnological enterprises", "Modern methods and aspects of biotechnology", "Fundamentals of genetic engineering".

Participate in the development and examination of the content of the OP 5B070100 "Biotechnology" was conducted by the Director of the Akmola branch of "Kazakh scientific research veterinary station" - Tokaev S. O., Director of RSE on REM "Republican collection of microorganisms" of Abzhalelov A. B.

The content of the CED OP 5B072800- "Technology of processing industries" is influenced by the recommendations of representatives of employers. The following disciplines contribute to the achievement of competence in the field of professional activity: "commodity science of grain and products of its processing", "Processing and storage of crop production", "automation of technological processes", "Technology of flour production" , etc. Professional competences are formed in the framework of the disciplines introduced in the curriculum on the recommendations of employers, "Food chemistry", "Technology of cereals and food concentrates", "Technology of fermentative productions and winemaking" and taking into account the influence of the labour market.

It should be noted the expressed practical orientation of the disciplines offered by employers.

Participate in the development and examination of the content of the OP 5B072800- "Technology of processing industries" conducted by the Director of LLP "Akbidai - Astana" Kashurina B. S.

The process of acceptance, implementation and identification of the effectiveness of accredited OP monitors the op Committee of the faculty of technology.

Members of the WEC noted that the students of accredited OP discussing the content of education offered by the University, but to a lesser extent participate in the administration of educational programs.

VEK notes that joint OP on accredited OP with foreign organizations of education is not available.

Analytical part

Analysis of the studied documents, as well as the results of interviews with students, faculty, graduates and employers led to the conclusion that changes in the content of academic disciplines in the framework of educational programs are not always available to stakeholders.

The survey of faculty conducted during the visit of VEK IAAR demonstrated a positive assessment of the attention of the University management to the content of the OP. The content of OP "very good" meets the needs of PPP -71,9 %, "good" – 28,1%.

The survey of students showed that the level of responsiveness to feedback from teachers regarding the educational process is fully satisfied – 89.11%; partially – 9.1%; fully satisfied with the quality of teaching – 92.76%, partially – 7.3%.

Strengths/best practices

- There is a practical orientation of educational programs.

The recommendations of the WEC:

- develop joint and/or double-degree programs with foreign universities.

- ensure timely information and publication of planned and undertaken actions in relation to the OP.

Conclusions of the EEC on the criteria of the standard "Development and approval of the educational program" for OP 5B070100- "Biotechnology", 5B072800 "Technology of processing industries (by industry)": strong - 6, satisfactory – 5, requiring improvement – 1

5.4. Standard «Continuous monitoring and periodic evaluation of educational programs»

➢ The University should monitor and periodically evaluate the OP in order to achieve the goal and meet the needs of students and society. The results of these processes are aimed at continuous improvement of the OP.

➢ Monitoring and periodic evaluation of the OP should consider:

➢ The content of programs in the light of the latest achievements of science in a particular discipline to ensure the relevance of the taught discipline;

➢ Changing the needs of society and the professional environment;

➢ Load, performance and output of students;

➢ The efficiency of procedures of assessment of students;

➢ Students ' expectations, needs and satisfaction;

➢ Educational environment and support services, and their compliance with the objectives of the OP.

➢ The University and the management of the OP must provide evidence of the participation of students, employers and other stakeholders in the revision of the OP.

➢ All stakeholders must be informed about any planned or taken actions in relation to OP. All changes made to the OP must be published.

➢ The management of the OP should ensure that the content and structure of the OP are reviewed in the light of changes in the labour market, employers ' requirements and social demands of the society.

The evidence part

The system of monitoring the implementation of plans for the development of accredited OP includes the following mechanisms: annual reports of the Department and faculty; annual reports of the faculty of the Department; consideration of the development of different directions of training of specialists for the meetings of the collegial bodies.

Issues of development of accredited OP are regularly considered at meetings of collegial bodies:

1. Academic Council Kazutb: may 2018; "the Use of different scenarios of e-learning in the educational process of the faculty TO the University" - April, 2018g.; "On the state and measures to improve library and information activities at the University", November 2018; Innovative orientation as a factor of competitiveness and resource development of modern University, February 2019;

2. UMS Kazutb: the Main directions and actions for development of educational programs (OP), January, 2018; "Improvement of normative, methodical, material base of WILK laboratories", March, 2018; "Professional and pedagogical competences of the teacher in the course of the organization of extracurricular employment of students", April, 2018; Monitoring of quality of methodical maintenance of training sessions, SRO, SRO in the context of educational programs, October 2018.;

3. Committee on OP of the faculty of technology: "On the state of the material and technical base of the faculty", April, 2018; "Results of the winter examination session 2018-2019 academic year", January, 2019; "On the results of the passage of all types of practices by students of the faculty", October, 2018; "On the state of educational and methodical work at the departments", November, 2018; "On the organization of academic mobility of students and undergraduates. Problems and prospects" - November, 2018

In the framework of the Committee on OP of the faculty is the approval of the methodological documentation on the OP, the forms of the interim assessment, recommendations for publishing educational and methodical literature.

The development of educational programs OP 5B070100 "Biotechnology" invited stakeholders - the heads of large enterprises of the city, who make their proposals on the subjects taught, necessary for the formation of a competitive specialist, able to solve the tasks. Changes made to the OP are published on the University website.

The curriculum OP 5B070100 "Biotechnology" in 2018 on the recommendation of the employers introduced the disciplines: Foundations for genetic engineering, Methods of food analysis, Modern techniques and aspects of biotechnology (Protocol of the Department "Tis" No. 6 of 11.01.2018 g), in the academic plan 2018 (the Protocol of the Department "Tis" № 8 from 19.03.2018 g): Basics of genetic engineering, Methods of food analysis, Modern methods and aspects in biotechnology. Within the framework of accredited OP 5B072800 "Technology of processing industries" at the suggestion of the employer Casquino B. S., Director of LLP "Akbidai-Astana" was amended discipline in the academic plan 2018: "Food chemistry", "Technology of cereals and food concentrates", "Technology of fermentative productions and winemaking" (minutes of the Department "Tis" №8 from 09.03.2018 G.);

During interviews with students, they were not able to give clear answers to the question about the mechanism of making changes in the content of the OP. It is necessary to provide for measures to promptly inform interested parties about changes in the OP, not only by posting information on the University website, but also through social networks, e-mail newsletters, seminars, etc.

The overall level of satisfaction of potential employers with students over the past three years was 83 %.

Analytical part

These internal monitoring procedures increase the reliability of achieving the goal of educational programs and the degree of achievement of the expected results. The results of internal monitoring of students ' progress and the level of development of educational programs correlate with the feedback of employers and indicators of employment of graduates.

Strengths/best practices

The University conducts organizational activities to monitor the OP with the involvement of employers.

The recommendations of the WEC:

- on the University website Kazutb http://www.kazutb.kz you need to post information about the specifics of the OP levels OP target OP, base practices, academic degrees, formed competencies, achievements of students, about research activities of faculty departments, data on international cooperation, contacts. The description of the OP contains only data on the requirements for admission to the OP, the form and period of training, the total number of loans purchased, the bases of practices of students.

Conclusions of the EEC on the criteria of the standard "Continuous monitoring and periodic evaluation of educational programs" for OP 5B070100 "Biotechnology" 5B072800 "Technology of processing industries (by industry)": strong - 2, satisfactory – 7, requiring improvement - 1.

5.5. Standard «student-Centered learning, teaching and performance assessment»

➢ The leadership of the OP should ensure respect and attention to different groups of students and their needs, providing them with flexible learning paths.

➢ The OP guide should ensure that different forms and methods of teaching and learning are used.

➢ An important factor is the availability of own research in the field of teaching methods of academic disciplines OP.

➢ The OP guide should demonstrate the existence of a feedback system on the use of different teaching methods and evaluation of learning outcomes.

➢ The leadership of the OP should demonstrate support for the autonomy of students, with simultaneous guidance and assistance from the teacher.

➢ OP leadership must demonstrate the existence of procedures for responding to complaints of students.

➢ The University should ensure consistency, transparency and objectivity in the evaluation of learning outcomes for each OP, including appeal.

➢ The University must ensure that the assessment procedures of learning outcomes students OP planned learning outcomes and objectives of the programme. The criteria and methods of evaluation for the OP should be published in advance.

➢ The University should identify mechanisms to ensure the development of each graduate OP learning outcomes and ensure the completeness of their formation.

➢ Evaluators should be familiar with modern methods of assessing learning outcomes and regularly improve their skills in this area.

The evidence part

When academic write modules or elective subjects OP teachers before students conduct a presentation of their courses. The presentation of elective courses is held in order to provide students with the choice of the teacher, and the learning path. The teacher gives a brief summary of the course: the place and role of the course in the specialty program, goals, objectives and novelty of the course, as well as methods and forms of training. The choice of academic disciplines is carried out by students voluntarily in accordance with individual educational needs. The right to choose is given to all students, regardless of their academic debts.

OP have the appropriate structure of the combination of modules, correlated with the formulated learning objectives. For example, the module "Industrial and food biotechnology" is combined with the disciplines "Food biotechnology", "Microbiological production of biologically active substances and preparations", "Biotechnology of milk and dairy products". The level of education is determined by the availability of the required component (s) in each block of disciplines, a freedom of choice of learning paths lies in the choice of educational disciplines of the elective component. The disciplines of the mandatory and elective component of the OP are planned in a logical sequence. The study of disciplines ends with the state exam in the specialty.

VEC notes that employers have the opportunity to submit their proposals on the organization of the educational process through e-mail.

We consider it necessary to note that the University in the framework of accredited programs there is a need to develop and implement new own research in the framework of teaching methods for the development of student-centered learning.

During interviews with students, members of the EEC found that midterm control and examinations are held in most cases orally, which affects the objectivity of learning outcomes.

Analytical part

During the visit, Vek experts on this standard came to the following conclusions.

In order to improve the quality of training and instilling professional competencies, work is being done to provide students with the opportunity to choose an individual learning path with the right to choose not only disciplines, but also a teacher. During the interview, students confirmed that the University has a choice of disciplines.

In General, both students and faculty expressed positive views on the implementation of accredited OP.

However, the members of the VEC consider it necessary to note that the University within the accredited programs there is a need for the development and implementation of new own research in the framework of teaching methods for the development of student-centered learning.

Students believe that the University provides equal opportunities to all students -85.5 % Objectivity and fairness of teachers - 90.9%, fairness of examinations and certification - 90.9%, conducted tests and examinations - 90.97%.

Strengths/best practices

- flexible system of discounts on training and payment schedules.

The recommendations of the WEC:

- To organize their own research in the field of teaching methods and evaluation of learning outcomes.

Conclusions of the EEC on the criteria of the standard "student-Centered learning, teaching and performance assessment" for OP 5B070100- "Biotechnology", 5B072800 "Technology of processing industries (by industry)": satisfactory – 10.

5.6. Standard «Students»

> ➤ The University should demonstrate the policy of formation of the contingent of students in the context of OP from admission to graduation and ensure transparency of its procedures. The procedures governing the life cycle of students (from admission to completion) should be defined, approved and published.
> ➤ OP leadership must demonstrate the special adaptation programs and support for newly arrived and international students.
> ➤ The University must demonstrate the conformity of the actions of the Lisbon Convention on recognition.
> ➤ The University should cooperate with other educational institutions and national centres of the "European network of national information centres for academic recognition and mobility/National academic Information Centres for Recognition" ENIC/NARIC to ensure comparable recognition of qualifications.
> ➤ The leadership of the OP should demonstrate the existence and application of a mechanism to recognize the results of academic mobility of students, as well as the results of additional, formal and non-formal education.
> ➤ The University should provide an opportunity for external and internal mobility of students of OP, as well as assist them in obtaining external grants for training.
> ➤ The management of the OP should make the maximum amount of efforts to provide students with places of practice, to promote employment of graduates, to maintain communication with them.
> ➤ The University must provide graduates with documents confirming their qualifications, including achieved learning outcomes, as well as the context, content and status of the education received and evidence of its completion.
> ➤ An important factor is the monitoring of employment and professional activity of graduates of OP.
> ➤ The leadership of the OP should actively encourage students to self-education and development outside the main program (extracurricular activities).
> ➤ An important factor is the existence of an existing alumni Association/Association.
> ➤ An important factor is the availability of a support mechanism for gifted students.

The evidence part

Admission of students to educational programs is carried out in accordance with the relevant rules and procedures (Decree of the Government of the Republic of Kazakhstan dated October 31, 2018 № 600 "On approval of the Model rules for admission to educational institutions that implement professional training programs of postgraduate education", "Regulations on admission Committee" dated 14.01.2009).

Under accredited OP students are trained on state educational grants, grants of akims of the region, on a contractual basis. The formation of the contingent of students is based on the requirements put forward by modern society to higher education.

Table 2 - student Body for three years under accredited programs

Code and name of specialty	2016-2017 academic year		2017-2018 academic year		2018-2019 academic year	
	just	grant	just	grant	just	grant
5B072800 Biotechnology	91	3	21	3	25	6
5B070100 Technology of processing industries (by industry)	196	1	81	2	157	6

Table 3 - student Body as of October 1, 2018 for accredited programs

Code and name of specialty	Distance learning		distance learning	Kazan	Russian	just	pay	Grand total
	just	Distance learning						
5B072800 Biotechnology	25	10	-	15	10	6	19	25

5B070100 Technology of processing industries (by industry)	157	0	-	120	37	6	151	157

According to the table it can be concluded that the OP 5B072800 Technology of processing industries (by industry), 5B070100 Biotechnology there is a decline in the number of students.

On the official website of Kazutb there is a page "Admission Committee", where applicants can find a list of specialties required for admission of documents and details of the University.

Research of students is expressed in participation in scientific conferences, competitions and competitions.

The direction of students for all kinds of practices is made by order of the rector Kazutb indicating the timing of the practice, the base of practice and the head (s) of practice. Professors, associate professors, experienced teachers of the Department who are well aware of the specifics of the profession and the activity of the practice bases are appointed as heads of the practice.

Table 4 – practice Bases of students of accredited programs

5B072800 Technology of processing industries (by industry) 5B070100-Biotechnology	RSE UDP Kazakhstan "Karaotkel" House of ministries, RSE "national center of biotechnology», Chamber of Entrepreneurs of Astana, KTI and K LLP», JSC "Astana-Nm», Too "Torgay Elevator», LLP "Astana Akbidai», LLP "Kazakh research Institute of processing of agricultural products», LLP "Kazakh scientific research veterinary Institute», RSE "Republican collection of microorganisms»

Branches of the Department operate on the following bases:

The educational program 5B072800 "Technology of processing industries" LLP "Akbidai - Astana".

The educational program 5B070100 "Biotechnology: RSE on REM "Republican collection of microorganisms".

Monitoring of satisfaction on the results of the practice is carried out by means of questionnaires on the subject of satisfaction of heads of practices from the enterprises of students.

The overall level of satisfaction of employers over the past three years was 84 %.

The analysis of employment showed that the bulk of graduates are arranged on a profile of OP. Places of employment of graduates are mainly leading industrial enterprises. Separately, we can distinguish the following graduates: Murat L. - graduate of 2018 specialty "Biotechnology" works in LLP "Astana-Onim", senior laboratory assistant; Dauletiyar A. - graduate of 2018 specialty "Biotechnology" - "Milk Produkt", laboratory assistant; Temirkhan M. - graduate of 2018 specialty "Biotechnology" - "dairy plant Rodina", senior laboratory assistant. Canas R. graduate 2018, specialty "Technology of processing industries" after an internship and after graduation was invited to work at LLP "Akbidai-Astana" - the expert of calving estimates of grain.

Table 5 - Analysis of employment of accredited OP

Code and name of specialty	2016г.			2017г.			2018г.		
	Total	Employed	%	Total issues	Employe	%	Total	Employe	%

		issues are			are	d		issues are	d	
5B072800	Technology of processing industries (by industry)	6	3	50%	7	6	86%	8	4	50%
5B073200	Standardization, Metrology and certification	30	17	56%	40	22	55%	38	23	60%

Members of the WEC noted that the majority of graduates find jobs according to profile OP.

The graduating Department pays great attention to educational work (Protocol). Developed and approved the work plan of the Department, including educational work. Various forms of work are used to carry out the planned activities: preventive talks, round tables, meetings with cultural and public figures.

In General, it should be noted that the University has created conditions to support students to self-education and personal growth.

Analytical part.

During the interview, employers expressed the need to increase the time of practical training, which will improve the quality of practical training of students.

In the course of interviewing students proved that conditions are created to support gifted students by providing discounts, grants for training, stimulate creative activity, etc., while students expressed their wishes for events at various levels in areas of specialization at the University with the participation of students.

At the same time, VEK notes insufficient work of Association of graduates of higher education institution.

According to the results of the survey, Express full satisfaction with the availability of health services – 76.4%; availability of library resources – 85.56%; existing educational resources – 89.1%; the overall quality of educational programs – 92.7%; the relationship between student and teacher – 92.7%.

Strengths/best practices

- At the University there is a comprehensive support for students to self-education and personal growth.

- Within the framework of accredited programs, the University is actively working on the employment of graduates.

The recommendations of the WEC:

– To continue work on the development of external and internal academic mobility of students.

– To increase the role of the alumni Association in the activities of the University.

Conclusions of the EEC on the criteria of the standard "Students" for OP 5B070100-"Biotechnology", 5B072800 "Technology of processing industries (by industry)": strong - 1, satisfactory – 10, suggests improvement - 1.

5.7. Standard «Teaching staff»

➢ The University should have an objective and transparent personnel policy, including in the context of OP, including recruitment, professional growth and development of personnel, ensuring the professional competence of the entire staff.

➢ The University should demonstrate the compliance of the staff potential of the faculty with the University development strategy and the specifics of the OP.

➢ The management of the OP should demonstrate a sense of responsibility for its employees and ensure a favourable working environment for them.

➢ OP leadership must demonstrate the changing role of the teacher in connection with the transition to student-centred learning.

➢ The University should determine the contribution of PPP OP in the implementation of the development strategy of the University, and other strategic documents.

➢ The University should provide opportunities for career growth and professional development of PPP OP.

➢ Guide OP should bring to the teaching of practitioners of relevant industries.

➢ The leadership of the OP should provide targeted actions for the development of young teachers.

➢ The University should demonstrate the motivation of professional and personal development of teachers of OP, including the promotion of both the integration of research and education, and the use of innovative teaching methods.

➢ An important factor is the active use of PPP OP information and communication technologies in the educational process (for Example, on-line training, e-portfolio, MOE, etc.).

➢ An important factor is the development of academic mobility within the OP, attracting the best foreign and domestic teachers.

➢ An important factor is the involvement of PPP OP in the life of society (the role of PPP in the education system, in the development of science, the region, the creation of a cultural environment, participation in exhibitions, creative competitions, charity programs, etc.).

The evidence part

The staff of PPP accredited OP is completed according to the legislation of RK and Rules of competitive substitution of positions of PPP and scientific workers of higher educational institutions.

Personnel policy Kazutb consists of a set of principles, rules and regulations, organizational mechanisms, management decisions that are consistent with the strategic directions of the University.

All projects and programs for the implementation of Personnel policy are headed directly by the President - rector of the University. Personnel policy of Kazutb is reflected in such personnel documents as the "Code of honor of the teacher of the Kazakh University of technology and business" (Protocol of the Academic Council № 5 of January 24, 2017), "Regulations on the procedure for filling positions of teaching staff and researchers" (Approved on October 5, 2015), "Rules of labor regulations" (Approved on October 5, 2015).

The personnel management system is headed by the President - rector of the University. It includes managers at all levels, United on the principle of functional subordination. Participants of the personnel management system implement the main directions of Personnel policy within the powers defined by their job descriptions (Decision of the SS Protocol 4/1 of 14.01.2009), Regulations on structural units.

Personnel policy is available to all members of the team, copies of the Personnel policy regulations are located in each Department, and the electronic version is located on the internal server of Kazutb.

Leading experts in the field of education and industry are invited as chairmen of the SAC or reviewers of theses. In the reports for final certification many employers offer not only the analysis of students ' knowledge, but also make proposals for the amendment of the subject of theses and the need for the inclusion of certain elective courses in the educational program for the formation of the required competencies of a graduate of the University taking into account his qualifications.

Population dynamics of PPS OP 5B070100 - "Biotechnology" and 5B082800 - "Technology of processing industries" are presented in table 6.

Table 6 - size and composition of PPP 5B053200 - "Biotechnology" and 5B082800 - "Technology of processing productions (on branches)»

Indicator	Academic year		
	2016-2017	2017-2018	2018-2019
All PPP people. among them	27	28	30

Full-time faculty, people. from them:	22	23	25
with a degree of doctor of science	4	2	5
with a scientific degree of candidate of Sciences	11	12	9
with the academic degree of doctor PhD	-	-	1
with an academic master's degree	10	13	11
"Settling down», %	55	50	50
The proportion of full-time faculty, %	81	82	83

The Department has experts : MES RK on examination of OP, expert NATR, expert JSC NC GTE – Tultabaev M. sh., 2 members of the Technical Committee "72 – Nanotechnology of Kazakhstan" – Orynbasarov A. S., Bekturganova A. A., 1 member of the dissertation Council on specialties "Technology of food products" and "Food safety" GU them. Semey - Zh. z. Urazbayev, 3 people have academic titles of Professor, rated by the Committee for control in education and science – Sarsenbayev K. N., Myrzahanov N. M. Tultabaev M. Sh. 5 associate professors – Zhunusova G. S., Orynbasarov A. S., ISA P. O., Dzhandarbekova D., Urazbaev Z. Z..

The share of teaching staff conducting classes in the Kazakh language is 92 %. Training and support staff is 1 laboratory assistant of the Department - Kadyrbek G. and 1 on 0.5 rates head WILK – Anuarbekova A. S.

It should be noted that ostepenennyh PPS Department have a scientific degree "candidate of technical Sciences" - 7 person Sirkap G. E., Bekturganov A. A., Zhunusova G. S. Amanzholov S. A., ISA P. O., Dzhandarbekov D. Orynbasarov A. S., "candidate of Sciences"- 1 person of Capuani J. E., "PhD" -1 man Tarlykov P. V., OP 5B050100 areas - Biotechnology and 5B082800 - "Technology of processing industries" corresponds to the scientific degree "candidate of technical Sciences" or PhD in the relevant specializations.

To improve the quality of teaching, to ensure a close relationship with the production of the educational process involves specialists with experience in the relevant industries. As part of the OP teachers-practitioners are: teachers of the Department with experience in the relevant industry. For example, to conduct lessons on discipline "Technology of processing industries", "the Handling and storage of crop products" OP 5B082800 - "Technology of processing productions" is involved, the employee LLP "Akbidai -Astana" Kashurina B. S. For lessons on the subject "Biotechnology of microorganisms" OP 5B070100 - "Biotechnology" involved an employee of the RSE "Republican collection of microorganisms" of Abzhalelov A. B.

Also, existing workers from the production involved in the learning process during the final certification (as members of the SAC) and the passage of production practices.

Teachers annually improve their skills through short-term seminars, refresher courses, internships in the best educational centers of the Republic of Kazakhstan and abroad (See table 7).

Table 7 - Information on professional development of PPP accredited OP

№	Full name of the teacher who passed internship	Year and place of internship	Topic of internship
1	Sitnikov I. S. Kenzhebekova G. B., Mukanova K. A.	Astana, Akkol training center LLP, 2016	The organization of therapeutic nutrition and modern dietetics
2	Ошакбаев П.О.,	ATU, 16 January 2016	«Improving the quality of teaching

		disciplines at the University through innovative teaching methods»
3	Turehanova Bn G. I., G. E. Sirkap	Castin, 2016. Astana	Implementation of international standards ISO 14001-2015 "environmental management system" and ISO 22004:2014 "food safety management" at enterprises»
4	Karmanova, G. K., Sirkap G. E. Artykbaev Zh.	ATU, 16 January 2016	"The restaurant business from A to z»
5	Ust-Kamenogorsk, St. Kievskaya, 1 I. P. Artykbaev G. S. S. Bekturganova A. G. E. Savoini, G. E. Sirkap, S. Anuarbekova S.	Kokshetau, 2016., The world of quality	The quality management system ST RK ISO 9001-2009
6	G. E. Savoini,	IAAR, Astana, 2016	Development of intra-University system of education quality assurance
7	Ust-Kamenogorsk B., S. Aitkalieva A., M. Talipova , PR. Dzhandarbekov, G. Karmanova.K.; Sitnikov I. A., Ul. Mukanova A., Ust-Kamenogorsk, St. Kievskaya, 1 I. P., S. S. Ibraeva, S. M. Orazbayeva, Kargasekova N. M., S. Bekturganova A., Artykbaev G. S.	ATU, Almaty, 2017	Innovative technologies as a means of updating the learning process
8	Isa P. O., Karmanova, G. K.	Castin, Astana, 2017	The implementation of management systems cseparated
9	A. A. Bekturganova.	TOO training center " Akkol» Astana, 2017	Organization of school meals and modern principles of dietetics
10	Safani J. E., Sirkap G. E.	ATU, Almaty, 2017	Management in education
11	G. E. Sirkap A.S. Anuarbekova S. P. Batakova S. S. Baitasov	16 по 20 октября 2017 года в г. Семей	Food safety management system Certificate of participant of the international table
12	Anuarbekova A. S. Artykbaev Zh.	14.08. -28.08.2017 г Kokshetau	Modern aspects of biotechnology and Microbiology 72 hours "Quality world» Certificate. No. 398
13	Bicakova A. K.	03.11. 2017 г. Kokshetau	Modern achievement of food Microbiology and biotechnology. 72 hours
14	Baitasov S. S.	09.10- 13.10.2017 г. Kokshetau	Development and implementation of ISO 22000 HACCP 36 hours Certificate
15	Esca G. E., Bekturganova A. A., Safuan J. E.	April 1, 2018 № 107 U.-Kamenogorsk Astana city	"Implementation of management systems in enterprises ISO/FDIS 45001" Occupational safety management systems. Requirements for use" Lecturer Mahmud Albekov, lead auditor of the British Institute of standards (BSI)/. RSE "Kazakhstan Institute of standardization and certification".

16	G. E. Sirkap PR. Dzhandarbekov S. Turabaeva E., Ul. Mukanova A., S. Bekturganova A.	5 june 2018 Fstana. Shooting	Innovative technologies of bread, confectionery and pasta
17	Safani J. E. Zhaskayrat C. J. Zhakenova G. B.	June 1, 2018. Astana. ATU	Methods of teaching special disciplines. 72 hours
18	Karmanova, G. K. Orazbayeva A. M.	27 March to 02 April 2018 Astana city	Innovative technologies in teaching Humanities. JSC "Kazutb". 72h. Certificate No. 68
19	Orazbayeva A. M.	World of quality, Kokshetau, 2017	Modern technology and control at the enterprises of the food
20	K. G. Karmanova, S. S. Baitasov, G. I. Turehanova G. S. Zhunusova	72 hours of Almaty	Food safety system. Food safety system management
21	Safani J. E.	Kineu, Kostanay, 2018	ISO 14000 "environmental management System»; ISO 22000 "food safety management System»
22	Tarabaeva A. E.	World of quality, Kokshetau, 2018	New technologies in the processing industry of Kazakhstan
23	Serikova A. S.	Akkol training center LLP, 2018.	Science and processing industry: status and prospects
24	Mukanova M. Z.	World of quality, Kokshetau, 2018	Quality management at the enterprise (professional retraining)
	Tarabaeva A. E.	Kazutb, 2018	Innovative technologies in teaching Humanities
25	Anuarbekova A. S. Bicakova A. K. Artykbaev Zh.	Июнь 2018г. Алматы. АТУ	Fundamentals of Microbiology of food production. Certificate 72 hours
26	Zhaskayrat C. J.	World of quality, Kokshetau, 2018	New trends in the organization of public catering
27	Baitasov S. C., Sitnikova, I. A., Batakova S. l. Serikova S. S., Sirkap G. E., Anuarbekova S. S.,. Zhaskayrat, S. G Dzhandarbekov, M. Mukanova G., Astana, Ul. Beybitshilik B. S. Bekturganov A., S. E. Turabaeva, Artykbayev G. S., G. E. Savoini	Astana, 2018 Incident	QMS. Quality management systems, methods and tools

Research work of departments is carried out on the basis of the approved plan of research work of faculties taking into account the strategic plan of development of University.

Research faculty is reflected in the publications of scientific papers, monographs of teachers of the Department, corresponding to the national policy of the state in the field of education, science and innovative development of Kazutb and educational programs (table 8).

Table 8 - Scientific and methodological development of PPP accredited OP

Name departments	Educational benefits*			Monographs*			Teaching AIDS, instructions *		
	2016 г	2017	2018	2016 г	2017	2018	2016 г	2017	2018

Technology and standardization	5	3	2	2	1	1	22	18	12

Note: * including with ISBN

In 2016-2017 academic year 2 educational and methodical works with assignment of ISBN are prepared for publication. In the 2016-2017 academic year, one application, work on inventive and patent licensing activities was filed. In the 2017-2018 academic year, positive decisions on two patents were obtained, where the author is Amanzholov S. A., Anuarbekova A. S. (table 9).

Table 9 - Inventive and patent licensing activities

Applications submitted from the Department	Of applications for the industrial property and received a positive decision on the issuance of documents of title, license
Department "Technology and standardization»	2
Итого:	2

To improve the health of faculty, improve teaching methods and performance of work in Kazutb the system of evaluation of teaching staff, which is enshrined in the "evaluation of the professional rating of teachers-stuff" (the decision by the US Kazutb from14.01.2019, Protocol No. 4/1). The current regulation was revised and approved in may 2018. The main objectives of the system of efficiency are the development of creative thinking, activation of educational, research and socio-political work, improving the quality of training, as well as improving the efficiency of teaching staff, departments and the University as a whole for the implementation of educational programs.

In accordance with modern economic relations, the wages of each employee must correspond to the quantity and quality of his work.

The use of the efficiency system makes it possible to more reasonably and differentially set surcharges to the salaries of teaching staff, taking into account the results of their work at the expense of the University's own funds, based on available financial opportunities.

The system of efficiency involves full-time teachers who have worked at least one academic year. The results of the PPP rating are considered and approved at an extended meeting of the Department. Summing up the results of the efficiency assessment is carried out by the Commission appointed by the order of the rector, which makes proposals to the rector to establish personal allowances to the salary of the PPP.

Analytical part

VEK notes that it is necessary to intensify the work of the faculty of the Department "Tis" on inventive and patent licensing activities.

During the interview, the staff and faculty expressed satisfaction with the current personnel policy at the University, demonstrated awareness of the procedure and nuances of the current personnel management system, confirmed the fact of the competition for vacant positions. Young teachers are also satisfied with the working conditions.

In General, the teaching staff of the degree, IT-competence meets the requirements. But at the same time, there is not enough information about the teachers on the University website (research areas, taught subjects, etc.), there is no external mobility of teaching staff.

The Commission recommended to take part in competitions for the implementation of scientific projects funded by the MES.

Analysis of the documents submitted by the staff of the teaching staff of the departments showed that accredited educational programs need to work to increase the degree of teachers with appropriate basic education.

During the meetings with the faculty and the analysis of the documents submitted by the

University, the experts found the lack of academic mobility of the faculty in the far abroad.

According to the results of the survey IAAR faculty expresses satisfaction with the content of the OP ("very good" - 56.3 % and "good" - 43.7 %), the opportunity for continuous development of the potential of teaching staff (90.6 %).

Strengths/best practices
- providing comfortable psychological climate and favourable conditions of work PPS;

The recommendations of the WEC:
- It is recommended that the active involvement of teachers in the implementation of the strategy of development of the University through the holding of strategic sessions;
- to develop external academic mobility of teaching staff.

Conclusions of the EEC on the criteria of the standard "Teaching staff" for OP 5B070100- "Biotechnology", 5B072800 "Technology of processing industries (by industry)": strong - 2, satisfactory – 8, suggests improvement – 2

5.8. Standard «Educational resources and student support systems»

➢ OP leadership must demonstrate the adequacy of material and technical resources and infrastructure.
➢ OP leadership must demonstrate the existence of procedures for support of different groups of students, including informing and consulting.
➢ The management of the OP must demonstrate that the information resources correspond to the specifics of the OP, including compliance with:
- technological support for students and faculty according to educational programs (e.g. online training, modeling, databases, data analysis programs);
- library resources, including the Fund of educational, methodical and scientific literature on General, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases;
- examination of the results of research, final works, theses on plagiarism;
- access to educational Internet resources;
- functioning of WI-FI on the territory of the organization of education.
➢ The University should strive to ensure that the educational equipment and software used for the development of educational programs are similar to those used in the relevant industries.
➢ The University must ensure compliance with safety requirements in the learning process.
➢ The University should strive to take into account the needs of different groups of students in the context of OP(adults, workers, foreign students, as well as students with disabilities).

The evidence part
The material,technical and social base, located in the operational management of Kazutb, is located in the city of Nur Sultan, the infrastructure of the University is a training building consisting of 3 blocks – 2 training and 1 administrative, training and production facilities, a hostel for 280 seats. The total area of buildings and structures of the University, according to the available technical passports, is 26615.2 sq. m. All buildings of the University meet sanitary standards, fire safety requirements and the requirements of the state compulsory standards of the implemented specialties.

The construction of a new hostel for 680 people has begun, the completion date of which is planned for the end of 2020.

To organize the educational process, the University is sufficiently equipped with educational and laboratory facilities, modern technology in classrooms, lecture halls and in all departments of the University.

Laboratory classes are held on the basis of educational and research laboratory complex created at the faculty of technology. The purpose of WILK is to create a unified educational environment for students of the faculty of technology in the sections of the course of General physics, chemistry and biology, as well as in some special disciplines of the departments of the faculty. The task of WILK is to form a legal, methodological and material basis for the functioning of WILK, to improve the professional competence of the teaching staff through the creation of an innovative environment for self-education of teaching staff for the effective use of physical, computer and digital equipment using an interactive whiteboard, to provide quality

methodological training of teaching staff to conduct educational work with students; to provide practical assistance to teaching staff in laboratory classes, organization of educational and experimental, research activities. Areas of work of WILK is legal support. Providing conditions for innovative activity of students, teaching staff, improvement of pedagogical skills and professional competence of teaching staff, activities for students with high motivation to study subjects. The purpose of the laboratory complex is to provide students with the opportunity to obtain theoretically advanced knowledge in a laboratory complex equipped with modern equipment. In the personnel structure of WILK has 4 senior laboratory assistants, 4 laboratory assistants. Educated technicians with experience, masters. Laboratory assistants - qualified specialists who have full knowledge of laboratory equipment and safety.

Conducting research, the direction and theme of which correspond to the profile of the Department and are promising in terms of further development of theoretical and practical issues of the studied Sciences (disciplines);

- development of new food biotechnologies;
- intensification of technological processes in the food industry;
- development of biotechnology of deep processing of grain raw materials for the production of composite flour and bakery products with high nutritional and biological value with therapeutic and preventive properties;
- development of communication with leading scientists of higher educational institutions, research organizations and institutes of the Republic of Kazakhstan

The infrastructure of the University includes a hostel, a sports base, a library, a medical center and other educational and auxiliary facilities.

Sports base Kazutb consists of a set of sports facilities of closed and open type. The University has 1 indoor sports hall, equipped with appropriate sports equipment, with a total area of 895 m2.

For the organization of student food at the University operates a youth cafe, with a total area of 275.6 m2 for 100 seats.

Medical care of employees and students is provided by the health center, which is located in the building of Kazutb building and in the city polyclinic № 3.

For users of the library there is a subscription for issuing books, a reading room, a Department of electronic resources, computer classes with Internet access. Also, students, undergraduates, researchers and teachers of the University use the services of the Astana branch of the Republican Scientific And Technical library (contract No. 5 of 17.03. 2015 for library and information services), the book Fund of which is about 2 000 000 publications, the number of seats in the library, including computer classes and rntb (according to the agreement №5 from 17.03.2015) – 310.

The library is located in the main academic building. The library has a reading room where students can work with electronic textbooks, electronic catalog, electronic library of RMEB, audio - video materials. Electronic reading room is equipped with modern office equipment: computers, printers, scanner.

The library occupies the 2nd floor of the new building of the University, its total area is 366 m2. The library has two structural divisions: service Department (subscription and reading room for 78 seats) and Internet room for 13 seats with 10 computers. All information resources are available to users daily from 8.30 to 18.00 (except Sunday).

The library Fund of the University has on 01.12.2018 – 114 940 copies. the Fund on electronic and magnetic media is 4809 copies., including: in Kazakh - 1864 copies., Russian - 2851 copies., and in English - 94 copies.

For the convenience of users in the electronic hall of the University library on CD-ROM database of intra-University publications: educational and methodical complexes of disciplines on educational programs, as well as licensed educational publications, electronic educational resources, computer training programs, etc.

Book supply of students on OP 5B070100- "Biotechnology" is - 142 copies., on OP 5B072800 "Technology of processing industries (by industry)"- 110 copies.

The Commission notes the availability of library resources for students.

The University for the organization of the educational process is sufficiently equipped with modern technology in classrooms, lecture halls, in all departments of the University.

Educational and research laboratory complex and classroom Fund corresponds to the contingent of students, implemented educational programs and sanitary-epidemiological norms and requirements. Just Kazutb there are 15 laboratories. Projection and interactive equipment is installed in 26 lecture halls and computer classes. There are 2 specialized language classes for 22 seats, equipped with a special technique of two-way sound transmission.

Modern software is used for educational and research purposes. Academic license from Autodesk allows you to work with all engineering and graphics products of this company – AutoCAD, 3DMax, ArchiCAD, Maya, Inventor and others.

The Department "Tis" has 7 laboratories, 1 specialized office. All audiences are private. The laboratories are supplied with water, there are fume hoods. General information about the material base of the Department "Tis" is presented in tables 10 and 11.

Table 10 - Training material and technical base of the Department of SPT

Number of audience	Number landing place	Name audiences	Among them		Number of computers	The degree of provision of premises in the whole Department
			open type	closed type		
3/111	22	Laboratory Control and evaluation of food products		+	-	Good
3/113	12	Laboratory of cooking Technology		+	-	Good
3/115	16	Laboratory Technology of processing industries		+	-	Good
3/211	24	Laboratory of food biotechnology		+	1	Good
3/213	20	Laboratory of biotechnology and bioengineering		+	1	Good
3/215	18	Laboratory of Microbiology and Virology		+	-	Good
3/107	12	Raw material evaluation laboratory		+	-	Good
3/205	20	Specialized room		+	1	Good

Table 11 - List of laboratories of accredited programs with equipment

Ауд.	Name	The name of the installed equipment
3/111	Laboratory Control and evaluation of food products	Tiled laboratory table, laboratory Table, metal two drawers, Teatralny table, metal Cabinets, Fume cupboard, viscometric milk Analyzer LAKTAN 1-4 and ovens, laboratory Scales, Centrifuge OPN-8, the Apparatus Chizhov, Spirometry ear, Table single sink, rack for drying dishes, C/m, the chemical Table, shelf, 2 drawers, C/m, a Table of the chemical

3/113	Laboratory of cooking Technology	Magnetic Board, Production tables, Rack, Oven, electric Stove, Microwave oven, Refrigerator, Stove El.EP-6ЖШ (face stainless steel.) KAT-0,12, Wardrobe frying SIE-3 (face stainless steel.) standard. Oven, 1ARW/BW/microwave oven Samsung VT-1403-mixer Vitek ,Scale wind turbines-6-1/2-And, the Heater 10 l, bath wash seamless 3 section.WM-S-3-(500*400*250) kitche. stainless steel. Caracas crash., Kitchen rack SC-S-4-2-K (1000*400*1700), kitchen Rack SK-S-4-3-K (1200*400*1700) stainless steel shelves.frame crash, Table production wall SPP-S-6-2 K (1000*600*850) crash,SB 200 refrigerator Indesit
3/115	Laboratory Technology of processing industries	Layout of metal silos, Layout aeroplanitaliani screw device, the Divider BIS-1, 1984, Scales, electronic, for batches up to 100 grams,Cups to batches of 200-250 ml,Sovochki for batches, Boards collapsible (analizie), Ovens SESH -3 m 1976,1980 G., Metal boxy (main method), Net buxy, Crucible tongs, The electrolaser CEH-3, Chiller, Desiccator ø 20-25 cm, a Contact thermometer 1978, 1991, Spatula, Sieve for sifting of batches 1.5 × 20, 1.7 x 20, 2.2x20, 1.6x20, 1.7 x 20 Liter purka HRP-1,the Sieving POS-1 (to determine penetration), Diaphanoscopy DSZ-2,the Device IDK-1 1972,1974,1978 , Thermometers for measuring water temperature,Measuring cylinder 25, 50 ml, Porcelain mortar with pestle, Basin with a capacity of at least 3 liters, Jars with a lid for storing grain, flour, cereals and animal feed 3 – 10 kg, Probe baggy SM, The heating device (hot plate), de-hulling machine for cereal crops U1-ESO,Analytical balance, Mini mill,.Conveyor,Bucket Elevators,.Metal silo, Aerogravitation screw device,bis-1 Divider, Electronic scales 0.01 g, electronic balance for batches of up to 100 grams, Cups to batches of 200-250 ml, Sovochki for batches Mills laboratory MUL-1, LZM, Boards collapsible (analysis), Thermostat TC-80 M2, 1987
3/211	Laboratory of food biotechnology	The Board is magnetic, Wardrobe, titration tables, Cabinet for laboratory glassware, Fume cupboard, Start –up and control device (speed controller)to centrifugal fan, Centrifugal fan for exhaust hood, Steam sterilizer (570x740x1070,m=80 kg,6 kW,380V, Distillator electrical Cabinet dryer (garbarini 680x626x603,масса45кг), gas chromatograph, Refractometer, separator.
3/213	Laboratory of biotechnology and bioengineering	The Board is magnetic, Wardrobe, titration tables, Cabinet for laboratory glassware, Fume cupboard, Start –up and control device (speed controller)to centrifugal fan, Centrifugal fan for exhaust hood, Steam sterilizer (570x740x1070,m=80 kg,6 kW,380V, Distillator electrical Cabinet dryer (garbarini 680x626x603,масса45кг), Electric stove 1-camphor.1000W, Densimeter AON-1общ.the destination (set из19) in the registry, Thermostat,Microscope binocular, viscometric milk Analyzer LAKTAN 1-4, pH meter, laboratory Scales, Scales electronic, Minishaker, Colocacao Microcalorimeter MKMF-02, Magnetic stirrer, laminar Box, Fume hood, Lab sink with suwilai, Centrifuge

3/215	Laboratory of Microbiology and Virology	Magnetic Board, Cabinet , Cabinets metal, Cabinet metal, Drying Cabinet, Thermostat, Box bacterial, Microscopes monocular
3/107	Raw material evaluation laboratory	Thermometers for measuring water temperature,Measuring cylinder 25, 50 ml, Porcelain mortar with pestle, Basin with a capacity of at least 3 liters, Jars with a lid for storing grain, flour, cereals and animal feed 3 – 10 kg, Probe baggy SM, The heating device (hot plate), de-hulling machine for cereal crops U1-ESO,Analytical balance, Mini mill,.Conveyor,Bucket Elevators,.Metal silo, Aerogravitation screw device,bis-1 Divider, Electronic scales 0.01 g, electronic balance for batches of up to 100 grams, Cups to batches of 200-250 ml, Sovochki for batches Mills laboratory MUL-1, LZM, Boards collapsible (analysis), Thermostat TC-80 M2, 1987
3/205	**Specialized room**	Computer, multimedia screen, scales, psychrometer-hygrometer, thermometer, si stands

Based on the above, it follows that the material and technical base of the Department "Tis" generally meets the requirements for the educational process on OP 5B070100- "Biotechnology" and OP 5B072800 "Technology of processing industries".

Also, to improve the efficiency of the educational process, the quality of training it is necessary to provide the opportunity to purchase modern laboratory equipment in the areas of OP.

Members of the EEC note that the verification of written works for plagiarism is carried out only with the help of external databases on online services. It is necessary to create a system of anti-plagiarism, including intra-University base of written works.

Analytical part
As a result of visual inspection of facilities of material base by members of VEK, we will note that for ensuring educational process of the accredited educational programs the University possesses all necessary educational and material assets. The University building meets the current sanitary standards and fire safety requirements. Classroom and laboratory facilities, classrooms and other facilities, sports facilities comply with established norms and rules.

According to the results of the survey, students are satisfied with the existing educational resources of the University "completely" 89.1%; classrooms, classrooms for large groups – 74.5 %; rest rooms for students – 70.9%; computer classes and Internet resources – 76.4%; hostel – 72.7%.

Strengths/best practices
- availability of library resources.

The recommendations of the WEC:
- To develop measures for modernization and equipment of specialized laboratories of OP "Technology of processing industries (by industry)" and "Biotechnology" with modern laboratory equipment;
 to ensure that check written works for plagiarism with the creation of a University base.

Conclusions of the EEC on the criteria of the standard "Educational resources and student support systems" for OP *5B070100- "Biotechnology", 5B072800 "Technology of processing industries (by industry)": strong – 2, satisfactory -7, suggests improvement –*

5.9. Standard "public Information»

➢ Published by the University within the framework of the OP, the information should be accurate, objective, current,

and must include:
- implemented programs, indicating the expected learning outcomes;
- information on the possibility of qualification at the end of OP;
- information on teaching, training, assessment procedures;
- information on passing scores and training opportunities provided to students;
- information on employment opportunities for graduates.

➢ The management of the OP should use a variety of means of disseminating information, including media, information networks, to inform the General public and stakeholders.

➢ Informing the public should provide support and clarification nationally development programs of the country and the system of higher and postgraduate education.

➢ The University should publish audited financial statements on its own web resource, including in the context of OP.

➢ The University should demonstrate the reflection on the web resource of information characterizing the University as a whole and in the context of educational programs.

➢ An important factor is the availability of adequate and objective information about the PPP OP, in the context of personnel.

➢ An important factor is to inform the public about cooperation and interaction with partners in the framework of the OP, including scientific/consulting organizations, business partners, social partners and educational organizations.

➢ The University should post information and links to external resources based on the results of external evaluation procedures.

➢ An important factor is the participation of the University and implemented OP in a variety of external assessment procedures.

The evidence part

The University regularly informs the public and key stakeholders about all aspects of its activities, conditions and features of educational programs, within the framework of existing accreditations and licenses.

Through information policy, the University demonstrates the constant development of educational programs, adaptation to the trends of education in the world. The University uses all available channels and technologies in its information work, including mass media, specialized events and conference materials. The Internet and social networks are actively used.

Sources of information about the activities of the University and the implementation of educational programs for stakeholders are the headings "Admission Committee", "Student", "Graduate" and "Training" on the website of the University www kazutb.kz ahhh!

The mass media for publication are local Newspapers Kazutb, "Our Nur Sultan", and Eurasia TV channel.

The University has an official instagram page: (@)kazutb.kz ahhh!

The satisfaction of stakeholders in the quality of the information received and its completeness is monitored through comments on social networks, through the book of complaints and feedback form on the University website http:////www.kazutb.kz and through the rector's blog/

In order to establish feedback with students and employers, the reception on personal and other issues is carried out by deans and heads of departments at certain hours, when interested persons can obtain the necessary information. Whatsapp channel is also used to communicate with stakeholders.

Information stands, banners and signs with the names of faculties and departments are placed on the territory of the University to inform students. Open days are held on a regular basis.

The University annually holds job Fairs, which allows graduates and employers to establish contact for the selection of the necessary personnel. As a result of such preliminary work, students before graduation get an idea of the labor market, the existing vacancies and the requirements for them.

The University regularly participates in various rankings of higher educational institutions of Kazakhstan, as well as in external evaluation procedures.

Analytical part

The analysis of the information provided on the University website, showed that the University needs to Supplement information about its activities, rules of reception of entrants, educational programs, the timing and form of training, contact details and other useful

information for its users.

The University regularly informs the public and key stakeholders about all aspects of its activities, conditions and features of educational programs, within the framework of existing accreditations and licenses.

The personal pages of the teaching staff available on the site require updating and bringing them to a single form with information about the disciplines taught, publications and contacts. Also, the site does not contain the portfolio of the faculty of the producing Department.

Assessment of satisfaction with information about the activities of the University, the specifics and the implementation of the OP is carried out annually through questionnaires, surveys, feedback, as well as through the rector's blog.

The survey of students conducted during the visit of VEK IAAR showed that satisfaction with the usefulness of the University website and informing students about courses, OP and academic degrees is 92.7 % and 87.3 %, respectively.

Strengths/best practices
- various ways of disseminating information are used.

The recommendations of the WEC:
- provide full information about the faculty (portfolio) and on the University website;
- to provide timely information to the public about the activities of the University;
- provide placement of audited financial statements on the website.

Conclusions of the EEC on the criteria of the standard "public Information" for OP 5B070100- "Biotechnology", 5B072800 "Technology of processing industries (by industry)": strong – 2, satisfactory – 9, suggests improvement – 2.

6.10. Standard «Standards in the context of individual specialties»альностей»

Educational programs in the areas of "Natural Sciences", "Technical Sciences and technologies", such as "Mathematics", "Physics", "Information systems", etc., must meet the following requirements:
➢ In order to familiarize students with the professional environment and relevant issues in the field of specialization, as well as to acquire skills on the basis of theoretical training, the education program should include disciplines and activities aimed at obtaining practical experience and skills in the specialty in General and the main disciplines in particular, including:
- excursions to enterprises in the field of specialization (factories, workshops, research institutes, laboratories, training and experimental farms, etc.).),
- conducting individual classes or entire disciplines in the enterprise specialization,
- holding seminars to solve practical problems relevant to enterprises in the field of specialization, etc.
➢ The teaching staff involved in the education program should include full-time teachers with long-term experience as a full-time employee in enterprises in the field of specialization of the education program.
➢ The content of all disciplines of the OP should be more or less based and include a clear relationship with the content of the fundamental natural Sciences, such as mathematics, chemistry, physics.
➢ The manual of the OP should provide measures to strengthen practical training in the field of specialization.
➢ Guide OP should ensure the preparation of students in the application of modern information technologies.

The evidence part

In order to familiarize undergraduate students with the professional environment and relevant issues in the field of specialization, as well as to acquire skills on the basis of theoretical training for students, the following activities are carried out:

- the students of the specialty 5B070100- "Biotechnology" were recruited to participate in the events dedicated to the International day of the standard, to the Day of science held by RSE on REM "Republican collection of microorganisms".

- for students of specialty 5B070100- "Biotechnology", the Department conducted an excursion to the enterprises of Nur Sultan (JSC "national center of biotechnology", "Nazarbayev University", Akmola branch of "Kazakh research veterinary station", JSC "Astana-Onim»);

Traditionally, the Department of Tis for OP 5B070100- "Biotechnology" conducts seminars and conferences dedicated to the International day of science, world quality day with

the involvement of specialists in relevant fields for students of the faculty of technology.

Discipline "Biotechnology of microorganisms" OP 5B070100- "Biotechnology" has a pronounced practical orientation, classes are held on the basis of RSE on PCV "Republican collection of microorganisms" in the classroom branch of the Department of technology and standardization. On discipline "Technology of processing of crop products" OP 5B072800 "Technology of processing industries (by branches)" students acquire the necessary practical skills for the control of quality and safety of grain in the conditions of the accredited test laboratory at LLP "Akbidai -Astana".

As part of the accredited OP carry out educational activities of teachers with work experience:

- OP 5B070100- "Biotechnology" - Tarlykov PV – production experience of 18 years. Works at the University since 2017, currently holds the position of senior lecturer.

- OP 5B070100- "Biotechnology" Anuarbekova as – production experience of 5 years. Works at the University since 2017, currently holds the position of senior lecturer.

- OP 5B072800 "Technology of processing industries (by industry)" Sitnikova Ia– production experience of more than 30 years. Works in Kazutb since 2008 as a senior lecturer of the Department "Technology and standardization".

- OP 5B072800 "Technology of processing industries (by industry)" Turabaeva AE– work experience in the production of more than 20 years. Works as a senior lecturer of the Department of Tis since 201 years.

Analytical part

Analysis of feedback from employers and managers of educational and industrial practices for accredited educational programs indicates that there is a pronounced practical orientation of special disciplines.

The Commission notes that there is a close relationship with practice.

Also during the interview with students it was found out that students of accredited programs sufficiently use modern information and communication technologies in the educational process.

Strengths/best practices

- availability of accredited OP disciplines aimed at obtaining practical experience in the application of theoretical knowledge;

The recommendations of the WEC:

- *Provide for students on educational programs 5B070100- "Biotechnology" and 5B072800 "Technology of processing industries (by industry)" development of the graduate model taking into account the uniqueness of the OP and modern achievements of world science and practice in the field of specialization.*

Conclusions of the EEC on the criteria of the standard "Standards in the context of individual specialties" for OP *5B070100- "Biotechnology", 5B072800 "Technology of processing industries (by industry)": strong – 3, satisfactory – 2.*

(VI) <u>REVIEW STRENGTHS/ GOOD PRACTICES FOR EACH STANDARD</u>

According to the standard «Management of the educational program»:
- Mops contain elective courses reflecting modern requirements in the field of training.

According to the Standard «information Management and reporting»:
- the University uses a developed system of communication with students, teachers and employees, used, inter alia, to resolve conflicts;
- within the framework of the organized meetings of the EEC, regular monitoring of the satisfaction of the needs of the PPP, staff and students was confirmed. The information collected and analyzed by the University is effectively used in the educational and scientific activities of the University.

According to the Standard «Development and approval of the educational program»:
- there is a practical orientation of educational programs.

According to the Standard «Continuous monitoring and periodic evaluation of educational programs»:
- the University conducts organizational measures to monitor the OP with the involvement of employers.

According to the Standard «student-Centered learning, teaching and performance assessment»:
- flexible system of discounts on training and payment schedules.

According To The Standard «Students»:
- at the University there is a comprehensive support for students to self-education and personal growth;
- within the framework of accredited programs, the University is actively working on the employment of graduates.

According to the Standard «Teaching staff»:
- providing comfortable psychological climate and favorable conditions of work of the faculty.

According to the Standard «Educational resources and student support systems»:
- availability of library resources.

According to the Standard «public Information»:
- various ways of disseminating information are used.

Standards in the context of individual specialties:
- availability of accredited OP disciplines aimed at obtaining practical experience in the application of theoretical knowledge.

(VII) REVIEW RECOMMENDATIONS FOR QUALITY IMPROVEMENT FOR EACH STANDARD

According to the standard «Management of the educational program»:
- provide for the possibility of developing and implementing joint educational programs with foreign partner universities;
- specify the risk management system for accredited OP.

According to the Standard «information Management and reporting»:
- it is recommended to place on the main page of the University website full information about the PPP, serving data OP;
- provide measurable indicators of key performance indicators and the effectiveness of the implementation of the OP.
- introduce asynchronous communication between students and teachers (offline) using distance learning technology.

According to the Standard «Development and approval of the educational program»:
- develop joint and/or double-degree programs with foreign universities.
- ensure timely information and publication of planned and undertaken actions in relation to the OP.

According to the Standard «Continuous monitoring and periodic evaluation of educational programs»:
- on the University website Kazutb http://www.kazutb.kz you need to post information about the specifics of the OP levels OP target OP, base practices, academic degrees, formed competencies, achievements of students, about research activities of faculty departments, data on international cooperation, contacts. The description of the OP contains only data on the requirements for admission to the OP, the form and period of training, the total number of purchased loans, the base of practices of students.

According to the Standard «student-Centered learning, teaching and performance assessment»:
- to organize their own research in the field of teaching methods and evaluation of learning outcomes.

According To The Standard «Students»:
– to continue work on the development of external and internal academic mobility of students.
– to increase the role of the alumni Association in the activities of the University.

According to the Standard «Teaching staff»:
- It is recommended that the active involvement of teachers in the implementation of the strategy of development of the University through the holding of strategic sessions;
- to develop external academic mobility of teaching staff.

According to the Standard «Educational resources and student support systems»:
- to develop measures for modernization and equipment of specialized laboratories of OP "Technology of processing industries (by industry)" and "Biotechnology" with modern laboratory equipment;
 to ensure that check written works for plagiarism with the creation of a University base.

According to the Standard «public Information»:
- to provide full information about the faculty (portfolio) on the University website;

- to provide timely information to the public about the activities of the University;
- provide placement of audited financial statements on the website.

Standards in the context of individual specialties:
- Provide for students on educational programs 5B070100- "Biotechnology" and 5B072800 "Technology of processing industries (by industry)" development of the graduate model taking into account the uniqueness of the OP and modern achievements of world science and practice in the field of specialization.

(VIII) REVIEW RECOMMENDATIONS FOR THE DEVELOPMENT OF EDUCATIONAL ORGANIZATIONS

1. It is recommended to provide students with the necessary number of places to stay in the student hostel..

Annex 1. Estimated table PARAMETERS «SPECIALIZED PROFILE»

№ п\п	№ п\п	Evaluation criterion	Position of the organization of education			
			Strong	Satisfactory	Suggests improvement	Unsatisfactory
Standard «Educational program Management»						
1	1.	The University must have a published quality assurance policy.	+			
2	2.	Quality policy should reflect the link between research, teaching and learning.		+		
3	3.	The University should demonstrate the development of a culture of quality assurance, including in the context of OP.		+		
4	4.	Commitment to quality assurance should apply to all activities performed by contractors and partners (outsourcing), including joint/double-degree education and academic mobility.			+	
5	5.	The management of the OP ensures transparency of the development plan of the OP based on the analysis of its functioning, the real positioning of the University and the focus of its activities to meet the needs of the state, employers, stakeholders and students.		+		
6	6.	The management of the OP demonstrates the functioning of mechanisms for the formation and regular revision of the development plan of the OP and monitoring its implementation, assessing the achievement of training goals, meeting the needs of students, employers and society, making decisions aimed at continuous improvement of the OP.		+		
7	7.	The management of the OP should involve representatives of stakeholder groups, including employers, trainees and PPP, in the development of the OP.	+			
8	8.	The leadership of the OP should demonstrate the individuality and uniqueness of the development plan of the OP, its consistency with national development priorities and development strategy of the organization of education.		+		
9	9.	The University should demonstrate a clear definition of those responsible for business processes in the framework of the OP, a clear distribution of duties of staff, the division of functions of collegial bodies.		+		
10	10.	The management of the OP should provide evidence of the transparency of the educational program management system.		+		
11	11.	The management of the OP should demonstrate the successful functioning of the internal quality assurance system of the OP, including its design, management and monitoring, their improvement, decision-making on the basis of facts.		+		

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12	12.	The management of the OP should manage the risks.			+	
13	13.	The management of the OP should ensure the participation of representatives of interested persons (employers, teachers, students) in the collective management bodies of the educational program, as well as their representativeness in decision - making on the management of the educational program.	+			
14	14.	The University should demonstrate innovation management in the framework of the OP, including the analysis and implementation of innovative proposals.		+		
15	15.	The EP management should demonstrate evidence of openness and accessibility to learners, faculty, employers and other stakeholders.	+			
16	16.	Management of the OP should be trained in education management programs.	+			
17	17.	The management of the OP should ensure that the progress made since the last external quality assurance procedure is taken into account in preparing for the next procedure.		+		
		Total standard	**5**	**10**	**2**	
Standard «information Management and reporting»						
18	1.	The University should ensure the functioning of the system of collection, analysis and management of information through the use of modern information and communication technologies and software.	+			
19	2.	The management of the OP should demonstrate the systematic use of processed, adequate information to improve the internal quality assurance system.		+		
20	3.	Within the framework of the OP, there should be a system of regular reporting, reflecting all levels of the structure, including the assessment of the effectiveness and efficiency of departments and research.	+			
21	4.	Вуз должен установить периодичность, формы и методы оценки управления ОП, деятельности коллегиальных органов и структурных подразделений, высшего руководства, реализации научных проектов.	+			
22	5.	The University should demonstrate the definition of the order and ensure the protection of information, including the identification of responsible persons for the accuracy and timeliness of information analysis and data provision.	+			
23	6.	An important factor is the involvement of students, employees and teaching staff in the collection and analysis of information, as well as decision-making based on them.		+		
24	7.	The management of the OP should demonstrate that there is a mechanism for communication with learners, workers and other stakeholders, including conflict resolution mechanisms.	+			
25	8.	The University should provide a measure of the degree of satisfaction of the needs of faculty, staff and students within the framework of OP and demonstrate evidence of elimination of the found shortcomings.		+		
26	9.	The University should evaluate the effectiveness and efficiency of activities, including in the context of OP.			+	

		Information collected and analyzed by the University should take into account:				
27	10.	key performance indicator;			+	
28	11.	dynamics of the contingent of students in the context of forms and types;	+			
29	12.	level of academic performance, achievement of students and the dismissal;	+			
30	13.	satisfaction of students with the implementation of OP and the quality of education at the University;		+		
31	14.	availability of educational resources and support systems for students;		+		
32	15.	employment and career growth of graduates.		+		
33	16.	Students, employees and teaching staff must document their consent to the processing of personal data.		+		
34	17.	The guidebook of the OP should facilitate the provision of all necessary information in the relevant fields of science.		+		
		Total standard	**7**	**8**	**2**	
Standard «Development and approval of educational programs»						
35	1.	The University should define and document the procedures for the development of OP and their approval at the institutional level.	+			
36	2.	The guidebook of the OP should ensure that the developed OP meets the stated objectives, including the expected learning outcomes.		+		
37	3.	The OP guide should ensure that the developed models of the op graduate describe the learning outcomes and personal qualities.		+		
38	4.	OP leadership must demonstrate the conduct of external examinations OP.	+			
39	5.	The qualifications obtained at the end of the OP should be clearly defined, explained and consistent with a certain level of NSC.		+		
40	6.	The management of the OP should determine the impact of disciplines and professional practices on the formation of learning outcomes.		+		
41	7.	An important factor is the ability to prepare students for professional certification.		+		
42	8.	The management of the OP should provide evidence of the participation of students, faculty and other stakeholders in the development of the OP, ensuring their quality.	+			
43	9.	The complexity of the OP should be clearly defined in Kazakhstan loans and ECTS.	+			
44	10.	Management OP should provide the content of academic disciplines and learning outcomes level (bachelor, master, doctoral).	+			
45	11.	The structure of the OP should provide for different activities corresponding to the learning outcomes.	+			

46	12.	An important factor is the presence of joint OP with foreign educational organizations.		+		
		Total standard	**6**	**5**	**1**	
Standard «Continuous monitoring and periodic evaluation of educational programs»						
47	1.	The University should monitor and periodically evaluate the OP in order to achieve the goal and meet the needs of students and society. The results of these processes are aimed at continuous improvement of the OP.		+		
		Monitoring and periodic evaluation of the OP should consider:				
48	2.	the content of the programs in the light of the latest achievements of science in a particular discipline to ensure the relevance of the taught discipline;		+		
49	3.	changes in the needs of society and the professional environment;		+		
50	4.	workload, academic performance and graduation;	+			
51	5.	effectiveness of students ' assessment procedures;		+		
52	6.	expectations, needs and satisfaction of students with op training;		+		
53	7.	educational environment and support services and their compliance with the objectives of the OP.		+		
54	8.	The University and the management of the OP must provide evidence of the participation of students, employers and other stakeholders in the revision of the OP.	+			
55	9.	All stakeholders should be informed of any planned or undertaken actions with respect to the OP. All changes made to the OP must be published.			+	
56	10.	The management of the OP should ensure that the content and structure of the OP are reviewed in the light of changes in the labour market, employers ' requirements and social demands of the society.		+		
		Total standard	**2**	**7**	**1**	
Standard «student-Centered learning, teaching and performance assessment»						
57	1.	The leadership of the OP should ensure respect and attention to different groups of students and their needs, providing them with flexible learning paths.		+		
58	2.	The guidebook of the OP should ensure the use of different forms and methods of teaching and learning.		+		
59	3.	An important factor is the availability of own research in the field of teaching methods of academic disciplines OP.		+		
60	4.	The guidebook of the OP should demonstrate the existence of a feedback system on the use of different teaching methods and evaluation of learning outcomes.		+		
61	5.	The leadership of the OP should demonstrate support for the autonomy of students, with simultaneous guidance and assistance from the teacher.		+		
62	6.	OP leadership must demonstrate the existence of procedures for responding to complaints of students.		+		

63	7.	The University should ensure consistency, transparency and objectivity in the evaluation of learning outcomes for each OP, including appeal.		+		
64	8.	The University should ensure that the procedures for assessing the learning outcomes of students OP planned learning outcomes and objectives of the program. The criteria and methods of evaluation for the OP should be published in advance.		+		
65	9.	The University should identify mechanisms to ensure the development of each graduate OP learning outcomes and ensure the completeness of their formation.		+		
66	10.	Evaluators should be familiar with modern methods of assessing learning outcomes and regularly improve their skills in this area.		+		
		Total standard		**10**		
Standard «Students»						
67	1.	The University should demonstrate the policy of formation of the contingent of students from admission to graduation and ensure transparency of its procedures. The procedures governing the life cycle of students (from admission to completion) should be defined, approved and published.		+		
68	2.	The leadership of the OP should demonstrate the implementation of special adaptation and support programs for newly enrolled and foreign students.		+		
69	3.	The University must demonstrate its compliance with the Lisbon Convention on recognition.		+		
70	4.	The University should cooperate with other educational institutions and national centres of the "European network of national information centres for academic recognition and mobility/National academic Information Centres for Recognition" ENIC/NARIC to ensure comparable recognition of qualifications.		+		
71	5.	Management of the OP should demonstrate the existence and application of a mechanism to recognize the results of academic mobility of students, as well as the results of additional, formal and non-formal education.		+		
72	6.	The University should provide an opportunity for external and internal mobility of students of OP, as well as assist them in obtaining external grants for training.		+		
73	7.	The management of the OP should make the maximum amount of effort to provide students with places of practice, to promote the employment of graduates, to maintain communication with them.		+		
74	8.	The University must provide the graduates of the OP with documents confirming the qualifications obtained, including the achieved learning results, as well as the context, content and status of the education received and evidence of its completion.	+			
75	9.	An important factor is the monitoring of employment and professional activity of graduates of OP.		+		
76	10.	The management of the OP should actively encourage students to self-education and development outside the main		+		

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		program (extracurricular activities).				
77	11.	An important factor is the existence of an existing Association/alumni Association.			+	
78	12.	An important factor is the availability of a mechanism to support gifted students.		+		
		Total standard	**1**	**10**	**1**	
Standard «Teaching staff»						
79	1.	The University should have an objective and transparent personnel policy, including recruitment, professional growth and development of personnel, ensuring the professional competence of the entire staff.		+		
80	2.	The University should demonstrate the compliance of the staff potential of the faculty with the University development strategy and the specifics of the OP.		+		
81	3.	The management of the OP should demonstrate a sense of responsibility for its employees and ensure a favourable working environment for them.		+		
82	4.	Руководство ОП должно продемонстрировать изменение роли преподавателя в связи с переходом к студентоцентрированному обучению.		+		
83	5.	The University should determine the contribution of PPP OP in the implementation of the development strategy of the University, and other strategic documents.			+	
84	6.	The University should provide opportunities for career growth and professional development of PPP OP.		+		
85	7.	The management of the OP should involve practitioners from relevant industries in teaching.	+			
86	8.	The leadership of the OP should ensure targeted actions for the development of young teachers.		+		
87	9.	The University should demonstrate the motivation of professional and personal development of teachers of OP, including the promotion of both the integration of research and education, and the use of innovative teaching methods.		+		
88	10.	An important factor is the active use of PPP information and communication technologies in the educational process (for example, on-line training, e-portfolio, MOE, etc.).			+	
89	11.	An important factor is the development of academic mobility within the OP, attracting the best foreign and domestic teachers.		+		
90	12.	An important factor is the involvement of PPP OP in society (the role of PPP in the education system, in the development of science, the region, the creation of a cultural environment, participation in exhibitions, creative competitions, charity programs, etc.).	+			
		Total standard	**2**	**8**	**2**	
Standard «Educational resources and student support systems»						
91	1.	The management of the OP should demonstrate the adequacy of logistical resources and infrastructure.		+		

№	№					
92	2.	OP leadership must demonstrate the existence of procedures for support of different groups of students, including informing and consulting.		+		
		The management of the OP should demonstrate the compliance of information resources with the specifics of the OP, including compliance:				
93	3.	technological support of students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs);		+		
94	4.	library resources, including the Fund of educational, methodical and scientific literature on General education, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases;		+		
95	5.	Access to educational Internet resources;	+			
96	6.	examination of the results of research, final works, theses on plagiarism;			+	
97	7.	the functioning of WI-FI in the territory of the organization of education.	+			
98	8.	The University should strive to ensure that the training equipment and software used for the development of OP, were similar to those used in the relevant industries.		+		
99	9.	The University must ensure compliance with safety requirements in the learning process.		+		
100	10.	The University should strive to take into account the needs of different groups of students in the context of OP (adults, workers, foreign students, as well as students with disabilities).		+		
		Total standard	**2**	**7**	**1**	
Standard «Public Information»						
		The information published by the University within the OP should be accurate, objective, relevant and should include:		+		
101	1.	implemented programs, indicating the expected learning outcomes;		+		
102	2.	information on the possibility of qualification at the end of OP;		+		
103	3.	information on teaching, training, assessment procedures;		+		
104	4.	information about passing scores and training opportunities provided to students;		+		
105	5.	information on employment opportunities for graduates.		+		
106	6.	The management of the OP should use a variety of means of disseminating information (including media, web resources, information networks, etc.) to inform the General public and stakeholders.		+		
107	7.	Public awareness should include support and clarification of the country's national development programmes and higher and postgraduate education.		+		
108	8.	The University should publish audited financial statements on its			+	

		own web resource.				
109	9.	The University should demonstrate the reflection on the web resource of information characterizing the University as a whole and in the context of the OP.		+		
110	10.	An important factor is the availability of adequate and objective information about the PPP OP, in the context of persons.			+	
111	11.	An important factor is to inform the public about cooperation and interaction with partners in the framework of the OP, including scientific/consulting organizations, business partners, social partners and educational organizations.		+		
112	12.	The University should post information and links to external resources based on the results of external evaluation procedures.	+			
113	13.	An important factor is the participation of the University and implemented OP in a variety of external evaluation procedures.	+			
		Total standard	**2**	**9**	**2**	
Standards in the context of individual specialties						
NATURAL SCIENCES, AGRICULTURAL SCIENCE, ENGINEERING, AND TECHNOLOGY						
		Educational programs in the areas of "Natural Sciences", "Technical Sciences and technologies", such as "Mathematics", "Physics", "Information systems", etc., must meet the following requirements:				
114	1.	In order to familiarize students with the professional environment and relevant issues in the field of specialization, as well as to acquire skills on the basis of theoretical training, the education program should include disciplines and activities aimed at obtaining practical experience and skills in the specialty in General and core disciplines in particular, including: - excursions to enterprises in the field of specialization (factories, workshops, research institutes, laboratories, training and experimental farms, etc.).), - conducting individual classes or entire disciplines in the enterprise specialization, - holding seminars to solve practical problems relevant to enterprises in the field of specialization, etc.	+			
115	2.	The teaching staff involved in the education program should include full-time teachers with long-term experience as a full-time employee in enterprises in the field of specialization of the education program.	+			
116	3.	The content of all disciplines of OP should be more or less based and include a clear relationship with the content of the fundamental natural Sciences, such as mathematics, chemistry, physics.	+			
117	4.	The manual of the OP should provide measures to strengthen practical training in the field of specialization.		+		
118	5.	The management of the OP should provide training to students in the use of modern information technology.		+		

Total standard	3	2		
JUST	30	76	12	