

**MINISTRY OF AGRICULTURE OF THE REPUBLIC OF KAZAKHSTAN**

**JOINT-STOCK COMPANY**

**"KAZAKH AGROTECHNICAL UNIVERSITY NAMED AFTER S.SEIFULLIN"**

**REPORT ON SELF-ASSESSMENT  
FOR INSTITUTIONAL ACCREDITATION OF  
KAZAKH AGRO-TECHNICAL UNIVERSITY  
NAMED AFTER S.SEIFULLIN**







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ASTANA, 2019

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## **SPECIFICATIONS AND ABBREVIATIONS**

**Undergraduate:** A professional higher educational program with a normative term of training of at least 4 years with the award of an academic bachelor's degree.

**Magistracy:** Professional educational program of the post-graduate education with a standard term of 2 years training (scientific and pedagogical direction); 1,5 year (profile direction) with the award of the academic degree of Master of Agriculture in the specialty "Marketing".

**Doctoral studies:** Professional educational program of postgraduate education aimed at training scientific and pedagogical staff with the award of a doctoral degree (PhD) or a doctor in the profile with a normative term of training of at least 3 years.

**Individual curriculum:** A document compiled annually by the student for the academic year on the basis of a standard curriculum and catalog of elective disciplines, and containing a list of academic disciplines for which he was enrolled and the number of credits or academic hours; individual curriculum reflects the educational trajectory of a particular student

**Catalog of elective disciplines:** A document containing a list of academic disciplines, their scope, forms of intermediate control (coursework), determined by a higher educational institution independently, and offered to students for study by choice.

**Credit technology of education:** Educational technology aimed at increasing the level of self-education and creative mastering of knowledge on the basis of individualization, electivity of the educational trajectory and accounting for the volume of the learned teaching material in the form of credits.

**Elective component:** A list of academic disciplines and the corresponding minimum amounts of credits or academic hours offered by higher educational institutions, chosen by students independently and studied in any academic period.

**Working curriculum:** The document is developed and approved by higher educational institutions on the basis of a typical curriculum and individual study plans of students, taking into account the conditions of specific professional activity, the stages of the educational process: it contains a complete list of training disciplines grouped into cycles GED, BD and PD as mandatory component, and a elective component, required for mastering by the student, indicating credits or academic hours: the structure of the working curriculum is determined by the higher educational institution independently.

**Syllabus:** The curriculum of the discipline, which includes the description of the discipline being studied, its goals and objectives, a thematic plan reflecting the continuity of each topic, their brief content, tasks for independent work, time for consultations, a timetable for supervisory control, a list of literature, teacher requirements, and evaluation criteria.

**Model curriculum:** The main educational document, developed on the basis of the state compulsory standard of education in the specialty and setting the mandatory components in the form of a list of academic disciplines, combined in the cycles of the GED, BD, PD with the indication of the minimum credits required for mastering by students, forms of control, as well as additional types of training and final attestation.

**Compulsory component:** List of academic disciplines and corresponding minimum amounts of credits established by state compulsory educational standards and studied by students without fail in accordance with the training program.

**Department for Academic Affairs:** A service providing the organization of various types of knowledge control, which registers the entire history of educational achievements of students and the calculation of their academic rating, as well as the issuance of documents on education.

The following abbreviations are used in this self-assessment report:

RK – Republic of Kazakhstan;

MES RK - Ministry of Education and Science of the Republic of Kazakhstan;

AC –Accreditation Council;

BA –baccalaureate;

MA –magistracy;

PhD – doctoral studies;

HEI – higher educational institution;

EEC – external expert commission;

SCES - state compulsory educational standards;

SPDE – state program for the development of education;

KATU – Kazakh Agro Technical University named after S.Seifullin;

IAAR -Independent agency for accreditation and rating;

NLA – **Ошибка! Недопустимый объект гиперссылки.S;**

NQF –national qualifications framework;

NQS –national qualifications system;

RW –research work;

SRW – student research work;

MSRW – master student research work;  
EP – educational program;  
TS – teaching staff;  
QMS -Quality Management System;  
EO – educational organization;  
GED -general educational disciplines;  
BD - basic disciplines;  
MD – major disciplines;  
SIW – independent work of students;  
SIWTG – independent work of students under the guidance of a teacher;  
MSIWTG - independent work of master students under the guidance of a teacher;  
EEEE– external evaluation of educational achievements;  
FSC – final state control;  
AIC – agro-industrial complex;  
RI – Research Institute;  
CCR - club of cheerful and resourceful;  
YC - Youth Committee;  
FSP – Faculty of Social Professions;  
MM – mass media;  
JSC – Joint-Stock Company;  
SC – standard curriculum;  
ASS – academic support staff;  
TMC – training and methodology complex;  
ECD - educational complex of discipline;  
MARK – Ministry Agriculture of the Republic of Kazakhstan;  
WC – working curriculum;  
CED –catalog of elective disciplines;  
ITC – individual training curriculum;  
ECS –educational complex of specialty;  
EMC – educational & methodological council;  
MEP – modular educational program;  
C – curriculum;  
MC – midterm control;  
SRS – scores -rating system;  
FC – final control;

CC – current control;  
IT –information technologies;  
IS – information systems;  
AIS – automated information system;  
SWOT –Strengths Weakness Opportunities Threats;  
ISO - The International Organization for Standardization;  
LP – limited partnership;  
NC – national company;  
ECTS – European Credit Transfer System;  
QS - Quacquarelli Symonds  
EEC – Eurasian Economic Community;  
UNT – unified national testing;  
CTA – comprehensive testing of applicants;  
PDM - personnel and document management;  
CCRK – Civil Code of the Republic of Kazakhstan;  
DAA – department for academic affairs;  
DEW – department for educational work.



## REFERENCED CODES AND STANDARDS

The department of “Computing equipment and software” in the implementation of educational programs for the preparation of bachelors, masters and doctors of PhD specialty “Computing equipment and software” operates in accordance with the normative legal regulations of the Ministry of Education and Science of the Republic of Kazakhstan:

1. Law of the Republic of Kazakhstan of July 27, 2007 No. 319-III "On Education"
2. Model rules for the ongoing monitoring of progress, interim and final certification of students №125 from 18.03.2008
3. Rules for the organization of the educational process on the credit technology of education (No. 152 of April 20, 2011).
4. Law of the Republic of Kazakhstan “On accreditation in the field of conformity assessment” dated July 5, 2008 No. 61-IV
5. Rules of the organization of the educational process on the credit technology of education dated April 20, 2011 No. 152.
6. On the approval of the state obligatory educational standards of the corresponding levels of education. Resolution of the Government of the Republic of Kazakhstan dated August 23, 2012 No. 1080.
7. Model rules of admission to study in educational organizations that implement vocational educational programs of higher education (approved by the Government of the Republic of Kazakhstan dated January 19, 2012 No. 111
8. Development Program of JSC "S. Seifullin Kazakh Agro Technical University" for 2016-2020 years and others.

## GENERAL INFORMATION

<b>Name of organization of education</b>	Joint Stock Company "S. Seifullin Kazakh Agro Technical University.
<b>Legal details</b>	Republic of Kazakhstan, 010000, Astana, Pobeda Avenue 62 Tel: 8 7172 317547, 8 7172 393918, Fax: 8 7172 316072 E-mail: <a href="mailto:agun.katu@g.mail.com">agun.katu@g.mail.com</a> Web-site: <a href="http://www.kazatu.kz">www.kazatu.kz</a>
<b>Founder</b>	The rights and ownership of a 100% stake in the Company are owned by the Ministry of Education and Science of the Republic of Kazakhstan (the only shareholder of the National Agrarian Scientific and Educational Center)
<b>Head of the University</b>	Kurishbayev Akylbek Kazhigulovich.
<b>First Deputy of the Head</b>	Abdyrov Aitzhan Mukhamedzhanovich.
<b>Contact person for the preparation of the self-assessment report</b>	Aldabergenova Saule Salimzhanovna Тел: 8 7172 395907
<b>Date of submission of 1st report on self-assessment</b>	
<b>Date of submission of 2nd report on self-assessment</b>	
<b>Information about the self-assessment procedure</b>	The self-assessment procedure was carried out collectively, on the basis of the principles of transparency and publicity. While drawing up the report on self-assessment the commission was guided by the following methods: quantitative analysis, systematic, objectivity, comparative analysis, theorizing of generalization. The self-assessment report on the subject of specialized re-accreditation was approved at the meeting of the University Academic Council, protocol No. 3 dated 10.10.2018.

# **1 BRIEF REVIEW OF THE ACTIVITIES OF S.SEIFULLIN KATU**

## **1.1 Introduction**

Joint Stock Company “Kazakh Agro Technical University named after S.Seifullin” (hereinafter KATU named after S.Seifullin) is a subject of higher professional education of the Republic of Kazakhstan and operates on the basis of the Charter, approved by the order of the State Property and Privatization Committee of the Ministry of Finance of the Republic of Kazakhstan dated 27.06.2007. 350, certificate of state re-registration of a legal entity No. 27738-1901-AK dated July 10, 2007

S.Seifullin KATU is one of the largest multidisciplinary higher educational institutions in Kazakhstan. This university provides training of highly qualified specialists for various sectors of the economy of Kazakhstan, carrying out scientific research and training highly-qualified personnel on their basis.

S.Seifullin KATU is among the 10 basic universities of the country, providing training for projects of the State program of industrial-innovative development of the Republic of Kazakhstan for 2015-2019. The priority sectors for S.Seifullin KATU are “Agricultural Engineering”, “Food Production”. The partner of S.Seifullin KATU is a University of California at Davis (US Davis, the USA), the world's leading agricultural research university, with which new educational programs are being developed.

The educational process is carried out by 889 lecturers 83 of whom are doctors and 376 candidates of science, 18 doctors of PhD. The scientific degree of the faculty is 53%.

For the period of more than half a century, the university has trained more than 60 thousand highly qualified specialists for various branches of the country's agro-industrial complex, who have contributed and continue to make a worthy contribution to the development of the state's economy through their selfless work. The University is rightly proud of its graduates, among them there are employees of the Presidential Administration and the Office of the Prime Minister, deputies of the Senate and Mazhilis of the Parliament of the Republic of Kazakhstan, ambassadors, prominent scientists, candidates and doctors of science, akims of regions, cities and districts, various spheres of national economy.

Currently, there are 42 departments at the university. About eight thousand students in 36 undergraduate specialties, 31 graduate specialties and 23 PhD doctoral studies are enrolled in eight faculties. Training of multilingual personnel in 8 bachelor specialties, 31 graduate specialties and 9 doctoral specialties has been started.

Higher vocational education is obtained according to the full-time and correspondence courses, including the reduced educational program and on the basis of higher education. Depending on the form of study, the period of study lasts from 2 to 5 years.

On the basis of higher education, university graduates receive a second higher professional education at the Institute for Advanced Studies and Distance Learning: the term of study lasts from 2 to 4 years, depending on the form of study.

The employees of the enterprises have the opportunity to receive higher professional education at the Institute for Advanced Studies and Distance Learning according to the full and reduced program. Duration of training lasts from 2.5 to 5 years.

A great achievement of the university is the Gold Medal named after Blinnikov V.I. awarded by the Eurasian Patent Organization for its great contribution to the "Inventive and Patent Business". It should be noted that at present the university is the only owner of such a prestigious award in the republic.

### **1.2 The history of S.Seifullin KATU**

JSC "S.Seifullin Kazakh Agro Technical University" was founded in 1957, when Akmola Agricultural Institute was established by the Resolution of the Council of Ministers of the USSR No. 1176 dated October 3, 1957 in Akmolinsk - the center of a vast virgin region.

The decision to open the university was associated with the wide development of virgin and fallow lands in Kazakhstan, the opening of hundreds of new state farms and, as a result, the need for highly qualified specialists. Specialists were trained in three faculties: agronomic, land management and farm mechanization. The first admission was organized in 1958 and amounted to 250 students.

The institute gradually expanded, becoming a major center of higher agricultural education and science. Over the next 20 years, other faculties were organized and opened.

In 1996, by the Government Decree No. 573 of May 7, 1996, the Akmola Agricultural Institute was reorganized into Akmola Agrarian University and was named after a prominent public figure and outstanding personality of the Kazakh people - Saken Seifullin.

On the basis of the Resolution of the Government of the Republic of Kazakhstan No. 821 dated July 15, 2001, the State Enterprise "Akmola Agrarian University named after S. Seifullin" was renamed into CJSC "Kazakh Agrarian University named after S. Seifullin".

On May 20, 2003, CJSC “S. Seifullin Kazakh Agrarian University” changed the type of society and acquired the abbreviation of Open Joint Stock Company “S. Seifullin Kazakh Agrarian University.”

In 2004, on the basis of the Decree of the Government of the Republic of Kazakhstan (No. 829 of August 3, 2004), OJSC “S.Seifullin Kazakh Agrarian University” was liquidated and the RSE was established on the basis of economic management of S.Seifullin Kazakh State Agro Technical University.

By the Decree of the Government of the Republic of Kazakhstan "Certain Issues of the Ministry of Education and Science of the Republic of Kazakhstan" (No. 300 dated April 4, 2005), the RSE on the right of economic management "S.Seifullin Kazakh State Agro Technical University" was transferred to the Ministry of Agriculture of the Republic of Kazakhstan.

In 2007, on the basis of the Decree of the Government of the Republic of Kazakhstan (No. 409 of May 22, 2007), the university was reorganized into S. Seifullin Kazakh Agro Technical University.

In May 2013, speaking at a meeting of the Council of Foreign Investors, President of the Republic of Kazakhstan N. Nazarbayev proposed to organize on the basis of S.Seifullin KATU a world-class research university in the field of agriculture, following the example of Nazarbayev University. Distinctive features of the new status will be as follows:

- 1) autonomous model of management following the example of the leading research agricultural universities of the world, combining scientific research, training and implementation of scientific results in real production and focused on integration into the global scientific and educational space;

- 1) own academic programs built on the basis of the adaptation of the best programs in the world, with a focus on the development of practical skills in the application of advanced achievements in the industry;

- 2) breakthrough scientific research, combining advanced achievements of the fundamental and applied science, integrated into the educational process and based on partnership with world technological leaders;

- 3) a developed toolkit for the introduction of innovations, based on constant “feedback” with the subjects of the AIC including both mechanisms for the commercialization of technologies and the dissemination of knowledge.

Attracting leading foreign professors and scientists, combining their knowledge with the experience of domestic specialists, the necessary competences in all key areas of the agro industrial complex will be gained. As a result, upon completion of the transformation

in S.Seifullin KATU Research Agrarian University will be positioned as follows: 1) the main supplier of competitive innovations for the agro industrial complex in the North and Central Kazakhstan, 2) the most desired job for lecturers, 3) the most desired place for training students, undergraduates and doctoral students in relevant specialties.

The basic activities of the university are as follows:

- staff training with higher and postgraduate professional education, advanced training and retraining of personnel in the field of agriculture and other sectors of the economy;

- carrying out research and development work in the field of agriculture and other sectors of the economy;

- introduction of scientific and technical developments into production.

The main kinds of the activities of the university are:

- 1) training in accordance with the state compulsory education standard of qualified specialists for various sectors of the economy and social spheres;

- 2) training of scientific and pedagogical personnel in magistracy, doctoral studies;

- 3) organization and conduct of fundamental, applied research and development work, as well as methodological research in all fields of science;

- 4) advanced training and retraining of specialists in various fields;

- 5) cultural and educational activities, participation in the process of mutual enrichment of the cultures of the peoples of Kazakhstan, dissemination and promotion of scientific knowledge;

- 6) production and sale of printing products, training and teaching aids, new technologies and scientific developments;

- 7) organizing and conducting physical and recreational and sports activities, the creation of sports sections;

- 8) the conclusion of the direct agreements and contracts with foreign organizations in all areas of primary activity, the creation of temporary teams of scientists and specialists, participation in the activities of international associations and organizations.

In 2015, a new development strategy of S.Seifullin KATU until 2025 - "KATU - 2025" was developed and approved. The university through the implementation of the mission and strategy aims at becoming a research university of international level in the field of agro-industrial complex and related industries. The "KATU-2025" strategy was approved at the meeting of the Academic Council on June 3, 2015, Minutes No. 20, and approved by the Board of Directors of S.Seifullin KATU on December 14, 2015.

## 2 STRATEGIC DEVELOPMENT AND QUALITY SUPPORT

In the 2015-2016 academic year at the University the first semester of the academic year was focused on the S. Seifullin KATU development program for 2011-2015

From 2016 till the present, the activity of S. Seifullin KATU is focused on the implementation and realization of the S. Seifullin KATU Development Program for 2016-2020, approved by S. Seifullin KATU Academic Council of December 18, 2015, protocol No. 8.

This program is focused on the implementation of the following state programs:

1) The State Program for the Development of Education for 2011–2020, approved by the Decree of President of the Republic of Kazakhstan dated December 7, 2010 No. 1118.

2) p. 1.6. Minutes No. 01-8.1 (HT) of the Plenary Meeting of the Foreign Investors Council of May 22, 2013.

3) Minutes of the extended meeting of the Government of the Republic of Kazakhstan with the participation of the Head of State dated February 14, 2014.

4) The vision, mission and strategy of S. Seifullin KATU approved by the decision of the Board of Directors on December 14, 2015.

The optimal model of education and science management in developed countries has already been found, the formula for the success of innovative development has been invented. These are Western-type research universities.

Therefore, the development program of S. Seifullin KATU is a transfer of technologies in education and science: we are adopting a model of an agricultural research university that has been successfully applied in the world.

Our partner, the world's leading research agricultural university, the University of California at Davis, took part in the writing of this program.

University at Davis is like a “playing coach”: together with us its leading professors analyze the situation, plan reforms and help us implement them. For us, this is an additional guarantee for the successful implementation of the Program.

The difference of the Program is that we do not change the form of management of science, do not create an extra administrative "shell", as we did before. We radically change the content of agricultural education and science.

Therefore, our reform comes from the inside. In the center of the program of S. Seifullin KATU is a scientist who must generate new knowledge, formulate it as a completed competence and pass it on to students in the auditoriums or farmers in the field.

For this purpose, as a result of the implementation of the Program, an optimal environment will be created - from internal decision-making procedures to interaction with employers.

First, by analogy with the world's leading research universities and following the example of Nazarbayev University, the management system at S.Seifullin KATU will be reformed. Procedures for making all key decisions will be based on collegiality.

The main reforms will be as follows (1) reorganization into a non-profit organization, (2) transition to an autonomous management model and (3) adaptation of all management procedures to new conditions.

Secondly, the new personnel policy of S. Seifullin KATU will be introduced. It will be based on competition both among scientists inside S. Seifullin KATU, and with scientists from other research centers and universities, including foreign ones.

The main reforms will be (1) competitiveness in promoting teaching staff at all stages of a career, (2) significant differentiation of salary depending on the quality of work results, (3) expanding opportunities for personal professional development, (4) a wide choice of activities to combine with scientific research.

Thirdly, on the basis of international best practices, we plan to restructure the system for organizing scientific research on the model of large-scale integrated scientific and technical programs. The principal difference from the existing approaches in Kazakhstan is as follows:

- (1) own research is combined with the transfer of successful foreign technologies;
- (2) all the research teams participating in the program are grouped by an interdisciplinary principle around a common technological task;
- (3) the result of the program is measured not only in scientific indicators, but also by the contribution to production, the creation of new scientific schools, and the training of specialists.

In total, until 2022, we plan to begin implementation of 16 programs, the themes of which will correspond to the specialization of the agro-industrial complex of Northern and Central Kazakhstan.

Fourthly, the educational process should be as flexible as possible and adapted to the individual interests of students. We are adapting approaches to the educational process, for many years allowing Davis to remain a leader in the world.

“Learning in practice” is a new educational paradigm of S.Seifullin KATU. The content of practical and laboratory classes in each discipline will be completely revised. For this purpose we have already created 4 technology platforms. We need to cover all specialties related to agriculture with the platform tools, so we will continue to create them.



Therefore, our reform comes from within. In the center of S. Seifullin KATU program is a scientist who must generate new knowledge, formulate it as a completed competence and pass it on to students in classrooms or farmers in the field. To this end, as a result of the implementation of the Program, an optimal environment will be created - from internal decision-making procedures to interaction with employers.

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Thus, students will receive basic knowledge and skills at the university. Their further consolidation will be carried out in the course of production practice on the basis of leading agroformations during the entire agricultural season. Teachers will periodically practice in these agroformations.

By 2023, we will completely modernize the specialties related to the AIC, completing the transition to a new system of training specialists.

Fifth, we will restructure the infrastructure management system and create the missing facilities to provide the most productive environment for the faculty and students.

The development of technological platforms is one of the key elements of the reform of S. Seifullin KATU. In total, as a result of the implementation of the Program, we plan to create 7 modern technological platforms. Their activities will cover all areas of the S.Seifullin KATU academic profile: (1) drastically improve the quality of practical training through training with modern equipment “do it yourself”, we will provide the necessary tools to solve problems (2) to develop the food belt in Astana and (3) on the implementation of the State Program for the Development of the AIC for 2017-2021.

Sixth, in order to promptly bring scientific results to the consumer, we will expand the systems of technology commercialization and dissemination of knowledge.

We integrate the implementation of scientific results in scientific research and in the educational process in the program.

By 2022, we will complete the construction of the basic elements of a system for introducing scientific results. By 2025, on the basis of the accumulated potential, on the basis of S. Seifullin KATU, we plan to create the first agro-industrial park in Central Asia.

Thus, consistently reforming all areas of activity, on the basis of S. Seifullin KATU, we will create a full-fledged system of technology transfer. Within the framework of integrated scientific and technical programs, we will be able to test various foreign technologies and determine the best of them. Then we will transfer the experience gained into practice through educational programs, the system of dissemination of knowledge, international center of competence and joint projects with entrepreneurs.

In other words, we will concentrate in S. Seifullin KATU all possible tools for promoting the best foreign technologies into practice, which will make their development in production efficient and effective.

The probabilities of risks by processes are given in table 1.

Table 1 - Probable risks.

<b>№</b>	<b>Probable risks</b>	<b>Probability risks, %</b>	<b>Accomplished results risk mitigation measures</b>
1	Wrongly chosen directions of the strategy of KATU S.Seifullin	12%	For the timely identification of risks that may not lead to the execution of the Strategy, S. Seifullin KATU by decision of the Academic Council of December 18, 2015 No. 8 adopted the S. Seifullin KATU development program for 2016-2020. The program of S. Seifullin KATU is based on the development model of the University of California at Davis (UCDavis, USA). In order to implement the Program, an Action Plan for the current period is approved annually.
2	Erroneously established performance indicators for the implementation of the strategy	30%	To make effective decisions at the beginning of the next year, the Plan of Seifullin KATU approves the Plan - measures to implement the program of S. Seifullin KATU for the current year.
3	Lack of financial resources to fully implement the strategy	40%	In order to implement the Development Program of S.Seifullin KATU, it is necessary first of all to develop the infrastructure with modern equipment.
4	Discrepancy between human and infrastructural resources of JSC S.Seifullin KATU to strategic goals	50%	To equip the infrastructure in 2016, the FEO for 2016-2018 was developed and the amount of more than 750 million tenge was supported. In 2018, FEO of 380 million tenge was developed.
5	Drastic changes in market conditions	20%	Increasing the competitiveness of S. Seifullin KATU through the adaptation and

affecting the formation of the revenue base and competitiveness of S. Seifullin KATU in the light of the implementation of the approved strategy	implementation of the Davis models, Nazarbayev University, and other leading research universities in the world. Increased demand for specialties related to agriculture, due to the expansion of state support measures and the growth of investment in agriculture
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The development program of S. Seifullin KATU did not take into account such risks as: The political sphere is the risks arising under the influence of political changes and military conflicts, for reasons beyond the control of the economic entity.

Weather risks - the possibility of incurring losses due to changes in weather conditions. Often there are a number of natural emergencies.

Environmental risks are associated with the probability of losing money as a result of environmental degradation. Ecological risks manifest themselves in different ways: these include increased solar radiation, climate change, and emissions of harmful substances into the atmosphere and water. As a result, there are various mutations of living organisms, often harmful to humans, the amount of high-quality agricultural products decreases. Reducing environmental risks is costly. This is a global problem and only the state can solve it.

The risks that arise in the social sphere are inherent in the entire national economy and are directly related to the economic and political situation in the country.

Demographic risks are expressed in additional cash costs due to the deteriorating demographic situation. The mortality rate exceeds the birth rate, the population is aging, and the average life expectancy decreases.

Migration risks are caused by the costs of material and other resources associated with the inability to plan to change the migration situation. The decline in the birth rate and the increase in mortality are partially offset by population growth due to migration. It is due to both economic and political reasons. Migration flows create additional tension in the labor market and in the social sphere.

S.Seifullin KATU, on the basis of annual reports of structural units on the implementation of the Action Plan, conducts monitoring and analysis of its implementation. Based on the decision of the Academic Council of S. Seifullin KATU, for

quality and targeted performance, proposals for the next calendar year will be adjusted and made.

Information is sent for approval (both the report and the plan for the current year) to all structural subdivisions of S. Seifullin KATU on ART. After approval, the approved plan-activities (scan) for work are sent for review in all structural divisions. The original is stored in the documents of the reform and development group.

The analysis of the current situation in the world and in domestic higher education indicates the need to reorient the university to a research university, as the flagship of the development of the agro-industrial complex. Therefore, the basis of the vision, mission, strategy and policies are taken as the basis not only of world experience, but the realities of the current state and needs of the agroindustrial complex and other related industries.

Vision - Saken Seifullin Kazakh Agrotechnical University, through the implementation of the mission and strategy, is striving to become a research university of international level in the field of the agro-industrial complex and related branches:

- with a competitive scientific potential involved in solving priorities in a wide range of scientific fields;

- with unique educational programs that project the results of scientific research into the educational process, providing training for specialists with a fundamental education and developed skills for applying the knowledge gained in real production;

- closely integrated into the world scientific and educational space, having partnerships with the world's leading research universities and research centers of a similar profile;

- actively implementing scientific results through the educational process, knowledge dissemination and technology commercialization;

- with the best corporate governance system among higher educational institutions of the Republic of Kazakhstan.

The mission of S. Seifullin KATU is the generation, implementation, dissemination and application of advanced knowledge to improve the quality of life, increase labor productivity and competitiveness of the agroindustrial complex and other sectors of the economy of Kazakhstan.

The strategy of S.Seifullin KATU until 2025 is to build the best in Kazakhstan system that meets international standards of advanced training of specialists and scientific and pedagogical personnel by providing wide opportunities for choosing the level, content, form and terms of training based on unique curricula and academic mobility.

S.Seifullin KATU as a priority will develop cooperation with organizations - consumers of scientific research and graduate employers at all stages: from the joint setting of priority tasks to the implementation of scientific results into practice.

The strategic goals of S. Seifullin KATU until 2025 inclusive are:

- improving positions in international university rankings - joining (1) among the top 300 universities in the world by QS rating and (2) among the top 500 universities in the world by THE rating;

- Employment in the specialty within three months after completion of training, confirmed by independent sources - at least 60% of graduates;

- the average citation index of one publication according to the Web of Science database is at least 2;

- the share in the total income (1) of the income from scientific activity - at least 30%, (2) from the introduction of scientific results - at least 12.5%;

- International accreditation of at least 50% of educational curricula.

Achievement of strategic goals will be carried out by solving the following tasks:

- reorganization of S. Seifullin KATU into an autonomous organization of education;

- Achievement and maintenance of the highest qualification of the faculty, administrative and support staff;

- expansion of scientific research, transfer of advanced knowledge and technologies in the areas of highest priority for Kazakhstan;

- modernization of the educational process by introducing unique educational curricula developed on the basis of its own scientific results with the participation of employers, leading domestic and foreign professors and scientists;

- the development of multilingual education and the formation of the English-language language environment in order to transfer the missing competencies and prepare graduates in accordance with generally accepted standards in the world;

- expansion of international cooperation with the world's leading research universities and research centers in the framework of academic mobility, research and innovation projects;

- modernization and expansion of educational, research, production and experimental and social infrastructure to improve the educational process, living conditions of students and faculty;

- the constant updating of civic-educational and cultural work aimed at the formation of a comprehensively developed, creative personality;

- formation in the society of a stable opinion on the prestige and elitism of education

in S. Seifullin KATU.

By the decision of the Academic Council of December 18, 2015, Protocol No. 8 agreed on the Development Program of JSC S. Seifullin Kazakh Agrotechnical University for 2016-2020. In order to monitor the implementation of the Program, annually the S. Seifullin KATU takes action plans for its implementation.

According to the provision on indicative planning and monitoring in S. Seifullin KATU (hereinafter - the Provision), approved by order No. 286-H of April 28, 2017, the Monitoring of the Action Plan is carried out at the end of each planning year.

All structural subdivisions of S. Seifullin KATU (i.e., all departments (43), faculties (9), structural subdivisions), according to the Regulations, provide a report on the implementation of the Action Plan for the relevant year no later than February 15. The reform and development group analyzes the implementation of measures and indicators, and on the basis of the data obtained, corrects and makes changes (upwards, in the case of early execution, and postponement of performance to subsequent periods or years, if these indicators are not achieved Academic Council of S. Seifullin KATU) for the next calendar year. The presented report is submitted to the Academic Council of S. Seifullin KATU, which collectively considers and decides on its execution.

Missions, visions, strategies and quality assurance policies were reviewed at the S. Seifullin KATU Academic Council (No. 20 dated June 3, 2015) and approved at the S. Seifullin KATU Board of Directors meeting (December 14, 2015). According to the Regulations of the Mission, visions, strategies and policies are reviewed once every 10 years. Due to the fact that the mission, vision, strategy and policy were developed in 2015 and approved by the Board of Directors of S. Seifullin KATU, as well as the results (indicators) of the S. Seifullin KATU Program were not fully implemented and achieved. planned and not carried out.

The University's website has published a quality policy, a mission and a development strategy for S. Seifullin KATU. As a result of the self-assessment, the working group came to the conclusion that the mission corresponds to the current management system of the University, as there are services in the structure of the university that can implement it. In turn, the mission contributes to the expansion of the meaning and content of activities for the staff of the University. An important condition for the formulation of the University's mission was the understanding and acceptance of it by the majority of employees, since the goals and interests of individuals participating in the activities of the university should be subordinated to the goals of the University.

For the qualitative implementation of the Action Plan, the structural units of S.

Seifullin KATU developed various provisions, such as:

1) To stimulate the teaching staff of the university, the Regulation on the establishment of allowances for teaching staff to the official salary, approved on 15.05.2017, was developed.

2) for the purpose of practical training of students and carrying out research work, S. Seifullin KATU was leased (for a period of 10 years) of 1,159 hectares of agricultural land in Akmola region, Tselinograd district, Kabanbay Batyr village. For the purposeful activity, the Regulation on the activities of the research and experimental agricultural campus was developed;

3) as part of the preparation of highly qualified personnel for the implementation of the State program of industrial and innovative development for 2015-2019, 4 scientific and experimental platforms were created with laboratories for which Regulations were developed;

4) a structural subdivision of the reform and development group was created to monitor and analyze the implementation of the Plan of Measures of S. Seifullin KATU - a regulation on the activities of exploration was developed;

5) One of the main activities of the Development Plan is the creation of an effective system for the dissemination of knowledge for agricultural producers, therefore, an organizational unit for the extension of knowledge Extension-KATU was created and a regulation on its activities was developed;

6) for the implementation of the Program, a commercialization office was created, whose activities include the development of a system for the commercialization of scientific research and technology. A regulation was also developed for its activities.

7) For the qualitative monitoring and analysis of the annual implementation of the Action Plan, in the framework of the S. Seifullin KATU Development Program for 2016-2020, a Regulation on the system of indicative planning and monitoring was developed.

The policy of ensuring the quality of education at the university is reflected through the involvement of students (students, undergraduates, doctoral students) in the implementation of research projects under the programs of grant, program and target financing of the MES RK, international projects, direct agreements with economic entities, as well as the inclusion in the educational programs of research results of the faculty, doctoral students, undergraduates.

For the further development of the culture of quality and values of the university, the following measures were implemented:



- developed and adopted the main documents governing the teaching, scientific, educational processes and ensuring the quality and high performance of the team;

- the “Code of honor of the student of JSC S. Seifullin KATU;

- traditionally held international conferences that reveal the value of individuals whose activities are associated with the university;

- regular meetings with university graduates are held in order to maintain the continuity of generations;

- regular meetings with university graduates are held in order to maintain the continuity of generations;

- organizes round tables, seminars, meetings, debates and debates on various issues of ethics, law and order, morality and the formation of a healthy lifestyle in order to educate a comprehensively developed young generation;

- there is an institution of advising that provides guidance and coordination of educational work.

Actions or activities to further develop the culture of quality of the educational, research and educational process are reflected in the University’s Development Strategy and are included in the work plans of the structural units.

The implementation of the mission for the future is aimed at preparing competitive, innovative-minded and patriotically educated specialists who meet modern domestic and international criteria, as well as at creating a promising scientific, intellectual, and informational and cultural environment among young people in the country. Promising areas of university activities to achieve the university’s mission are:

- maintaining a high level of management- and professionalism of teachers, staff in each of the departments of the University;

- development and implementation of new world and domestic information technologies in academic disciplines;

- ensuring a high level of business culture and performance discipline of members of the teaching and student groups;

- preparation of PhD - doctors in all specialties:

- mutually beneficial cooperation with other universities in the implementation of educational activities;

- organization of highly effective quality management in each of the departments (faculties, departments, departments, centers, divisions) of the University.

The implementation of policies and the achievement of goals and objectives in the field of quality is carried out by:

- organization, maintenance, continuous improvement of the educational process;
- training highly qualified specialists;
- creation of a high level of interaction between the departments of the University;
- study of customer satisfaction with the quality of educational services provided by the University;
- evaluation of the activities of structural units through self-certification, mutual verification;
- performance of the Quality Policy to each employee, a student of the University.

The University's quality policy is an expression of the principles and values arising from its mission and the Charter, is carried out centrally and is binding on all departments of S. Seifullin KATU. The quality policy is constantly being improved, based on the use of the best domestic and foreign experience in the practice of higher and postgraduate education.

### 3 INSTRUCTION AND MANAGEMENT

Multistage management according to the legislation of the Republic of Kazakhstan and its Charter at S. Seifullin KATU:

Board of Directors - management body;

The Academic Council is a collegiate body;

Management Board - executive body;

According to the Program, the Department of Academic Affairs coordinates all issues regarding the organization and management of higher and postgraduate education in S. Seifullin KATU. So according to the Program, if earlier the students' personal affairs were in the dean's offices by the specialties of their studies, then the Student Service Center (CSO) was created, where the personal files of all the students (bachelor, master, doctoral) are collected and stored. TSOO allows the trainee in one place to get all the necessary advice on their training at S.Seifullin KATU and to receive the necessary documents (certificate of the place and duration of training, academic mobility, etc.), if necessary, at the place of demand. management and organization of educational, educational and methodical, scientific and educational work, and technical work with students in the center (on the principle of one window).

The program does not change the form of science management, and does not create an extra administrative superstructure. In the field of research and development, the department is managed by the department for research and innovation, together with deans and departments, as well as with teams of scientists (according to the principle of interdisciplinary research). One of the effective forms of management of scientific projects and programs is project management, which in turn allows you to properly organize and manage the processes of the implementation of an interdisciplinary scientific project or program. This approach finds its implementation. So, through the Ministry of Agriculture on the basis of the S. Seifullin KATU, a project management center was opened.

As well as scientific activity, innovation management, knowledge dissemination and technology commercialization is carried out by an interdisciplinary group of scientists, which allows you to effectively make decisions in the implementation of relevant work. The established structural units in the field of commercialization and dissemination of knowledge provide consulting, organizational and other types of work in preparation for submitting for the competition. If the project is approved by the customer, the employees of these departments can also take an active part in its implementation, as one of the

members of the interdisciplinary team.

The University has developed, documented, implemented and maintains a quality management system, constantly increasing its effectiveness in accordance with the requirements of ISO 9001: 2015 in relation to the current organizational structure of the university. The quality management system of the S.Seifullin Kazakh Agrotechnical University is based on the process approach.

At the relevant stages of the provision of educational services, the university conducts a systematic analysis of the developed elements of the educational process: working curricula, catalogs of elective disciplines, syllabuses, teaching materials, practical, laboratory materials, methods of current control, etc. At the university representatives of departments and services, employers interested in the development of the analyzed teaching materials. The results of the analysis and follow-up actions are documented and monitored. In the university, the analysis of the developed curricula, syllabuses, plans for practical training and laboratory work and other teaching materials is carried out in the departments, in the work of the methodological commissions of the faculties; It is also attended by reviewers, dean and specialists from other interested departments of the university.

There are risks in JSC “S.Seifullin KATU”, which significantly affect the activities of the university. The risk management process contributes to decision making by considering the significance and likelihood of future events or circumstances (assumed or not anticipated) and their impact on the activities of the university. Risk management includes the use of logical and systematic methods for:

- maintaining communication and counseling throughout the process;
- risk classification;
- determination of the probability of their occurrence;
- setting the context for determining, analyzing, evaluating, considering the risk associated with any action and process;
- development of a risk map;
- monitoring and review of risks;
- compilation of a report.

The purpose of identifying risks is to determine what may happen or what situations may arise and affect the achievement of the goals of the system or organization. Once a risk has been identified, an organization should identify any existing controls, such as design features, people, processes, and systems. The process of identifying risks includes identifying the causes and source of risk (danger in the context of physical harm), events,

situations or circumstances that may have a material effect on the purpose and nature of such an impact.

Risk identification methods may include:

- evidence-based methods such as checklists and analysis of historical data;
- systematic group methods, where an expert group follows a systematic process for identifying risks through a structured set of instructions or questions;
- methods of automatic inductive reasoning.

To improve the accuracy and completeness of risk identification, including brainstorming and Delphic techniques, various supporting methods can be used.

In JSC " S.Seifullin KATU" identified 10 main types of risks (table 2) by university processes, which are ranked by significance as follows:

Table 2 - 10 main types of risk

№	Type of risk
1	Strategic
02	Educational
03	On scientific activities
04	On educational work
05	International Relations
06	Financial
07	HR
08	Legal
09	Information
10	Life Support

For further management, risk categories have been developed with types of risks belonging. The following categories are defined:

**1) By the nature of the interaction**

- Internal - risks arising from the activities of the subject of the educational services market;

- External - risks that are not directly related to the activities of the subject of the educational services market, but are caused by the external environment;

**2) By scope of activity**

- International - risks inherent in the education system on an international scale;

- National - risks inherent in the education system at the country level;

- Local - risks inherent in the education system at the level of a separate university;

- Image - risks affecting the image of the university;

**3) By a combination of internal factors**

- Operational - risks of losses associated with the imperfection of internal activities;
- Functional - risks associated with the use of electronic technology;
- Organizational and managerial - risks associated with poor educational management;

#### **4) By belonging to the subject of the educational services market**

- Risks of JSC S. Seifullin KATU - risks associated with the quality of educational services, with a set of applicants, with financing, with a low standard of living of the population;

- Public risks - risks associated with obtaining highly qualified personnel who are not able to effectively solve the problems of society; with the possibility of social tension due to the impossibility of finding a job for university graduates;

- State risks - risks arising from both the fault of the higher education system and those depending on the efficiency of the state.

For the above categories, the risks were classified and for

Assessment of degree of risks is a part of risk management which represents the structural process defining influence of the purposes and analyzes risk through the sequences and their probabilities before definition of future considerations.

The risk assessment purpose – is to provide constructive information and the analysis for adoption of fluidized decisions on consideration of special risks and to the choice between options.

Main advantages of evaluating risks:

- comprehension of risks and their potential influence on activity of the university;
- providing with information the persons making the decision;
- contribution to a comprehension of risks for assistance in the choice of consideration parameters;
- definition of the main participants of risks and weaknesses in systems and the organizations;
- comparison of risks in the alternate systems, technologies or approaches;
- maintaining of communication of risks and indeterminacies;
- assistance in establishment of priorities;
- assistance in the prevention of incidents based on the research conducted after fulfillment of an incident;
- choice of various forms of risks processing;
- compliance to legal requirements;
- providing information which will help to define admissibility of risk when

comparing with the given criteria.

Philosophy of risk management provide policy, procedures and organizational actions which will introduce a risk management system on all organization at all levels.

As in JSC S. Seifullin KATU basic process is rendering educational services and research activity, the assessment of degree of risks according to the educational program is carried out not less once in academic year.

Heads of processes by November 1 of the current year reveal scratches with the development of the plan for risk management, according to a form given in Appendix 4.

The department on the academic issues (further DAI), by November 1 of the current year, provides collecting and the analysis of risk assessment according to each educational program (on all levels). According to a template heads of educational programs we fill out data in AIS "Scratches according to Educational Programs", an obligatory step is filling of the column "Supporting documents" by each criterion.

According to a form of criteria for evaluation of degree of risk of educational programs for each criterion the criterion share in the total amount of indicators who are 100 points is defined. Each criterion in turn is divided into quality indicators, one of which is defined by heads of educational programs (managers of departments, the staff of departments or other). After filling of AIS "Scratches according to Educational Programs" the program determines the main scratches by the university. DAI having allocated the most important processes subject to risk, till July 25 of the current year develops the plan for risk management which copy presents to SK. Heads of other processes also develop the plan for risk management.

When determining risks each head of process establishes the probability of emergence of risk, by determination of percent of high and improbable risks on each process, on the basis of it a framework of risks is defined. The card of risks is formed on the basis of probability and a significance of risks.

Assessment of risk represents set of probability of risk and its materiality. Assessment of risk is carried out with the forecast horizon, equaling 1 year.

Probability of risk is an expert metrics and is determined by a 5-mark scale (see Table 3).

Table 3 - Scale for determination of risk probability

Score	Meaning in %	Interpretation
<b>1 (Very low)</b>	<b>1-7%</b>	The event will take place most likely not more often than 1 time in <b>15 years</b>
<b>2 (Low)</b>	<b>7-20%</b>	The event will take place most likely 1 time in

		<b>5-15 years</b>
<b>3 (Average)</b>	<b>20-50%</b>	The event will take place most likely 1 time in <b>2-5 years</b>
<b>4 (High)</b>	<b>50-70%</b>	The event most likely will take place in the <b>next one or two years</b>
<b>5 (Very high)</b>	<b>&gt;70%</b>	The event most likely will take place in the <b>next year</b>

All heads of processes on the basis of the analysis of the processes determine the probability of emergence of risks by the above-stated scale. Probability of emergence of risks is defined for 1 calendar year and is approved as the chairman of the Board.

The total value Z is defined: amount of probable risks from 30% (30 inclusive) - A, we divide into total number of probable risks on this process - B, multiplying by 100%.

$$Z = \frac{A}{B} * 100\%$$

Risk analysis is focused on contribution a comprehension of risks. It provides data for risk assessment and a decision making on need of risks consideration and the most suitable strategy and methods of consideration.

For the revealed events of risks the risk analysis consists of definition of consequences and their probabilities, taking into account existence (or absence) effectiveness of any existing means of risks.

Risk analysis includes consideration of the reasons and sources of risks, their consequences and probability of emergence of these consequences. The factors influencing consequences and probability have to be defined. The event can have a set of consequences and can affect many purposes. The existing control elements by scratches and their effectiveness have to be taken into consideration.

Risk analysis to measure risk level, usually includes assessment of range of potential consequences which can occur owing to an event, a situation or a circumstance, and the related probabilities. However in certain cases, when consequences are insignificant or the probability of emergence too low, for a decision making there can be enough assessment of one parameter.

For prevention of risks the card of risk management which is defined by a significance of risks and the probability of their emergence is developed. At the end of the academic year heads of processes provide the report on risk management in service of quality. After providing reports, SK carries out the analysis of risk management once a year. Till November 1 of the current year heads of divisions develop the plan for risk



management. In July, for last academic year, each head of process provides the report, according to the plan for risk management. The approved plans for risk management and the card of risks are submitted for consideration of the Board of directors by the first deputy chairman of the board. Monitoring of risks consists in control over risk level. It is reached by updating on the regular basis (once a year) of information on scratches, actions for risk management, the status of realization of actions and also by tracking of extent of influence and probability of the risks emergence developed earlier at a stage of identification and risk assessment.

The analysis of the existing systems of monitoring of education quality in higher education institution showed that generally these systems are based on statistical processing of various questionnaires or estimates received by trainees. It allows, analyzing statistical data, to find weak points in quality of education and sometimes to predict a situation. As main objectives of an informational and analytical system of monitoring of education quality in higher education institution the following is defined:

- monitoring of educational process and timely identification of adverse situations;
- delivery to administrative personnel of evident idea of education quality, alleged causes of emergence of adverse situations and recommendation about their elimination;
- the sequence and the maintenance of stages for the analysis of educational activity in higher education institution: stage of the choice of a subject of the analysis (staff of divisions of higher education institution, students) and time span of the analysis (semester, academic year);
- identification in the analysis of educational process, in case of its deviation from normal (reference), often repeating situations (typical situations) which arise during educational process.

Assessment of efficiency and effectiveness represents the procedure which is carried out for the purpose of identification of compliance degree to particular requirements of personal qualities of workers, the quantitative and qualitative responses of their activity.

In the conducted sociological researches the following requirements to assessment of activity of divisions were considered:

- complexity of assessment – enough the indexes describing activity of divisions;
- minimum complexity of collecting and roughing-out of information;
- simplicity of calculation of indexes;
- openness of calculation – a possibility of multilevel monitoring of reliability of information.

Information obtained at measurements and monitoring allows the university to take control of discrepancies and to continuously improve the educational processes. All events held on observed data of monitoring are reflected in documentation, in particular monitoring is carried out by complex check which part internal auditors and chairmen of the methodical commissions are. At a meeting of methodical council of the university the analysis of the revealed discrepancies for the purpose of further prevention and an exception of their repetition is carried out.

S.Seifullin Kazakh Agrotechnical University realizes the activity on the basis of the Constitution of the Republic of Kazakhstan, the Civil code of RK, the Law of RK "About Education", other Laws of RK, normative documents of MES RK, the Charter of S. Seifullin KATU, internal normative documents (Rules, Provisions, Instructions).

The supreme collegial body of management of the university is the Academic council which acts under the Charter Regulations on the Academic council. Work of the Academic council is carried out according to strategic plans and the plan approved for each academic year. The circle of the questions submitted for meetings of council covers all range of the main activities of the university.

All activity of S. Seifullin KATU is focused on rendering high-quality educational services which are defined first of all by skillful management. At Kazakh Agrotechnical University there is a vertical control system providing satisfaction of consumers in educational services. The chairman of the board performs management of activity of S. Seifullin KATU, controls distribution of financial and material resources for the ensuring quality of educational services conforming to requirements of State Obligatory Standards of Education (SOSE) VPO and consumers takes responsibility for the common organization of the works which are carried out to S. Seifullin KATU, for keeping of statutory requirements and the regulating documents.

Control of Kazakh agrotechnical university is executed according to the legislation of the Republic of Kazakhstan, Standard rules of activity of the organizations of education implementing educational programs of higher education, the Charter of S.Seifullin KATU, regulations, the collective agreement on the principles of a combination of one-man management and collective nature. All guidance documents of the university – the collective agreement, norm of time for accounting of volume of work and main types of educational and methodical, research, organizational and methodical and educational activity of teaching staff of the university for each academic year - all their standards and requirements are created on the basis of the recommendations of divisions, are considered at a meeting of the Academic council and are approved as the Chairman of the board.

Some of the regulating documents is the Charter of the university and regulations in which the main activities of the university, internal requirements for personnel and students are stated. These documents are shared for all staff of the university.

Exercises control of the educational programs (EP) of committees on curricula of specialties of bachelor degree-magistracy-doctoral studies. The plan of work of committees on curricula is developed and annually approved as deans of faculties. EP are developed at the releasing departments by leading experts on a profile of the direction of preparation with engaging of experts from adjacent departments and representatives of business community, scientific research institute, public institutions and the organization.

EP is a basic point for formation of organizational structure, scheduling financial investments, human resources. For example, formation and the realization of EP of a profile magistracy 6M072700-"The technology of food products" was enabled at the releasing Technology of Processing Industries department with engaging of foreign and domestic experts in the field of processing of agricultural products. For the internship of the focused tutoring the technological platform with engaging of financial investments, Scheduling of government procurement (acquisition of materials, reactants) is created and also creation of specialized laboratories is carried out around EP.

At the university 90 educational programs (EP) are implemented, including: 36 specialties of a bachelor degree, 31 specialties of a magistracy and 23 specialties of doctoral studies, control of which are exercised of committees on curricula of specialties. The plan of work of committees on curricula is developed and annually approved as deans of faculties. The list of educational programs of a bachelor degree and magistracy is defined by the Academic council of the university. Management of educational programs of undergraduates and doctoral candidates is carried out immediately through interaction with departments and faculties.

EP are developed at the releasing departments by leading experts on a profile of the direction of preparation, coordinated with heads of the industry enterprises, research institutes, public organizations and correspond to the real requirements defining quality of experts` training.

The university develops cooperation with the foreign partner universities and the Kazakhstan research organizations for realization of collateral EP in a bachelor degree and a magistracy. So, for example, formation and realization of EP of a magistracy 6M072700 - "Technology of food products" is carried out at the releasing Technology of Processing Industries department with engaging of foreign and domestic experts in the field of processing of agricultural products. Taking into account the maintenance of EP,

specialized laboratories are created, necessary materials and reactants are acquired, the technological platform is created.

The annual plan of activity of higher education institution is developed on the basis of the strategic development plan for the university. Key performance indicators are reflected in the system of achievements calculation – teaching staff Rating.

For the purpose of effective realization of the processes, involvement of personnel in activities for implementation of policy and strategy, the management of KATU annually develops the strategic development plan for Higher Education Institution.

Staff of the university, being competent and full participants of processes of activity of the university in the field of quality of educational services, initiatively and responsibly plan and carry out the activity, efficiently increasing the level of knowledge and mastering innovative technologies. At the university the teaching staff work's rating system of assessment which reflects structure of realized works of teaching staff, including educational and methodical, research, educational work, coaching, consultation and the public work corresponding to a mission, the purposes and tasks of Higher Education Institution is introduced.

The purposes of external academic mobility in S.Seifullin KATU are:

- 1 integration of the studying S.Seifullin KATU in the international scientific and educational space;
- 2 upgrading of knowledge and level of students training;
- 3 comparability and recognition of educational programs of S.Seifullin KATU with programs of the foreign universities;
- 4 increase in prestigiousness of S.Seifullin KATU in the educational market.

The external academic mobility of the studying S.Seifullin KATU is carried out by means of realization of the following mechanisms:

- studying by students of separate disciplines or modules of educational programs in partner higher education institution abroad;
- departure of students abroad on practical preparation in partner higher education institution or other organization.

Financing of external academic mobility can be carried out for the account:

- means of the republican budget, for students within the state educational order;
- income gained by S.Seifullin KATU from realization of paid services;
- grants of employers, social academic and scientific partners, international and domestic funds and grants;
- personal means of students.

Participants of external academic mobility can be:

1 undergraduates of the first and second semester of tutoring, from the beginning of the academic mobility from the second and third semester of tutoring;

2 students with third on the sixth semester inclusive according to programs with four-year tutoring, from the beginning of the academic mobility with fourth on the seventh semester;

3 students with third on the eighth semester inclusive according to programs with five-year tutoring, from the beginning of the academic mobility with fourth on the ninth semester.

7.2 The following requirements are imposed to candidates for participation in external academic mobility:

1 high academic progress - the current progress on completion of the academic period preceding external academic mobility or if during selection the results of the specified academic period aren't summed up – for the previous academic period:

- at the direction on external academic mobility at the expense of means of the republican budget - not lower than 3.33;

- at the direction on external academic mobility at the expense of personal means of the students or other sources provided in item 6.3 – not lower than 3.00;

2 for partner higher education institutions with tutoring English - result of testing for determination of level of proficiency in English on the program of S. Seifullin KATU not less than 70% of the correct answers".

7.3 The candidates having operating certificates of the international exemplar of one of the following systems are exempted from passing of testing for determination of level of proficiency in English:

- IELTS – not less than 6.0;

- TOEFL – not less than 550.

7.4 At the direction of candidates for partner higher education institutions with tutoring Russian existence of the operating certificate of the international exemplar or passing testing for determination of level of proficiency in English aren't required.

7.5 For the countries with other language of tutoring a necessary condition for the direction on external academic mobility is existence of the recognized international certificate with level of proficiency in a foreign language not below "well", including one of the following systems:

1 DELF – not less than B2;

2 TCF - B1, B2;

3 DAF - B2, C1;

4 certificates of similar level on other foreign languages.

The copies of the corresponding certificates of the international exemplar are provided in (ICaMLEDC) International cooperation and multilingual education development center.

7.6 In case the partner higher education institution to candidates for external academic mobility imposes additional requirements, such requirements are also considered at selection.

7.7 In case of the direction on external academic mobility at the expense of grants of employers, social academic and scientific partners, the international and domestic funds and grants, the requirements established by the organizations which provided financing are follow-up considered.

The transparency of a control system of JSC S. Seifullin KATU is provided through discussion of the main decisions on activity of higher education institution in collegial bodies of management, such as Academic council, Board and Board of directors. Discussion and a decision making in collegial bodies confirm that all decisions are made not individually, and are discussed with the group of S. Seifullin KATU. The control system at the university has vertically horizontal focus which provides a constant interconnection and interaction of divisions of S. Seifullin KATU.

The supreme collegial body of management of the university is the Academic council which acts under the Charter also Regulations on the Academic council. In the work the Academic council is guided by the legislation of the Republic of Kazakhstan, regulations of the Ministry of Education and Science of RK.

Activity of the Academic council is based on publicity and collective nature of discussion of questions on the main activities of the university: on exercise educational, educational and methodical and research and also educational work of students, work on training of research and educational personnel and increase in their qualification, development of material and technical resources. The operating structure of the Academic council is elected at a general meeting of collective for a period of 3 years from among heads of structural divisions, highly skilled professors and teachers, a student's asset and consists of an odd number of terms – 83 people (Protocol No. 726-N from 13.10.2016). Today the number of students as a part of the Academic council is 9 students. As required the decision of the Academic council of the university to its structure makes separate changes.

For obtaining objective information about activities of the university for various aspects so-called "mailboxes", forums and the blog by the rector, reception of the rector and vice rectors for private matters, the university newspaper and other instruments of monitoring of management process at the university function.

Since 2011 the blog by the rector of the university functions. All interested persons are teachers, students, entrants, parents, etc. have an opportunity to ask a question and to receive irrefragable answer, to state the wishes, to give offers, etc. On the basis of the analysis of the entered questions and offers the appropriate measures are taken.

Activities for management of technological innovations of Higher education institution, are aimed at providing policy of higher education institution in the field of creation and commercialization of results of intellectual creative activity (further - RICA) and means of individualization, for obtaining economic effect.

The most important elements of a control system of the technological innovations introduced in Higher education institution are:

- Situation about management of the intellectual property of Higher education institution (is developed to be at a coordination stage);
- internal normative documents (in 2017 changes were made to labor contracts with teaching staff of the university: points concerning accessory of the rights for office inventions and/or office works by the Employer are fixed);
- the automation equipment (the portal of complete scientific and innovative projects of Higher education institution is developed and started).

The control system regulates all aspects of creation, account, legal protection and practical use of RICA belonging to Higher education institution.

Control of technological innovations is exercised due to ensuring coordination of activity of structural divisions: office of commercialization, patent, economic (economical department, accounts department), legal services and also responsible for formation of the plan and performance of contracts research and development (contract researches).

Key element of such organizational and functional structure in the field of intellectual property is the Office of commercialization (further - OC). OC provides the complete alternation of work with RICA, maintaining close contact with researchers even until disclosure of a substance of inventions and bringing process to commercialization of technologies by means of licensing of technologies to the companies existing in the market, creations of new business (startup) or carrying out custom contract researches.

1. Licensing of technologies to the companies existing in the market, is carried out by means of creation, protection and legal protection, account and commercialization of RITD. A basic element in this mechanism is a management of a patent portfolio, that is constant carrying out a qualitative and quantitative analysis of patent cards that allows to establish degree of a significance of patents (key, minor and useless patents), calculation of their monetary value (at the moment only by an expensive method) and ability to block

action of competitors. OC together with authors of intellectual property items on a constant basis carries out searching of the companies interested in acquisition of technologies on the basis of the developed commercialization strategy.

2. Creation of new business (startup) OC within this work provides consultation and training of teaching staff in drawing up and submissions of applications for participation in competitions of institutes of innovative development. From the most significant results it is necessary to allocate the following:

- In 2017 JSC National Technological Development Agency approved to financing a grant on commercialization the project on creation the test - systems on a paratuberculosis of farm animals for the total amount of 25 million tenges, the refusal of a grant due to the lack of joint financing is made.

- The organization and assistance of teaching staff for participation in a competition of 2016 on receiving grants of Groups of the senior research associates and Groups of junior researchers of the Inducing of Productive Innovations Project by results of which the grant for the sum of 280,000 million tenges is won with joint financing from the business sector the small innovative company (startup) with participation of Higher education institution as the cofounder (2016 - 2017) is also created;

- In a competition on receiving grants of GSNS and GMNS of the Inducing of Productive Innovations Project, 2017. 5 applications are directed.

- For participation in the grant program of MSE RK "Consortia of a manufacturing sector are directed 2 projects with participation of Higher education institution.

- In 2017 6 applications are sent to JSC Fund of Science for participation in a competition on commercializations of RNNTD, and in 2018 3 applications are directed.

3. Realization contract researches and introduction of RITD is carried out in Higher education institution as by self-contained searching by scientists of Higher education institution of the economic entities interested in carrying out any researches and immediately by self-contained the appeal of economic entities with the technological order. For engaging of technological orders the Higher education institution carries out the edition of the catalog of scientific and technical developments, the organization of exhibitions of scientific and technical achievements and holding seminars. In 2016 28 contracts with economic entities for the sum of 35863.60 thousand tenges, in 2017 26 contracts for the sum of 44342.85 thousand tenges, in 2018 16 contracts for the sum of 109,618.39 thousand tenges were signed (on a state 01.08.2018).

International:



Since 2008 S. Seifullin KATU is a part of the Great Charter of the universities (Bologna Process). This membership allows S. Seifullin KATU to carry out the academic mobility of students and the faculty, recognition of the diploma of S. Seifullin KATU in the world, allows carry out the program of receiving two-degree education, etc.

Since 2016 S. Seifullin KATU was included into Alliance of an agricultural education and scientific innovations of the Silk way.

In 2017 in Astana there was held the 2nd International Alliance of the countries of the Silk way, as the organizer of this Alliance of S. Seifullin KATU acted. 23 universities of People's Republic of China and 26 universities from 15 countries of the FSU and beyond shared in work of Alliance.

In 2018 the representative of S. Seifullin KATU shared in work of the 3rd meeting of Alliance of the Silk way, Serbia.

Participation in this Alliance of S. Seifullin KATU allows come into contacts by the foreign countries of the Silk way, participation in various international scientific projects and programs. So in 2016-2018 our scientists in the field of forestry conduct collateral scientific research, both in the territory of Kazakhstan, and beyond its limits. In 2016-2018 collateral researches on a transfer and adaptation of grades of the Chinese selection of potatoes in the conditions of the Central and Northern Kazakhstan are conducted. Besides, within cooperation with the Chinese SRO and the universities to fixed assets of S. Seifullin KATU it was transferred on a grant basis the equipment and processing equipment.

National:

S. Seifullin KATU is a member of association of higher education institutions of Kazakhstan. This organization is the main representative in all public authorities of Kazakhstan on behalf of all higher education institutions. Therefore membership in this organization allows S. Seifullin KATU to be aware of not only all changes and reforms in the higher education, but also not indifferently to be the participant of these activities.

Regional:

S. Seifullin KATU concluded memorandums with 4 regional akimats Northern and Central Kazakhstan (Karaganda region (in 2017), Akmola, Kostanay and North Kazakhstan regions are in 2018. Within the university given Memorandums scientists conduct applied scientific research in the field of digitalization of crop production and livestock production, in the field of veterinary safety, the production technology of agricultural products, etc. to the directions. Together with akimats seminars for agricultural producers of these regions on the interested subjects and subjects are held. These Memorandums allowed expand bases of practical training of students and also for passing

of a work practice immediately on operating the agricultural enterprises, with the subsequent employment of students.

Leadership team: Chairman of the board, Vice chairmen of the board, Vice rector, deans of faculties, chiefs of structural divisions, managers of departments underwent professional development in volume of the 72nd hour on the subject "Management in Education" (certificates are available).

The procedure of accreditation includes development of recommendations for perfecting of activity of the university. During the previous institutional accreditation by external commission of experts 11 recommendations about various activities of S.Seifullin KATU were made. Within 5 years monitoring of their realization was carried out, the plan of measures on implementation of the recommendation of EEC beforehand was developed and approved. When carrying out a self-rating at the end of the report data on implementation of these recommendations are provided, it should be noted that the working group when writing the report on a self-rating carried out a detailed analysis of implementation of recommendations for the purpose of prevention of their repetition at the procedure of a reaccreditation.

#### **4 MANAGERIAL INFORMATION AND REPORTING**

At the university processes of management of information are introduced. The main channel of information distribution is the website of the university, AIS "PLATONUS", AIS "ARTA Synergy", 1C: University PROF, media university and mass media, social networks (personal page of the university in Facebook).

The modern level of informatization predetermines use of the latest information and communication technologies and software in activity of the university. Intensive use of information technologies is the strong argument in competition in education market.

In activity of the university information acts as one of the major resources. High school activity is bound to use and different generation of information flows which unite in themselves the transmitted data, existing both in external, and in the internal environment of higher education institution.

Carrying out educational activity, management of the university is forced to conduct searching, collecting and different processing of the external information and data. Information of this sort entering on the entering information flows is input data for rendering various type of service, directed to the organization, perfecting, the analysis and scheduling of activity of higher education institution. Having obtained and having processed the entered information, the management of the university can react in due time to changes of the legislation, an environment, volume and segmentation of education market, service price, behavior of competitors in the market, technologies of the organization and management of higher education institution.

The university needs to collect and process also the internal information generated in the course of activity by all structural divisions. Internal information can conditionally be divided into two categories: quick and strategic.

Operational information includes different data and is fixed by primary documents, for example: accounting of the rendered service (receipt consignment notes), the entered funds for the settlement account (an extract of bank), the spent tools (payment orders); orders on movement of shots; current plan of enrollment and release etc.

Strategic information evolves from primary documents and the analysis of operational flows of information for the particular period. Strategic information, as a rule, affects activity of several structural divisions, is used at adoption of strategic decisions at the level of the top management.

Output information flows are of separate interest. The management of the university, reacting to the entering external and internal information, forms domestic and foreign policy of the activity, issues information to the external environment. The issued information is used in the external environment by consumers of educational services (entrants), other higher education institutions and other. For example, information on the change in price of educational services, volumes of set and the nomenclature of the let-out experts, the gained income and taxes, types of the provided services.

The main sign of structuring information resources and their streams at the university are the types of activity providing the end results in the form of rendering services of the higher and postgraduate professional education; services of additional education; realizations of researches; production of scientific and educational and methodical products; rendering other services and performance of work.

At the university processes of management of information, including collecting, the analysis and the reporting are introduced.

For management of educational process at the university ASME "Platonus" is used: creation of the academic calendars, distribution of subject matters on teachers, calculation of clocks for departments, record of students on elective disciplines, conducting testing, automatic creation of reports on different criteria etc.

The complete information on process of tutoring of each student for the entire period is provided in this system. Account of progress on all disciplines, GPA is kept, orders and announcements are placed. Information on each teacher is also provided. Students have access to resources of ASME "Platonus": online journal, total estimates, online testing, transcript. The office of the registrar together with dean's offices gives the academic support to students. All necessary directory materials are given by it. The system provides private virtual offices: office to the registrar, selection committee, dispatching service, teacher, student.

In addition to the ASCO Platonus, the university has developed and has been using the AIS "Admission Committee" for a number of years, which allows automating the registration of applicants, significantly increasing the efficiency of technical secretaries.

The system "Personnel" is used for personnel management. Its main functions are: accounting of the organizational structure, management and planning of staffing, payroll, accounting of personal data of employees, accounting of personnel movements, formation of orders for staff, management of staff development.

An obligatory element of the "digital" infrastructure of a modern university is a document management system. Work with external and internal documents is attributed to

the most complex, time-consuming and “problematic” area of activity of organizations. Electronic solutions make it possible to significantly simplify and optimize it. The university has introduced the electronic document management system “Arta Synergy”. Electronic document management significantly simplifies the procedure for working with documentation and maximally automates the reporting process in the information database. Electronic document management also creates the conditions for monitoring orders, increases employee productivity, saves money and reduces the risk of losing documents.

The Department of Finance for the automation of various areas of accounting used AISBU "1C Enterprise". For the solution of other tasks related to accounting, the following information systems have been developed:

- AIS “Labour Time Sheet” allows to generate in electronic form time sheets in the departments and after approval by the Department of Personnel Management to transfer summary data to the accounting department;

- AIS “Business Trip Registration” is intended to prepare a standard electronic application form for a business trip with all related calculations;

- The AIS “Government Procurement” is used to register and streamline information flows on government procurement from departments to university management in order to monitor and execute them;

- AIS “Asset Accounting” expands the capabilities of AISBU “1C Enterprise” by adding detailed characteristics of fixed assets, including their condition and placement in the context of materially responsible persons;

- AIS “Warehouse Accounting” is used at the central warehouse of the university and allows you to control the movement of material values from entering the warehouse to the transfer to a specific department, informationally connected with AISBU “1C Enterprise” and AIS “Government Procurement”;

- AIS "Statistical reporting on the movement of students" allows you to monitor the number of students and pay for training, information is associated with the AISBU "1C Enterprise" and ASUO "Platonus".

The university’s scientific library uses an integrated library and information system IRBIS. This system implements all standard library technologies, including technologies of acquisition, systematization, cataloging, reader search, book distribution and administration, based on the interrelated functioning of five types of workstations.

For the management of processes in the field of educational work at the university, such information systems as AIS “Electronic Curator's Journal”, AIS “Dormitories” and AIS “Social Status of a Student” are developed and used.

An important process in the management of the university is the establishment of a complaints system for students, employees and other stakeholders. During the period of study at the university, students have complaints of various kinds. In accordance with the provision “On the procedure for the consideration of students' complaints by the university administration,” a student has the right to file a complaint to resolve any problems that may arise.

Students have the right to complain about the quality of the study process and social, creative development, as well as to ask for permission.

For the purpose of quality organization of educational work, the relevant control is carried out in accordance with the “Rules of organization of higher educational institutions”, the monitoring of compliance with the “Rules for organizing test and examination sessions”, “Rules for organizing and conducting final state attestation of students”.

According to the results of the meetings of the rector with the students, action plans are developed with timelines and responsible persons for the elimination of comments and student complaints.

To obtain objective information about the activities of the university on various aspects, so-called “mailboxes”, forums and the rector’s blog, a schedule of receiving the rector on personal issues, a university newspaper and other tools for monitoring the management process at the university are functioning.

Since 2011, the university rector's blog has been functioning. All interested persons - teachers, students, applicants, parents, etc. have the opportunity to ask a question and get an exhaustive answer, express their wishes, give suggestions, etc. Based on the analysis of the questions and suggestions received, appropriate measures are taken. Management system in S.Seifullin KATU covers all areas of the university’s activities, the quality management system ensures transparency of processes and delegation of responsibility at all levels of management, successful personnel policy is conducted, an annual analysis of the activities of collegial bodies is carried out, a SWOT analysis is given, which reveals the competitive advantages of the university, weaknesses and identifies opportunities and priorities of development.

One of the management methods at the university is the method of involving employees in management, which involves the creation of collegial management bodies at the university, authorized to make decisions in certain areas of the university. In S.Seifullin KATU at the university level such bodies are the Academic Council, the Board and the Methodological Council, the Informatization Council, the Scientific and Technical

Council, the Council of Young Scientists, the Council on Educational Work. The faculties have a faculty council, a faculty methodological council, and curriculum and program committees.

Collective management bodies are involved in planning, monitoring and improving the educational, scientific and educational systems of the university. To this end, according to the regulations of the university, meetings are held on a regular basis, at which the studied issues are discussed in various areas of the university's activities, possible ways of improvement are discussed, decisions are made to improve the processes, responsible ones and deadlines are set. All decisions taken are recorded.

Collective bodies such as the Academic Council and the faculty council include heads of departments, representatives of the teaching staff who study at least 10%, as well as employers. The participation of these representatives ensures, with the functioning of collegial bodies, openness and transparency. The privacy policy management procedure is described in a clause that also approves a list of confidential documents, access to which is restricted. All other documents are available and upon request, interested persons may have access to them. Documents ensuring the implementation of management decisions are available on the university website or at the stands of faculties and departments. Such documents include: development program of S.Seifullin KATU, academic calendar, reference guide, class schedule and calls, building layouts, etc.

University management delegates authority to structural units and teachers. In the decision-making process, discussion and involvement of the whole team in this process is taking place. In addition, teachers have the opportunity to express their opinions at faculty meetings and extended meetings of the Academic Council.

The general management of the university is carried out by the University Academic Council - an elected representative body. The Academic Council includes: Chairman of the Board, Vice-Rector, heads of departments, deans of faculties, heads of departments and selected leading researchers and teachers, specialists, representatives of students elected for a period of 3 years by open voting by the Academic Councils of faculties, as well as representatives of public organizations. The council may include heads of scientific organizations, scientists, experts in the field of economics and government bodies. The annual rotation of the membership of the Academic Council to replace its retired members is allowed: reelection, entry and withdrawal of members of the Academic Council appointed to the posts by the Chairman of the Board.

At the beginning of the academic year (September-October), at the extended meeting of the Academic Council, the Chairman of the Board appears on the results of the

university's activities over the past academic year and the tasks for the new academic year. The Academic Council also hears the reports of the Vice-Chairmen of the Board on the implementation of the development program of the university in the supervised areas, reports of deans on the activities of the faculties.

The activity of the structural units is checked by a specially created internal university commission of the most competent employees. The purpose of ongoing inspections is to study and control the parameters of educational, methodical, scientific, educational and other processes. In the course of ongoing inspections, all identified inconsistencies and irregularities are recorded in the form of a certificate and presented to the head of the audited unit and the chairman of the commission, which summarizes the results of the audit and prepares a message for listening and discussion at a meeting of the academic council. Heads of proven departments ensure the elimination of comments and their causes. All decisions made by the academic council are communicated to the staff.

Also one of the collegial executive bodies of management is the Board, which solves all the issues of its current activities except those that are within the exclusive competence of the General Meeting of Shareholders (sole shareholder) and the Board of Directors. The composition of the Board of "S.Seifullin KATU" JSC consists of the Chairman of the Board, Deputy Chairmen of the Board. The Board performs the functions of operational management and decision-making on the activities of the university, as well as the implementation of measures adopted by the Academic Council. Plans and reports are available, records are kept in accordance with the existing requirements of office work.

The main forms and methods of evaluating the activities of collegial bodies and structural units of the university are reports of heads of departments on the implementation of adopted work plans, internal audit reports, questioning students, teaching staff and university staff to identify the degree of satisfaction with the quality of education, services, etc.

The activities of the Academic Council are based on publicity and collegiality of discussing issues related to the main activities of the university: the implementation of educational, methodological and research work, as well as the educational work of students, the training of scientific and pedagogical personnel and the improvement of their qualifications, development of technical base. The current composition of the Academic Council was elected at a general meeting of the team for a period of 3 years from among the heads of departments, highly qualified professors and teachers, student assets.

Meetings of the Academic Council are held at least once a month in accordance with the approved work plan for the relevant academic year. If necessary, certain current key



issues that are not included in the plan, which require the adoption of operational decisions and constant monitoring, are considered.

The activity of the structural units is checked by a specially created internal university commission of the most competent employees. The purpose of ongoing inspections is to study and control the parameters of study, methodical, scientific, educational and other processes. In the course of ongoing inspections, all identified inconsistencies and irregularities are recorded in the form of a certificate and presented to the head of the audited unit and the chairman of the commission, which summarizes the results of the audit and prepares a message for listening and discussion at a meeting of the academic council. Heads of proven departments ensure the elimination of comments and their causes. All decisions made by the Academic Council are communicated to employees in the form of brochures multiplied by typographical means.

The principle of continuous quality monitoring in all areas of the university, which ensures the "traceability" of the dynamics of the quality of processes and results in all areas of the university. The implementation of the policy in the field of quality of education will allow the university to increase the responsibility of university staff at all levels of educational, scientific and administrative activities in the management of quality of educational services; to make the quality management system for the provision of educational services unified and transparent for all university staff and its students.

Also, one of the collegial executive bodies of management is the Board, which solves all the issues of its current activities except those that fall within the exclusive competence of the General Meeting of Shareholders (sole shareholder) and the board of directors. The composition of the Board of "S.Seifullin KATU" JSC includes the Chairman of the Board, Deputy Chairmen of the Board, as well as one of the representatives of the teaching staff. The current composition consists of 5 people. The functions, rights and obligations of the members of the Management Board are determined by the legislative acts of the Republic of Kazakhstan, the Charter of "S.Seifullin KATU" JSC, as well as individual labor contracts concluded by the said person with the company. Meetings of the Board are held at least once a month in accordance with the approved work plan for the relevant academic year. The Board performs the functions of operational management and decision-making on the activities of the university, as well as the implementation of measures adopted by the Academic Council. Plans and reports are available, records are kept in accordance with the existing requirements of office work.

The main document regulating the principles, directions and requirements for the protection of information, serving as the basis for ensuring information security and

guiding the development of relevant regulations, rules, instructions, is the “Information Security Policy Statement”. In the development of this document, methodological instructions “On password protection”, “On information backup copying” and “On organization of anti-virus protection” have been developed and are used in daily activities.

Information systems used at the university include security subsystems that implement the adopted security policy. The security policy, depending on the goals and conditions of the system, determines the rights of subjects access to resources, regulates the procedure for auditing users' actions in the system, protecting network communications, formulates ways to restore the system after accidental failures, etc. To implement the adopted security policy, legal, organizational, administrative and engineering measures to protect information are applied.

Organizational and administrative measures applied at the university: staff recruitment and training, determination of job descriptions of employees, organization of access control, security of premises, determination of the order of storage, reservation, destruction of confidential information, etc.

The following mechanisms are used in the security subsystems of information systems:

- encryption that converts information into a form inaccessible to unauthorized users;
- access control mechanisms that control the process of access to user resources based on information such as access control databases, passwords, access time, access duration;
- Integrity monitoring mechanisms that control the integrity of both the individual message and the message flow;
- authentication mechanisms, which, on the basis of passwords presented by the user, decide whether the user is who he claims to be.

Regulatory documents have been developed for each information system used at the university, from user instructions to the position in the quality management system, depending on the complexity and purpose of the information system, determining the procedure for collecting and providing information, responsible persons for the accuracy and timeliness of the information provided. For example, work in the Platonus automated control and management system is regulated by the “Regulations on the management of the AIS“ Platonus ”educational process and ten instructions, the ARTA Synergy standard for the electronic document management system and the ARTA Synergy EDMS have been developed. All information systems have built-in instructions.

### **Used information systems**

1. ASUO "Platonus"
2. Electronic Document Management System "ARTA Synergy"
3. Personnel Management System
4. AISBU "1C Enterprise"
5. Integrated Library Information System IRBIS
6. AIS "Admissions Committee"
7. AIS "Labour Time Sheet"
8. AIS "Business Trip Registration"
9. AIS "Government Procurement"
10. AIS "Asset Accounting"
11. AIS "Warehouse Accounting"
12. AIS "Statistical reporting on the movement of students"
13. AIS "Electronic Journal of the Curator"
14. AIS "Dormitories"
15. AIS "Social Status of a Student"

In accordance with the methodological instruction "On the backup information" for all information systems are backed up. A register of information resources to be backed up has been determined, and Backup Regulations have been developed.

In the process of collecting and analyzing information are involved all students, staff and teachers of the university. After each academic period at the student level, a survey is conducted. "The teacher is through the eyes of a student. The results of the survey are analyzed and discussed at meetings of departments, councils of faculties and the Academic Council of the University and together with the structural units of the University, an action plan is developed to meet the needs of students and faculty. To identify the quality of the developed teaching and methodological complexes of disciplines for students, methods and technologies for conducting classes, forms for evaluating knowledge control, upon completion of courses, teachers conduct a survey of students after completing the study of a discipline or module of disciplines. The results of the survey are analyzed and taking into account the suggestions of students, changes are made to improve the educational process. At the level of graduating departments that implement EP, the collection and analysis of information is carried out through demonstration, open classes, mutual visits, seminars, conferences, round tables. At the faculty and university levels, the monitoring and evaluation of SPs is carried out by analyzing intermediate, final student controls and discussions at the methodological and academic councils. Based on the discussion, a decision is made to improve the SP.

In S.Seifullin KATU the following automated information systems (AIS) of the university are used as a tool for collecting and analyzing information: Platonus (AIS Platonus) for automating the educational process; personnel records, the collection, storage and processing of personal data in the AIS "Personnel of the University"; accounting of working time of employees - AIS "Labour Time Sheet".

University staff successfully use the electronic document management system "ArtaSynergy". Currently, there are 100 users in the system.

In order to improve the process of Business Trip of employees, introduced AIS "Business Trip".

An additional module "Employee Cabinet" in the local network of the university provides each employee with their login and password to access their personal data (filling in, editing data), which also ensures the efficiency of updating information on employees.

The process of collecting and analyzing information on personnel, scientific and international activities and other areas operates through the rating of the university in the national, regional and international rating agencies.

Automated systems provide information intended for the operational and strategic management of the university.

The processing of personal data is carried out with the consent of employees and University teaching staff.

Based on the processing and analysis of information, specific decisions are made, action plans are developed to improve performance, the results are recorded in the form of reports and reviewed at the academic council of the university.

In all departments of the university office work is being done.

Communication with students, employees and other stakeholders is carried out through the rector's unit, where you can ask any question of interest and get an answer to it. In addition, the management of our university, as well as faculty members are active participants in social networks (Facebook, Instagram, etc.), which provides communication with a wide range of the country's population.

Since the first days of entering the university, the Student Service Center, curators and advisors have been working with students.

For educational services, you can contact the Department of Academic Affairs, the issues of residence in a dormitory - the Department of educational work, on research issues - the department of science and innovation, on legal issues advises the legal department.

In order to regulate public relations related to applying and considering appeals of physical and legal entities, for the implementation and protection of their rights, freedoms

and lawful interests at the university, the Regulation on the blog of the Chairman of the Board of S.Seifullin KATU.

The director of the press center is personally responsible for introducing the blog of the Chairman of the Board and organizes answers to readers' questions. All letters received on the blog of the Chairman of the Board are transferred from the DIT to the press center within one day from the date of admission.

Within three working days, faculty deans and heads of departments of the university must answer readers' questions. The answer to the question is published on the blog of the Chairman of the Board with a nominal appeal. For the accuracy of the answer shall be borne by the person who prepared the answer. After checking the answers by the editors of the press center, they are posted on the blog of the Chairman of the Board by the DIT staff on the day of the response.

The main methods used for feedback in S.Seifullin KATU: reception on personal and business issues of employees and reception of outside visitors, functioning of the rector's blog, internal informing, questioning, analysis of documents (Regulations on the procedure for managing the feedback procedure in S.Seifullin KATU).

A regulation is developed on the ethical rules of service behavior of employees of "S.Seifullin KATU" JSC, which establishes the requirements for business ethics of university employees, as well as the policy of resolving conflicts of interest and attitudes and decision-making at S.Seifullin Kazakh Agrotechnical University.

In case of a conflict between the employee and his immediate supervisor, the employee has the right to contact the first Deputy Chairman of the Board.

In case of a conflict, the staff of the personnel management department draw up a protocol indicating the causes of conflict situations and the decisions made. In order to monitor the original protocol is stored in the department of personnel management and workflow.

In case of a conflict in the unit, the following algorithm of actions is used:

To create the moral and psychological climate in S.Seifullin KATU, providing in its units a high-quality educational process is the anti-corruption, disciplinary commission (ADC).

Sources of information for ADC:

- the results of the survey of students;
- helpline;
- a box of suggestions and comments;
- SMS messages;

- University site;
- e-mail of the Chairman of the Board;
- blog of the Chairman of the Board;
- statements by S.Seifullin KATU employees or other persons.

In order to comply with the procedure for the consideration of complaints of employees of S.Seifullin KATU, and to make the right decisions on them, to prevent violations of the rights of workers in the event of substantiation of claims and the restoration of violated rights, the Regulation on the procedure for handling complaints from employees is valid (RDPM SMK 11010. 85– 2014 )

Every university employee has the right to file a complaint in the form he chooses personally or through a representative.

The term for consideration of the complaint is 10-15 working days from the date of its submission. If during the specified period not enough information is collected to make a decision, a notification will be sent to the bearer. The complainant will coordinate the draft response with the legal service and the DMTD director, and then submit it along with the collected materials for signature to the Chairman of the Board. transferred to the workflow sector for registration and sending to the person who submitted the complaint.

One of the most important indicators of the efficiency of a modern university, an indicator of the effectiveness of transformations, is the level of satisfaction of faculty, staff and students in the management system. To identify the level of satisfaction of faculty, staff and students with the university management system, periodically meetings are held with the Chairman of the Board, Deputy Chairmen of the Board of Directors for activities, and heads of departments. Surveys are systematically conducted on issues related to the development of the social and living sphere, educational activities, the organization of leisure time after extra-curricular activities, the salaries of employees and the financial support of students. Based on the results of the information received, the causes of non-conformities and the degree of satisfaction with the management system are analyzed, decisions are made to adjust the plans according to activity directions. In addition, an effective way to determine students' satisfaction with the management system is: conducting a survey, rector's blog, polls, interviews, testing, organizing a forum on the university's website, having a "mailbox" of trust, conducting a survey called "Teacher through the eyes of a student", "Curator through the eyes of students" and others. Students of all forms of education participate in questionnaires to assess the performance of teachers, satisfaction with the material base and the social sphere, which are yatsya via AIS «Platonus», where every student is questioning prior to the session. The results of the

survey are presented to members of the administration and to persons responsible for the implementation of certain activities. According to the survey results, it can be stated that the majority of students are satisfied with the organization of the educational process at the university.

To ensure the monitoring of satisfaction of teaching staff and employees of the university annually carried out a sociological survey (Regulations on the procedure for conducting sociological research in "S.Seifullin KATU" JSC).

The sociological survey is aimed at identifying and further solving problems related to the activities of faculty and university staff, to further develop measures to resolve the identified problem situations.

The main goal of the sociological survey is to identify priority measures to solve problems, preferences of teaching staff and employees of S.Seifullin KATU.

Sociological survey is conducted 1 time per academic year

The program and issues of sociological research are developed by employees of the sociological laboratory of the Faculty of Humanities, together with the personnel management sector and approved by the Chairman of the Board of S.Seifullin KATU "

The random number of respondents is 30% of the total number of teaching staff and university staff

The survey is conducted separately among the respondents – teaching staff and respondents - university staff

The technical organization of the sociological survey is provided by the personnel management department.

Sociological survey data are processed and analyzed by sociological laboratory staff.

The results of the sociological survey are reported and discussed for decision-making at the meeting of the Board of "S.Seifullin KATU ".

The effectiveness and efficiency of the university is evaluated annually in the form of a report of each structure, department, faculty and administration at the University Academic Council. Based on the results of the work, the analysis is carried out and the risks are determined. In the context of the SP according to the results of admission, graduation of students, the views of employers, an analysis of the effectiveness of this or that SP is carried out. Then an issue is made to the Academic Committee to decide on the viability of the SP.

At the university, the collected and analyzed information takes into account key performance indicators: research and innovation activities of teaching staff, teaching and

methodical work of teaching staff, educational work with students, support for the development of the university.

Analysis of the dynamics of the number of students in the context of the forms and types of training conducted to determine the competitiveness and improve the SP for consumers of educational services.

The analysis of students' achievements is carried out after each academic period by ranking SP, GPA students. Determined the right choice of SP, the achievements of students to participate in various scholarship programs, grants. Analyzed the strengths and weaknesses of the SP, teaching and methodical support and teaching methods.

Student satisfaction with the implementation of the SP and the quality of training is determined by conducting a survey among students.

The analysis of the availability of educational resources for students, the simplicity and transparency of the filling of educational content by teachers, as well as the support system for students is carried out annually. To this end, the university is improving the electronic library, an online service system for students.

The problem of employment of young professionals in an environment where there is no mandatory distribution of graduates for universities is one of the most acute. This imposes enormous responsibility for the training of not only highly qualified, but most importantly, specialists in demand in the competitive labor market.

In this regard, the university is faced with the task of strengthening the work of graduates in employment.

The transition to a modular system of developing educational programs for students is based on the implementation of the principles of the Bologna process and is aimed at satisfying the labor market with demanded specialists.

In order to improve the quality of study, employers and specialists from enterprises are involved in the development of study programs.

In order to ensure the quality of students' knowledge and education in general, a close relationship between education and production, cooperation of the university with employers is necessary. The university takes the following measures to improve the quality of students' knowledge:

- conducting an interview of students of the main specialties of the university with employers;
- study of the labor market (which is necessary for production) through interviewing students with employers;



- Discussion with the employers of the list of elective disciplines and individual topics of courses relevant to production with the aim of including them in QEDs, curricula and syllabuses;

- expanding the base for practical training of students;

- development of modular study programs in accordance with the Dublin descriptors;

The training of highly qualified graduates who are competitive in the labor market is a priority task of S.Seifullin Kazakh Agrotechnical University. The success of our graduates, its image and further employment depends on a successful solution of this task. The University conducts systematic work to promote the employment of its graduates.

As part of building a social partnership system, S.Seifullin Kazakh Agrotechnical University conducts the following areas of work: 1) meeting the need for personnel at the request of regional and city local executive bodies; 2) job placement for graduates, which includes a range of works on providing information, methodological, psychological and organizational support to graduates in order to adapt to the labor market and employment.

The demand for graduates is one of the most important characteristics of the effectiveness of the work of the university and makes it possible to judge the quality of the training of specialists. Employment issues are resolved upon receipt of applications from employers, in particular from local executive bodies of regions, Astana and Almaty cities. The customers and consumers of graduates are educational institutions, organizations, enterprises of the regions. Employment of graduates is carried out in conjunction with the deans and the center for the development of entrepreneurship, career and business.

In order to effectively distribute graduates and provide information to all stakeholders in order to improve career guidance, an annual tradition has been the distribution of young professionals. The graduates are assigned a large amount of organizational work each year: organizing and conducting graduates meetings with potential employers, preparing graduates .

In S.Seifullin KATU distribution of graduates in order to meet the needs of the labor market in personnel and facilitate the employment of graduates of the university.

The distribution of bachelors who have studied in the framework of the rural quota by specialties: 5B120100 - "Veterinary Medicine", 5B120200 - "Veterinary Sanitation", in the specialty 5B012000 - "Professional education" within the framework of the rural quota and within the framework of state educational grants.

As well as the distribution of PhDgraduates who studied on the basis of the state educational order.

Cooperation of S.Seifullin KATU with practice bases promotes marketing of the regional labor market and, as a result, expanding the circle of potential employers. The results of the survey of representatives of sectoral institutions indicate a high demand for graduates. According to the majority of respondents, the benefits of specialists who graduated from S.Seifullin Kazakh Agrotechnical University, is a good theoretical preparation, the ability to carry out research research and the ability to apply this knowledge in practice. This is the basis of the growing demand for graduates of S.Seifullin KATU regional labor market. During the reporting period, the share of graduates employed by the profile of the received specialty was on average of 80% in undergraduate specialties.

In the university is leading monitors the further professional growth of our graduates: in all deans have computer databases of graduates of the past three years.

Trainees, employees and teaching staff confirm document their consent to the processing of personal data.

In order to regulate the procedure for carrying out transactions with personal data of employees, establishing the rights and obligations of employees of S.Seifullin KATU, in terms of working with personal data approved the Regulation on the protection of personal data of employees of S.Seifullin KATU.

In hiring, employees confirm their consent to the collection and processing of personal data (the consent form is attached).

## **5 DEVELOPMENT AND APPROVAL OF THE EDUCATIONAL PROGRAM**

The educational programs at the University are developed on the basis of the National Qualifications Framework, professional standards, and are coordinated with the Dublin descriptors and the European Qualifications Framework. The main regulatory documents for the development of the educational program of specialties of a higher education institution are the Law “On Education” with additions and changes, the State Educational Standard of Higher Education, approved by the order of the MES of RK dated August 23, 2012 No. 1080, and order of the MES of RK dated June 2, 2014. №198 "On amendments and additions to the order of the Minister of Education and Science of the Republic of Kazakhstan dated April 20, 2011 № 152 and " On approval of the rules for organizing the educational process on credit technology of education ", perpetual license dated 02.07.2008 issued by the Control Committee in the field of Education and Science of the Republic of Kazakhstan (series AB 0062189), model curricula and catalog of elective disciplines (CED).

Before the beginning of the development of EP, an analysis of the needs and requirements for the professional competence of the future specialist from the business community, production by questioning employers is carried out. In the future, together with interested employers with the participation of faculty members of departments of the university in the direction of training specialists are formed CED, disciplinary forms indicating the acquired skills and competencies of students after completing the courses. After the formation of CED, is sent for review to independent external experts (leading production specialists, institutions, departments, business communities, SPE, foreign specialists).

Subsequently, taking into account the proposal of reviewers is formed EP. Based on the SC specialty and CED with the participation of advisors and all students participate in the formation of individual curricula (ISP). 65-80. 81-96. 97-112. 113-128.

The analysis of the quality of educational programs is carried out on the basis of the results of professional practices of students, state certification of graduates. External experts represented by the chairmen of the state certification Commission, reviewers of final works are involved in the evaluation of the quality of programs. It is carried out through annual participation in the ratings of the IAAR and the PPA, SPEAtameken, questioning of graduates after completion of training, interested employers, who are

registered in the «Regulations on the mechanism and criteria for systematic assessment of the competence of teachers, evaluation of the quality of teaching».

The basis for the development of EP is proposals related to innovations occurring in the internal and external labor markets and the needs of the business community.

The EP is revised at the proposal of the business community, employers, and SPE once at the end of the school year by introducing new courses in the CED. The basis for an unscheduled revision of the EP is the changes occurring in society, in production, associated with the adoption of the Strategic programs for the development of economic sectors.

For example, As part of the SPIID-2, an educational program in the specialty 6M072700 - “Technology of food products” was developed in collaboration with leading scientists from the University of California at Davis (UCDavis, USA), professors NealVanAlfen, YubangLee and CharlesFieldShoemaker.

Peculiarity of this program is the schedule of the educational process, which is divided into cycles with a duration of 3 weeks, which provides an interdisciplinary approach to studying courses. Amendments and adjustments were made to the name, as well as the goals and objectives of the direction of specialist training in the Modular Educational Program "Advanced Food Production Technologies" in the specialty 6M072700 - "Food Products Technology":

The program includes new disciplines reflecting innovative production technologies, such as:

- Modern technologies of production of dairy products;
- Chemistry and biochemistry of food products;
- Microbiological bases of food and biotechnological production;
- Biochemical processes in the production of dairy products;
- Food safety: inspection, sanitation and HASR;
- Business planning in food enterprises.

The first semester includes such disciplines as “Chemistry and biochemistry of food products”, “Microbiological bases of food and biotechnological production” necessary for understanding the basic processes occurring in raw materials under the influence of various factors, and in the second semester - disciplines focused on the technology of deep processing and food production.

In the schedule of the educational process, the cyclical nature of training has reduced the period of the summer examination session, due to which the period of internship has been increased by 3 weeks.

Taking into account the wishes and recommendations of managers and key specialists of enterprises, the following graduate specialist competencies were formed:  
Graduate - specialist:

- should have theoretical knowledge in the field of raw materials processing and food production, as well as basic knowledge of organic chemistry, biochemistry, microbiology and special disciplines;

- must know the physico-chemical, microbiological methods of analysis of raw materials, semi-finished products and finished products on modern devices and decipher the computer analysis results;

- should be able to organize work in a team, develop a recipe, maintain a software control equipment, be disciplined, responsible, initiative, competent, purposeful, trained, sociable specialist. Know professional terms in 3 languages. Knowledge of modern foreign automated technologies will allow the undergraduate (specialist) to successfully perform his official duties.

The purpose of educational programs is based on the needs of the labor market by qualified professionals who meet the requirements of employers. In order to match the developed educational programs with the established goals, the Modular Educational Programs (MEP) is formed at the higher educational institution, where the learning outcomes are formed for each module and a separate discipline. The main objectives of EP are the formation of basic professional competencies of future specialists, the creation of prerequisites for independent research and development activities in the framework of the experiment at all its stages, the ability to work with scientific and technical information, use domestic and foreign experience in professional activities, systematize and generalize the results information.

To make a decision on its results have established committees on curriculum and training programs for each specialty, this included department chairs, advisors and experienced teachers.

The objectives of the educational program are reviewed taking into account the needs of society, the economy and the labor market, international experience.

For example, jointly with «NC «KTZH» JSC «TRANSTELECOM»» and the Main Computer Center developed an EP, the purpose of which was the discovery of the IT security engineer demanded in the information technology market.

The objectives of the program were achieved by introducing various elective disciplines that reflect the specificity of the program. The MEP includes new disciplines such as: “Information Security Management”, “Service and Protection of Network

Technologies”, “Information Systems in Corporate Companies”. At practical classes, the method of dual training is used, using modern IT technologies and equipment of JSC "NC" KTZh ".

Modular educational programs are created on the basis of the competence-based approach, the modular structure of the construction of educational programs and the credit content of the disciplines and the calculation of the teaching load of students.

In the process of designing educational programs of students, the following organizational and methodical work is carried out:

- study the needs of the regional (or national) labor market;
- determining the competencies of future graduates with the participation of employers;
- the formation of modules (groups of related or related academic disciplines) and their logical construction;
- credit filling disciplines and modules of educational programs;
- methodological support of all types of educational activities of students in the development of educational programs;
- systematic monitoring of students' knowledge and skills;
- adjustment of the content and structure of educational programs based on the results of monitoring students' knowledge.

The graduate model is a system of personal qualities of a specialist - a graduate of a higher educational institution, this is the goal, an ideal representation of the result of the activity of the educational system.

In accordance with the National Qualifications Framework (NQF), the graduate bachelor has 6 qualification levels, the graduate magistracy has 7 qualification levels, and the graduate of the doctoral studies has 8 qualification levels.

On the basis of the NQF, to ensure intersectional comparability of qualifications and to confirm compliance and assignment of qualifications to specialists, as well as a more detailed description of the results, the sectoral qualifications framework (SQF) and professional standards describing the qualifications of workers and graduates have been developed. Based on NQF, NQF, professional standards and Dublin descriptors at the university developed a model of the graduate.

The learning outcomes of the undergraduate educational programs are determined on the basis of the Dublin first level descriptors in the form of competencies, the results of the master program are based on the Dublin second level descriptors, and the doctoral studies - the third level.

Level I descriptors assume abilities:

- 1) demonstrate knowledge and understanding in the studied area, including elements of the most advanced knowledge in this area;
- 2) apply this knowledge and understanding at a professional level;
- 3) formulate arguments and solve problems in the studied area;
- 4) to collect and interpret information to form judgments taking into account social, ethical and scientific considerations;
- 5) communicate information, ideas, problems and solutions, both to specialists and non-specialists.

According to the SMES of 2012 and 2016 The general competencies of the graduate bachelor are formed on the basis of the requirements for general education, socio-ethical competences, economic and organizational and managerial competencies, and special competencies. Professional competencies are developed for each specialty of higher education on the basis of professional standards, taking into account the requirements of employers and the social needs of society.

Second level descriptors assume abilities:

- 1) demonstrate developmental knowledge and understanding obtained at the higher education level, which are the basis or opportunity for the original development or application of ideas, often in the context of scientific research;
- 2) to apply knowledge, understanding and ability to solve problems in new or unfamiliar situations in contexts and frameworks of broader (or interdisciplinary) areas related to the studied area;
- 3) integrate knowledge, cope with difficulties and make judgments based on incomplete or limited information, taking into account ethical and social responsibility for the application of these judgments and knowledge;
- 4) clearly and clearly communicate their findings and knowledge and their justification to specialists and non-specialists;
- 5) continue learning by yourself.

Level 3 handles suggest abilities:

- 1) demonstrate a systematic understanding of the field of study, skills in terms of skills and research methods used in this field;
- 2) to plan, develop, implement and adjust the complex process of scientific research;
- 3) to contribute by own original research to the expansion of the boundaries of the scientific field, which may deserve publication at the national or international level;
- 4) critically analyze, evaluate and synthesize new and complex ideas;

5) communicate their knowledge and achievements to colleagues, the scientific community and the general public;

6) to promote the development of a society based on knowledge.

All modular educational programs include the section “Learning outcomes and key competencies”, which describes the developed model of the graduate of the EP, learning outcomes and personal qualities.

The results of training in the specialty as a whole are determined by the committees for the modular educational programs of the faculties as part of the dean and head of the department, as well as with the participation of employers and advisors in this specialty. During round tables and meetings with employers, key professional competencies and requirements for graduates in production were discussed. The results of training in major disciplines are refined and specified at the graduating departments, and the results of training in general education and basic disciplines - together with the department responsible for the teaching of these disciplines.

The graduate model is verified and validated in the process of final state certification (protection of convex works, passing state examinations), in the process of questioning employers to assess graduates, in the form of feedback from the general public and the graduates themselves in the media.

The university conducts a mandatory external examination of the EP. The university provides the developed EP to employers, directly from the field of direction.

The university management appeals to the regional akimats of the regions, according to the conditions (climate, etc.) of which the specialist is trained, to assist in monitoring enterprises and households that need training of specialists in the developed EP, with the aim of participating enterprise managers in conducting the examination. The experts are specialists from the educational environment and production, including employers.

For example, in the specialty 6M080100 - “Agronomy”, in the period from 7 to 28 June 2016, EP developed under the SPIID were examined by the executive director of the “Coalition for Green Economy and Development G-global” A.Suleimenov, chief agronomist of AO Akmola Phoenix "D.Pluzhnik, Director of the Greenhouse Complex of «Astana Eco Standard» LLP ZH.E. Dosmaganbetov, Director of «Agrochemsupply» LLP of Esil District, NKR Shkodin V.V., Director of LLP «Zhuravlevka-1» Sultanov K.S., Director of the Greenhouse Farm "Kuzmich" Gritsenko V.V., LLP "Logos Grain" Kovaleva L.F., Director of LLP "Topar greenhouses "Mursalimov S.B. and etc.

In 2017, NLA Atameken ranked among universities in Kazakhstan in the specialty Information Systems. The main criteria for the assessment of EP were: availability of



examinations of EP by employers, the content of EP, investments from the university in the specialty, employment of graduates. Specialty "Information Systems" S.Seifullin KATU took 16th place among 66 universities in Kazakhstan. The EP "Information Systems" passed the examination in IT companies such as Expert LLP, SmartSoftKazakhstan LLP.

In all the developed modular educational programs of the university, the section “Qualification Characteristics” is included, which clearly describes the qualifications obtained upon completion of the EP. This section consists of the following items:

- Spheres of professional activity;
- The objects of professional activity;
- The subject of professional activity;
- Areas of professional activity.

Thus, in the EP, the qualification obtained after its completion is quite detailed and clarified.

All modular educational programs of the university are developed in accordance with the European, National and sectoral qualifications frameworks, as well as professional standards. Undergraduate programs correspond to the 6th qualification level of the Industry Qualifications Framework (IQF); graduate programs - level 7 of IQF; Doctoral studies - 8th level IQF.

According to the Register of Professional Standards, professional standards are approved in 14 specialties of the university, respectively, the MEP of these specialties are developed on the basis of professional standards (Table 4).

Table 4 - These specialties

№	Name of the specialty and educational programs	Name of professional standard (by whom and when approved)
1	5B080100 - Agronomy; Agrotechnology; Selection and seed production; Crop production	"Standard in the activities of agronomy and agro-chemistry", approved by the Order of the Minister of Agriculture of the Republic of Kazakhstan dated January 21, 2014 № 20/56.
2	5B080800 - Soil and agrochemistry; Agrology; Agrochemistry	“Standard in crop production”, approved by the Order of the Minister of Agriculture of the Republic of Kazakhstan dated January 21, 2014 №. 20/52.
3	5B081100 - Plant protection and	" Standard in the activities of plant protection

	quarantine; Phytopsanitary security; Phytopsanitary optimization	and quarantine", approved by the Order of the Minister of Agriculture of the Republic of Kazakhstan dated January 21, 2014 № 20/56.
4	5B120100 - Veterinary medicine; Non-contagious animal diseases; Infectious Diseases of Farm Animals	"Standard in the activities of Veterinary Medicine", approved by order of the Minister of Agriculture of the Republic of Kazakhstan dated January 21, 2014 №. 20/39.
5	5B120200 -Veterinary sanitation; Veterinary and sanitary examination of livestock products; Veterinary and sanitary inspection and control	"Standard in the activities of veterinary sanitation", approved by the Order of the Minister of Agriculture of the Republic of Kazakhstan dated 21.01.2014, number 20/37.
6	5B081200 - Energy supply for agriculture; Energy saving and renewable energy sources; Electrotechnology and electrical equipment in agriculture	"The standard in the activities of energy supply of agriculture", approved by the Order of the Minister of Agriculture of the Republic of Kazakhstan dated January 21, 2014, № 20/41.
7	5B080600 - Agrarian equipment and technology; Technical support of agricultural production processes, Technical service in agriculture	Professional standard in the field of mechanization in agriculture, approved by the Order of the Minister of Agriculture of the Republic of Kazakhstan dated January 21, 2014 №. 20/50.
8	5B071800 - Electric power industry; Power supply; Energy management and energy audit	Professional standard "General professions of electrical production". Order Acting Minister of Industry and New Technologies of the Republic of Kazakhstan of December 30, 2013 №468.
9	5B071100 - Geodesy and cartography; Applied Geodesy; Aerial photogeodesy.	Professional standard "Geodesy and Cartography", approved by the Order of the Minister of National Economy of the Republic of Kazakhstan dated March 16, 2015 №208.
10	5B072800 - Technology of processing industries, Technology of storage and processing of grain	Professional standard in the bakery-pasta production activity, approved by the Order of the Minister of Agriculture of the Republic of

		Kazakhstan dated January 21, 2014 №20/45.
11	5B090100 - Organization of transportation, traffic and transport operation; Traffic organization; Organization of transport by road	Professional standard "Control of the transportation process in road transport", approved by the Order of the Acting Minister of Investment and Development of the Republic of Kazakhstan №314 dated December 26, 2014.
12	5B071300-Transport, transport equipment and technology; Cars and car industry; Road and agricultural transport	Professional standard "Installation and testing of the car", approved by the Order of the Minister for Investment and Development of the Republic of Kazakhstan dated December 30, 2014 №340.  Professional standard "Organization of technical operation of vehicles", Prof. standard "Technical operation of special and specialized vehicles", professional standard "Repair and maintenance of vehicles", approved by the Order of Acting. The Minister for Investment and Development of the Republic of Kazakhstan dated December 26, 2014, № 311; No. 312; №315.
13	5B090300 - Land Management; Territory organization; Land Management	The professional standard “Land Management” was approved by the Order of the Minister of National Economy of the Republic of Kazakhstan dated December 15, 2015 № 7695.
14	5B090700 - Inventory; Land cadastre and real estate valuation; Cadastre of natural resources	The professional standard “Cadastre” was approved by the Order of the Minister of National Economy of the Republic of Kazakhstan dated December 15, 2015 №7695.

Thus, the qualifications described in the EP correspond to a certain level of the National Qualifications System (NSQ).

According to the State Mandatory Standard Postgraduate education, approved by the Government of the Republic of Kazakhstan № 1080 of August 23, 2012, those who have mastered the educational programs of the magistracy and have publicly defended a master's thesis or master's project, are awarded the degree of “master” in the relevant specialty with a standard term of at least 1-2 years. Persons who have completed training in the educational program of the magistracy are awarded the degree of “master” in the relevant specialty and are issued a state diploma with an application (transcript).

Persons who have mastered the educational program of postgraduate doctoral education and have defended a doctoral dissertation, are awarded the degree of PhD or doctor in a profile with a standard term of study of at least three years. A positive decision of the Committee for Control of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan according to the results of the examination, persons who have fully completed the doctoral educational program and successfully defended their doctoral dissertation, awarded the degree of "PhD)" or doctor in the profile and state diploma with an application (transcript) is issued.

The names and contents of the disciplines offered for inclusion in CED correspond to the actual directions of development of the studied field of science and society. The quality of the elective disciplines offered for the study is ensured by a systematic audit of educational and methodological complexes conducted by the university's quality management service and members of the educational and methodical commission of the faculty.

Academic consultants (advisors) will acquaint students with the list and content of the disciplines. Each year, updated CED for each specialty are approved and published, which can be found in the library and in the departments. Students can familiarize themselves with the description of elective disciplines during the first stage of registration - the formation of an individual curriculum on the Registrar's Office page in INTRANET.

The scientific level of educational programs is provided by the inclusion in the elective courses of scientific research and the latest achievements of university scientists in the field of biotechnology, veterinary medicine, agronomy, agroengineering, energy-saving technologies, etc.

With the list of disciplines offered for study, the student can get acquainted at the department on orientation week. The adviser on a specialty advises the student on all questions of a choice of disciplines and a learning trajectory. The content of the disciplines is reflected in the syllabus, which the student receives from the teacher.

Professional competencies of graduates are formed in the process of mastering major subjects. Thus, in the educational program “Vocational education”, in the course of studying the module “Organization and management of vocational education”, students learn to use techniques, methods and means of training and education taking into account individual personality traits, acquire practical skills in working with methods of pedagogical and psychological research, master techniques resolving psychological, pedagogical conflict situations, methods of psychological influence and psychological help, etc.

Professional practice influences the formation of graduates' professional competencies. For example, in the educational program “Accounting and Auditing” professional practice is highlighted in a separate module, as a result of which students have such competencies as the ability to analyze the state of financial accounting, form documents for accounting sections, draw conclusions about the accounting status for all divisions of the accounting service. etc.

For each educational program, the forms of the modules are developed, in which the disciplines included in the modules are indicated in the tabular form, and the results of their training, thereby determining the contribution of these disciplines to the formation of the module’s learning results. In addition, the competences in accordance with the Dublin descriptors and learning outcomes that are formed in students as a result of the development of each module are listed.

In all working curricula and syllabus, the item “Learning outcomes” is provided. The learning outcomes are formulated by teachers, leading these disciplines, in the form of competencies in accordance with the Dublin descriptors.

The university annually conducts EEEA students and plans to prepare students for professional certification.

Since 2015, S. Seifullin KATU, one of 10 higher educational institutions of the republic, has trained specialists for the sectors of the State program of industrial-innovative development for 2015-2019 (SPIID-2).

Since 2015, undergraduates are trained in 2 specialties: 6M072400 - Technological machines and equipment, 6M072700 - Technology of food products, since 2016, another 2 specialties have been added: 6M080100 - Agronomy, 6M080200 - Technology of production of livestock products. undergraduates enrolled in 7 specialties, such as: 6M070100 - “Biotechnology”, 6M070300 - “Information Systems”, 6M071300 - “Transport, Transport Equipment and Technologies”, 6M071700 - “Thermal Engineering,” 6M071900 - “Radio Engineering, Electronics and Telecommunications », 6M080600 - «

Agrarian equipment and technology », 6M080800 -" Soil Science and Agricultural Chemistry. " The training of specialists is carried out in accordance with the regulatory documents of postgraduate education, as well as the State Program of Industrial-Innovative Development of the Republic of Kazakhstan for 2015-2019, approved by the Decree of the President of the Republic of Kazakhstan dated 1.08.2014, № 874.

New educational programs have been developed for magistracy within the framework of (SPIID-2). together with professors from UC Davis in the areas of training: in the specialty 6M072400 - Technological machines and equipment, 1 educational program has been developed, in the specialty 6M072700 - Technology of food products - in 3 directions; 6M080100 - Agronomy - in 3 directions; 6M080200 - Technology of production of livestock products, in 3 directions. Taking into account the study of foreign experience and recommendations of managers and key specialists of enterprises, the competences of a graduate specialist were formed. In 2017, for newly recruited undergraduates in 8 specialties (6M070100 - "Biotechnology", 6M070300 - "Information Systems", 6M071300 - "Transport, transport equipment and technologies", 6M071700 - "Thermal Power Engineering", 6M071800 - Power Engineering 6M071900 - "Radio Engineering, Electronics and Telecommunications ", 6M080600 -" Agrarian Equipment and Technologies ", 6M080800 -" Soil Science and Agrochemistry ") developed educational programs taking into account the experience of universities of Kazakhstan, developed within the framework of GPIID-2 in training areas, which, in turn, take into account recommendations Employers with production.

The recalculation of Kazakhstan credits into ECTS credits and back is carried out on the basis of conversion factors, by dividing ECTS credits by conversion factor depending on the amount of 1 ECTS credit for each discipline in the range from 1.5 to 1.8. In this case, loans are formed in whole units.

At S.Seifullin KATU, the transfer from Kazakhstan credits to ECTS credits and vice versa is carried out in accordance with the "Rules for the organization of the educational process on credit technology of education" (№ 152, 2011.04.20), item №. 4. "Kazakhstan credit transfer system by type ECTS".

The university approved the Regulation "On the organization of internal academic mobility of students at the Kazakh Agrotechnical University. S.Seifullin ( POIAME QMS 02.2042-2017) which is described in p. № 7" Procedure for reading disciplines from a transcript "on internal academic mobility (The final document confirming the training of the student under the mobility program is a transcript of training, which is filled in , Russian and English in the form according to Annex 5 of the transcript

about the training, information is entered on the program of study (code of the discipline), name of the discipline, duration of study of the discipline (year, semester, trimester), grade for training (At the national scale and scale ECTS), the number of credits awarded by the Republic of Kazakhstan (ECTS)).

Transfer of discipline credits from students of external academic mobility is described in the provision "On the organization of external academic mobility of students in the Kazakh Agrotechnical University. S.Seifullin "( POIAME QMS 11010.98 - 2014), in paragraph number 9" the procedure for transferring credits by type ECTS ".

The university conducted a large organizational and methodological work, the directions and sequence of which can be identified as follows:

- study the needs of the regional (or national) labor market;
- determining the competencies of future graduates with the participation of employers;
- the formation of modules (groups of related or related academic disciplines) and their logical construction;
- credit filling disciplines and modules of educational programs;
- methodological support of all types of educational activities of students in the development of educational programs;
- systematic monitoring of students' knowledge and skills;
- adjustment of the content and structure of educational programs based on the results of monitoring students' knowledge.

The work on the design and approval of educational programs is carried out with the participation of employers and in accordance with the Rules of the organization of the educational process on credit technology of education (order of the MES of RK №. 152 of April 20, 2011) in several stages. At the first stage, the Regulations on the activities of the curriculum and curriculum committees were developed, which set out the basic principles and mechanisms for the development of educational programs, described the algorithm for the formation of educational programs, as well as the methodological content of the modules; training seminars on the development of educational programs were held; by order of the university, curriculum committees for each specialty were created for the development of modular educational programs, including heads of departments, advisors and experienced teachers.

At the next stage, faculty internships at industry enterprises were organized to determine the specializations and professional competencies of graduates; faculty meetings with employers, during which general, professional and additional competencies of

graduates in each specialty are identified, lists of elective disciplines and individual courses relevant for production, topics with a view to including them in CED, WC and syllabuses; student meetings with employers in order to identify gaps in the professional knowledge of students at senior courses. To eliminate the gaps, changes were introduced in the content of the main disciplines and in the CED, as well as the analysis of WC and CED to exclude obsolete and unclaimed disciplines.

At the third stage, taking into account the remarks and suggestions of employers, the curriculum committees formed modules (groups of disciplines, practices) that form these competencies, and then modular educational programs; The expertise of WC and CED was conducted by employers of the agricultural sector and representatives of the subordinate structures of the Ministry of Agriculture of the Republic of Kazakhstan to take into account the needs of the labor market and the proposals of employers.

At the fourth stage of the formation of modular educational programs, the content of modules of educational programs was developed and the methodological content of each module was tested. The process of developing educational programs includes:

- development of educational-methodical complexes of disciplines by the departments;
- development of CED by curriculum committees, heads of graduating departments with the participation of advisors;
- development of the academic calendar and schedule of the educational process by the office of the registrar;
- the formation of students under the guidance of the advisers of their educational programs;
- development of the working curriculum of the specialty by deans.

Modular educational programs for undergraduate specialties are coordinated with the chairperson of the methodical commission of the faculty, the dean of the faculty, the head of the department of educational and methodological support, the head of the EP, director of the Department of Academic Affairs. In the specialties of graduate and doctoral studies, modular educational programs are coordinated with the head of the department of postgraduate education. MEP at all levels of education are reviewed at a meeting of the University Academic Council and approved by the Chairman of the Board.

The content of educational programs for undergraduate, graduate and doctoral studies is based on the principles of continuity and continuity with previous levels of education. The content of the programs ensures the completeness of each educational stage and gives the opportunity to interrupt education to move into the sphere of professional



activity, or to continue education. The goals, objectives, content, methods, technologies, tools and forms of organization of education at all three levels of education are coordinated among themselves.

Educational programs were analyzed for duplication of the content of individual disciplines. Based on the objectives of the educational program, the content of the disciplines at each level deepened taking into account the achievements of science and technology in the relevant industry.

Compliance of the required disciplines content with the level of the bachelor degree and the proposed learning outcomes is ensured through the content of the model curricula approved by the MES RK. The content of elective courses on the cycle of majors reflects the directions of scientific research and scientific schools of the university. Most elective courses are educational material that complements the required disciplines and help to ensure the multidisciplinary nature of education in several related specialties.

The elective courses offered for study are presented in the form of certain natural trajectories with indication of previous disciplines, prerequisites, the possession of the tools are necessary for understanding the following, as well as indicating the post requisites. Work programs and syllabuses are annually discussed at the meetings of the departments, methodical commissions of faculties, revised and supplemented with account of the achievements of science and practice, new requirements for the training of specialists. Thus, the content of elective disciplines corresponds to the level of training and the proposed learning outcomes.

In all educational programs of the university, in accordance with the SES, key competencies of graduates of a specific field of activity are formed. The list of general educational disciplines offered in CED is aimed at training an intellectual, personal and socially developed specialist. The cycle of basic disciplines is aimed at forming the future specialist with a fundamental knowledge of the relevant specialty. The cycle of the main disciplines determines the list of special knowledge, skills, abilities and competencies in relation to a particular field of professional activity.

Elective courses in the cycle of specialized disciplines for individual specialties give students the opportunity to master the educational program, both the main specialty and the program of specialization (additional, close and related to the main). This allows students to develop professional competencies based on their personal characteristics.

All the activities of the educational process: training sessions, intermediate, final state certification, practice during the school year - aimed at achieving learning outcomes. Theoretical training is supported by the internship of students. Depending on the profile of

training, educational, technological, educational, industrial, clinical, pedagogical, research, pre-diploma practices are conducted.

Personal characteristics of students, including features of perception of information, are taken into account in their choice of learning paths. Individual educational paths of students are reflected in the individual curriculum (IEP), which determines the content and sequence of studying the disciplines of the required component and the component of choice during the entire training of each student. IEP are formed under the guidance of advisors on the basis of the standard curriculum of specialties and the Catalog of elective disciplines specialties (CED).

For the students in the magistracy in the specialty 6M050700 - "Management", specialization "Agricultural Management" JSC " S.Seifullin KATU " with the University of Applied Sciences Weihenstephan (Germany) joint educational programs were developed. In 2016, the Master course "Agricultural Management" in the framework of international cooperation with the University of Applied Sciences Weihenstephan-Triesdorf (Germany) successfully passed the procedure of international accreditation. The experts of the accreditation agency AQQIN highly appreciated the quality of education and the level of material equipment of S. Seifullin KATU, as well as the compliance of the conditions for the implementation of this educational program with the requirements of the German Ministry of Education.

In the specialty of Master 6M050100 - "Economics" according to the SARUD project "Sustainable Development of Agriculture and Rural Areas" (EU Erasmus +) since 2017, joint educational programs are being developed. The goal of the SARUD project itself is to develop a relevant, attractive for students, adapted to the conditions of Kazakhstan, a master's program in rural development. The project coordinator is the University of Hohenheim - one of the world's leading agrarian universities.

In 2014, an Agreement was signed with the University of Milan on joint training of undergraduates in the specialty 6M070300- "Information Systems". The University of Milan is considered as one of the most prestigious educational institutions in Italy and is among the top five universities in the country, and the university is recognized as one of the best universities in terms of quality education and is among the top 200 in the world rankings for this criterion. In 2018, on June 12, 4 undergraduates defended their theses, the completion of the double degree program significantly increased the opportunities of these undergraduates in employment after graduating from S.Seifullin KATU and Milan University, providing them with better job opportunities and career prospects, as in

Kazakhstan, and abroad. Upon completion of the training receiving diplomas from two universities: JSC S.SeifullinKATU and the University of Milan is planned.

## **6 CONSTANT MONITORING AND PERIODIC ASSESSMENT OF THE EDUCATIONAL PROGRAMS**

To assess the quality of educational services, the university constantly monitors and evaluates educational programs through internal and external audits, external evaluations of students' educational achievements. The main objective of monitoring is to assess the level of student's satisfaction with the learning outcomes.

Achievement of goals within the framework of the EP is monitored by the internal control system at 4 levels:

1. At the level of students, in the form of a questionnaire "A teacher through the eyes of a student" (2 times a year, at the end of each academic period). The questionnaires are updated to reflect the changes in the methods and technology of providing educational services and the needs of employers and students. The results of the survey are analyzed and discussed at meetings of departments, councils of faculties and the Academic Council of the University and together with the structural units of the University, an action plan is developed to meet the needs of consumers and faculty.

2. At the level of the faculty the implementation of the EP to identify the needs of students with an educational-methodical complex of courses of disciplines, methods and technology for conducting classes, assessing the current, mid-term and final control upon completion of courses, students are involved and surveyed. The results of the survey are analyzed and taking into account the suggestions of students, changes to improve the EP are made.

3. At the level of graduating departments implementing of EP, monitoring and evaluation is carried out by conducting demonstration, open classes, mutual attendances, seminars, conferences, round tables, department meetings based on the results of intermediate and final controls of students.

4. At the level of faculties and universities, monitoring and evaluation of EP is carried out by analyzing the intermediate, final controls of students and discussion at the methodological and academic council. Based on the discussion, a decision is made to improve the EP.

The student's progress is determined according to the Rules of the organization of the educational process on the credit technology of education on the results of the development of credit disciplines, reflected in the transcript in the form of points corresponding to the digital equivalent of a four-point system, and the GPA.

Information about the educational achievements of students is stored and processed in the AIS "Platonus" and the students are ranked according to GPA scores.

Personal growth and development of the student in the process of the development of EP is monitored by the results of intermediate and final controls, in the form of test tasks, oral and written surveys. The results are recorded in the electronic log of grades, which are reflected in the student's personal account.

Upon completion of the development of the educational program, the learner confirms the knowledge gained by passing a comprehensive exam, defense of final works (thesis / project, master's thesis / project, doctoral dissertation).

To ensure the quality of graduates at all levels of education, the university has a system of checking on graduation papers for borrowing (plagiarism).

EP is constantly improved. For example, in the 2017-2018 academic year, the unification of basic and major undergraduate disciplines by university specialties groups was carried out. Based on this, developed and unified CED in all areas of training.

Monitoring and evaluation of EP at the university is carried out at each stage of the provision of educational services by the relevant departments of the university (graduating departments, methodical commission of faculties, methodical council of the university, academic committee, academic council of the university).

Updating the content of EP in the light of the achievements of science in a particular discipline to ensure the relevance of the discipline being taught. For example, the topics are introduced in the discipline courses for the students to study the results of completed research projects conducted by the university teachers, research institutions, departments of the republic, and foreign countries in relation to the socio-economic conditions of the region. In connection with the development of a new promising direction of biological farming in the world, the study program in the specialty "Agronomy" a new course in the discipline "Organic farming" has been introduced.

Updating the content of the EP specialties in the light of changing needs of society and the professional environment. For example, changes to the MEP for general education courses to study Rukhani Zhangyru Program, to the cycle of majors for all undergraduate specialties in the course "Economics of Enterprises and Entrepreneurship" were made. Taking into account the need for IT security specialists, changes to the EP of the specialty 6M070300-Information Systems and a modular educational program "IT Security Engineer" were made and developed;

Monitoring and assessment of students' workload is carried out to ensure compliance with the number of credits allocated for the study of the course of disciplines, the ratio of

theoretical and practical component, the correspondence of the volume of studied credits in ECTS during the internal and external academic mobility of students. Assessment of progress is carried out after each academic period of study to identify the completeness of the disciplines courses, professional practices in the EP. The analysis of graduation is carried out in order to determine the number of graduates from the number of registered students at the beginning of the course in order to identify the relevance of the EP in the labor market.

Monitoring and evaluation of the effectiveness of assessment procedures is carried out to determine the full coverage of knowledge throughout the course of disciplines, identify motivation and incentives for students to master the course program.

Expectations, needs and satisfaction of the training with the training are conducted using the graduate questionnaire after the completion of the final attestation. Analysis of the results of the survey is used to improve the EP.

Monitoring and evaluation of the educational environment is conducted annually to update the material and technical base, teaching and methodological support and compliance with its modern technologies and methods of providing educational services. The assessment of the EP support service is carried out to identify the timeliness of the fulfillment of orders for upgrading the material and technical base, repairing the classroom fund, purchasing educational materials, and accessing Internet resources.

Representatives of business structures, institutions, departments, research institutes (A.Barayev LLP NPC, Agrofirma Rodina LLP, Fenix LLP, etc., NPP Atameken, Ministry of Agriculture of the Republic of Kazakhstan) are involved in the development and revision of the EP, the stage of formation of the competence of graduates, catalogs of elective disciplines (CED).

The list of stakeholders, representatives and role in the revision is determined by the profile and specificity of the developed EP and the activity of employers and other stakeholders.

The list of interested persons includes students, parents, employers, faculty members of the university. Information on all changes made to the EP is published on the university website, discussed at the meeting of departments and methodological commissions of faculties and on the methodological council of the university. They are recorded in the minutes of the meeting.

The university has introduced a flexible response mechanism for educational programs to the needs of the labor market. Through continuous monitoring, the need for a program of certain specializations is identified. At the request of employers, new elective

courses are introduced into educational programs, which will undoubtedly be reflected in improving the competitiveness and competence of university graduates.

Educational programs are updated annually to reflect the development of the labor market, science, technology, economics, technology and the social sphere, adhering to the recommendations on quality assurance in the university, which are as follows: developing a strategy to ensure the quality of graduate training; monitoring, periodic review of educational programs; development of objective procedures for assessing the level of knowledge and skills of students, the competencies of graduates on the basis of clear agreed criteria; ensuring the quality and competence of teaching staff; providing sufficient resources for all ongoing educational programs, monitoring the effectiveness of their use, including by interviewing trainees; regular self-examination according to agreed criteria for evaluating one's activities and comparison with other educational institutions; informing the public about the results of its activities, plans, innovations.

For all specialties and cycles, a catalog of elective disciplines of all specialties is annually formed, which a systematic list of disciplines is chosen by students independently in any academic period to determine the trajectory of training and the formation of IEP.

Taking into account the policy documents of the Ministry of Education and Science of the Republic of Kazakhstan, the current state of science and technology and the decisions of the University Academic Council, the content of the university component of work curricula is annually revised and reaffirmed to ensure the quality of competitive graduates.

Leading experts of the Ministry of Agriculture of the Republic of Kazakhstan, enterprises and organizations, at the invitation of the departments, give lectures on modern technologies and equipment. Enterprises review the work programs of the elective disciplines, a number of which are submitted to technical council meetings. Enterprises provide equipment for practical training of students, organized at the enterprises of the internship of the faculty, as well as advanced training courses for employees of enterprises at the Institute for Advanced Studies at the university.

In developing educational programs, interests and requests of interested employers are taken into account. Forms and directions for taking into account the interests of employers are:

- conclusion of contracts for targeted training of specialists on the educational programs offered by employers;
- conclusion of contracts for conducting production practices;
- conclusion of contracts for the employment of graduates in enterprises;

- conducting a survey of employers and analyzing questionnaires, on the basis of which the departments make adjustments to the work programs of specialty disciplines, to the topics of special sections of diploma projects and course design, which ensures their reality and practical importance for the production.



## **7 STUDENT-CENTERED LEARNING, TEACHING AND EVALUATING EFFICIENCY**

The University actively implements student-centered learning processes in its educational programs that encourage students to take an active role in the joint construction of the educational process.

Student-centered learning plays an important role in increasing motivation, self-reflection and student involvement in the learning process, requires a balanced approach to the design and teaching of the educational program and the assessment of learning outcomes.

In order to implement the principles of student-centered learning, the university:

- shows respect and attention to different groups of students and their needs, providing them with flexible learning paths;

- use of various forms of teaching (where appropriate);

- flexible use of a variety of pedagogical methods;

- regular feedback on the techniques and methods used to assess and adjust pedagogical methods;

- support for the autonomy of the learner with simultaneous proper guidance and assistance from the teacher;

- work experience includes internships and other types of training program, which the student conducts outside the walls of the university to gain practical experience related to his training;

- strengthening the mutual respect of the teacher and the student;

- availability of appropriate procedures for responding to the students' complaints.

Given the importance of assessing student performance for their future careers, quality assurance procedures for assessment should consider the following:

- Evaluators should possess methods of testing and testing students' knowledge and improve their skills in this area;

- Criteria and assessment methods must be published in advance;

- Evaluation should demonstrate the level of achievement of the planned learning outcome by the student. The student should receive feedback and, if necessary, advice on the learning process;

- The exam should not be conducted by one examiner;

- Evaluation rules should include consideration of mitigating circumstances;

- Evaluation should be consistent, objective with the respect to all students and conducted in accordance with the established rules;

- There must be a formal appeal procedure.

In accordance with the academic policy of the university, students have the opportunity to determine the individual learning trajectory (approved academic policy). Assistance to students in the choice of disciplines and educational programs is provided by academic advisor services. The total number of advisors in all faculties and specialties is 328 teachers (among them: Doctor of Philosophy, Prof.-2, Doctor of Philosophy-2, Ph.D.-36, Ph.D.-70, PhD, Sen.Teach.-9, Assoc.-2, Mag., Sen.Teach. -18, Mag. Assistants-60, Sen.Teach.-77, Assistants-57). When analyzing the quantitative and qualitative composition of advisors, it was found out that, mainly, professors, associate professors, doctors and candidates of science, experienced teachers engaged in advisory activities for several years in a row, as well as young teachers.

The service functions of the advisor include:

- to assist students in timely professional orientation, in the choice of disciplines and teacher;

- to acquaint students with the working curriculum of the specialty,

- a guidebook with provisions on the credit system of education;

- to conduct group and individual consultations with the students in order to correctly draw up the students' individual curricula;

- to represent the academic interests of students at the university;

- to participate in the meetings of deans offices, where issues of academic progress of students are discussed;

- - to monitor the timely preparation of all educational and methodological documents required for training in this specialty.

- advisor is appointed by the order of the rector in coordination with the first vice-rector and the head of the department.

- advisor introduces students to the rules of the educational process for the credit system of education. Advisor provides assistance to students in timely vocational guidance, in the selection of academic disciplines and teachers:

- - identifies the needs and inclinations of students when choosing the trajectory of training in the relevant specialty;

- - introduces students to the standard curriculum of the specialty, the catalog of elective disciplines;

- - acquaints students with the method of forming the individual curriculum of the student (requirements for compilation, list of disciplines of an obligatory component and an optional component, prerequisites and post requisites of courses, number of credits, methods of their development);

- conducts group and individual consultations with students for the rational preparation of individual curricula for students, taking into account their individual abilities, growth prospects, the needs of society and production;

- provides advice on adjusting students' individual curricula;

- carries out the procedure for registering and re-registering students for disciplines, both on paper and in the automated system ("Platonus") of learning management.

- creates templates of individual curricula for students in Platonus during the entire period of study for the choice of educational trajectory by them;

- carries out a verification of the development of students of academic disciplines in the amount of these loans during the entire period of study at the university.

The main methodological innovations are associated with the use of interactive teaching methods. "Interactive learning" is learning using computer networks and Internet resources; the ability to interact or be in dialogue with something (for example, a computer) or someone (a person). In the educational process, business and role-playing games, problem lectures, binary lectures, research methods, case-method, educational and personal trainings, solving situational problems, brainstorming are actively used.

For example, the case method or Case-study is a method of analyzing specific situations, a method of active problem-situational analysis, in which learning by solving specific situations, is widely used by teachers of various specialties disciplines. For the disciplines of the specialty "Veterinary Medicine" to simulate situations as a case, you can use the list of the most common diseases of farm animals with elements of etiology and a set of symptoms detected during various diagnostic manipulations. The decision on the diagnosis, additional research and possible causes of the disease, students make out in the form of a project that is carried out in the process of interactive communication between students and the teacher. Teachers of disciplines of veterinary sanitation simulate situations related to the quality of food and the corresponding sanitary assessment of animal raw materials used for their preparation. Interesting imitation situations are created when studying the disciplines of hunting and fish farming. Here, as a "case" scenarios with the breeding of commercial fish, conservation and rational use of hunting grounds are used.

Binary lecture, practiced by the faculty of the University, is an excellent solution for teaching, when it is necessary to show the connection of the discipline with other sciences.

For example, when studying DNA (biological role, structure, chemical composition, structure, functions) it is logical to see a biologist and a chemist or a microbiologist and genetics in one audience. The choice of lecturers depends on the educational level and specialization of the university. Practicing the teaching method “lecture for two”, university lecturers invite leading specialists from industry to conduct classes.

The technology of role-playing and business games, applied by the faculty of the university, is one of the effective ways to form the communicative competence of graduates through the activation of training. The technology of developing critical thinking is aimed at acquiring a complex of skills and abilities: extracting necessary information, developing own opinions, logically building a chain of evidence, separating the important from the secondary, interpreting the information available, put forward new ideas and see new opportunities. (published collections of materials EMA).

CLIL (Content and Language Integrated Learning, or subject-language integrated learning) is used - a new direction of study, the essence of which is that students learn the program of standard disciplines in a foreign language in the classroom.

The CLIL program has two global goals, namely: a sufficient level of studying the subject's discipline through a foreign language, as well as in-depth study of a foreign language through the disciplines taught. Thanks to this approach, learning in one's mother tongue and the language under study constitutes one continuous process. In multilingual graduate and doctoral studies groups, 30% are taught in English.

There are mass open online courses (abbr. MOOC; Eng. Massive open online courses, MOOC) - training courses with massive interactive participation using e-learning technologies and open access via the Internet, one of the forms of distance education. As additions to traditional course materials, such as videos, reading and homework, mass open online courses provide an opportunity to use interactive user forums that help to create and maintain communities of students, teachers and assistants.

An inverted class (Flipped class) is a learning model in which the teacher provides material for self-study at home, and at the full-time lesson passes the practical consolidation of the material. ” Inverted learning is characterized by the use of vodcasts (podcasts), and podcasts (pre-vod casting).

At the Department of Vocational Education, a scientific-practical laboratory “Tulganyñ zamanauı psykholohıyalyk maseleleri” has been opened, named after the doctor of pedagogical sciences, professor B. Abdıkarym, as well as a research center for advanced training of specialists, designed to help in improving the level of organizational and methodological work at the university in accordance with the goals and development

strategy of the university, prospects and directions of development of higher professional education in the Republic of Kazakhstan.

On the basis of laboratory and center, teachers of the department conduct research in the field of methods of teaching academic disciplines, and provide methodological assistance to the teaching staff of the university. Research topic: "Theoretical and methodological foundations of the organization of the pedagogical process at Agrotechnical university in the context of transformation into a research university" (head of the Ph.D., senior lecturer Zh.K.Sagaliyev).

To assess students' satisfaction with the quality of the educational services annual students' survey is provided.

The results of recent surveys (date of delivery) showed that 99% of university students who took part in the survey are satisfied with the learning outcomes. One of the forms of feedback is the rector's blog, the graduate's blog on the university's website, and anonymous trust boxes have been set up at each department for complaints and suggestions from students.

During the implementation of the educational program, the university monitors the student's independent work, which is carried out through the current, intermediate and final controls. The basis for self-study is an appropriate scientific and theoretical course. Before starting work, students receive a special explanation for the implementation of self-study — requirements are determined, sources and manuals are indicated, the most rational method is recommended.

The adequacy of the assessment of students' knowledge is governed by the criteria for grading, specified in the educational and methodological complexes, reviewed at the meetings of the Methodological Council and approved by the Chairman of the University Board. These criteria are communicated to students.

During the period of study at the university, students have various kinds of complaints: both on the teaching and methodological support, and on the quality of teaching by teachers, and during the examination commission, etc. In accordance with the approved academic policy, the student has the right to file a complaint for the resolution of certain problems.

The procedure for the consideration of students' complaints is spelled out in the QMS 110010.02.-2013 "Regulations on the procedure for the consideration of students' complaints by university management" is carried out in accordance with the normative documentation of the University: SO QMS 4.5.01 "Management of the process of educational activities"; SO QMS 4.6.01 "Control of knowledge of undergraduates and

conducting final certification"; SO QMS 5.3.01 "Monitoring and evaluation of students' knowledge."

In order to ensure that every university student has access to regulatory information of state bodies, the university actively uses the library, the Internet, and the educational website of the university [www.kazatu.kz](http://www.kazatu.kz).

Objectivity and transparency of the assessment of knowledge in the current, midterm, final control is carried out, including using the module "Testing" in the AIS "Platonus". To work with this module throughout the faculty on the site in the AIS "Platonus" "Instructions for registration and placement of tests in the AIS Platonus" were posted. Data on the results of testing can be provided to interested parties at any time.

The university has approved and applied the standard of the organization "Control of knowledge and conducting final certification of students". According to this SE, students have the right to appeal within one day after the rating, final control. They write a statement of appeal (where they indicate the essence of the issues being appealed) in the Republic of Kazakhstan addressed to the Director, and the statement is considered by the subject committee of the department. The statement and the minutes of the meeting of the subject committee of the department are transmitted for taking appropriate measures.

For the period of the examination session, by order of the Chairman of the Board, an appeal commission is created from among the teachers whose qualifications correspond to the profile of the appealed disciplines.

The order for the appeal commission for the discipline "Modern History of Kazakhstan" for the appealing is formed in accordance with the paragraph 53 (order of the MES RK No. 125), for the appeal commission for undergraduate, graduate and doctoral studies according to paragraph 89 ((order of the MES RK No. 125).

In programs for each discipline, the teacher indicates the requirements and assessments for all types of control. In the "Academic Policy" document, the university-wide rules for assessing students' knowledge are indicated.

The final state certification is the final stage of the educational program of students and is carried out to determine their professional viability.

The results of the protection of SEC and SAC are reflected in the annual reports of the Chairmen of the commissions, which are discussed and approved at a meeting of the academic council of the university within a month.

One of the modern methods for assessing learning outcomes is the testing module in the AIS "Platonus". To work with this module throughout the faculty on the site in the AIS

"Platonus""Instructions for registration and placement of tests in the AIS Platonus" are posted. Data on the results of testing can be provided to interested parties at any time.

Also for the teaching staff "Instructions for completing the electronic journal of current performance in the AIS" Platonus " were published. The content of the Instruction changes as new procedures become available. The report on filling electronic journals with teachers is regularly filmed. Based on the reports, relevant decisions are made.

## 8 LEARNERS

The contingent of students of S.Seifullin Kazakh Agrotechnical University provides training in 36 undergraduate specialties, 31 graduate specialties and 23 PhD doctoral specialties. The list of specialties by level of education is listed in Appendices 6-9.

The contingent of students (table 5) for undergraduate, graduate and doctoral studies PhD amounted to 11,583 people at the beginning of the 2017-2018 school year, including:

- Bachelor students - 10313, of which 9684 full-time, 629 by correspondence courses 5690 study at the Kazakh department, including 5446 in full-time and 244 in correspondence courses. The number of students enrolled on the basis of the state educational grant amounted to 4681 (45.3% of the total number of students), including 2941 at the Kazakh department (62.8% of the total number of students enrolled in the educational grant). The number of foreign students was 130;

- 1270 students enrolled in postgraduate education, of which 1194 in master's programs, 76 in doctoral studies. 76 are enrolled in the state educational grant - 796, including in magistracy - 748, in doctoral studies - 48, which accounted for 62.7% of the total number of postgraduate education. Education in the specialties of graduate and doctoral PhD is carried out in full-time, in three languages (state, Russian and English).

The contingent of students in the context of specialties in undergraduate and graduate for 3 years is listed in Appendix 10:

Table 5 - the contingent of students by level of education on October 1 of the corresponding year

<b>Indicators</b>	<b>Unit of measurement</b>	<b>2015-2016</b>	<b>2016-2017</b>	<b>2017-2018</b>
The contingent of students total:	Number of people	10446	11270	11583
including:				
- bachelor degree	Number of people	9707	10278	10313
- magistracy		691	936	1194
- doctoral studies		48	56	76
Number of students on the state educational grant total:	Number of people	5307	5301	5477
including:				
- Undergraduate	Number of people	4827	4803	4681
- magistracy		432	449	748
- doctoral studies		48	49	48
Number of students on a contractual basis:	Number of people	5139	5969	6106



including: - Undergraduate - magistracy - doctoral studies	Numberofpeople	4880 259 -	5475 487 7	5632 446 28
Students enrolled in the Kazakh language (full-time undergraduate)	Numberofpeople	4894	5205	5690
Contingent of foreign undergraduate students	Numberofpeople	120	108	130

Data analysis from 2015 to 2018 shows that:

- the number of undergraduate students increased by an average of 6%. There is a decrease in the number of undergraduate students enrolled in state educational grants (3%). Accordingly, the number of students studying on a fee basis increased by 13%. The share of students in the state language has increased since 2015 in full-time education by 14%.

- the contingent of students in postgraduate education increased over 3 years by 41.8%. The number of students on state educational grants increased by an average of 40%. The contingent of students on a paid basis in the specialties of doctoral studies PhD also increases. If in the 2016-2017 school year, 7 people studied, then this year - 28 people.

A more complete description of the number of students for 3 years is given in Appendix 11.

Students' personal files, receiving applications from students, issuing and registering orders for all levels of education, providing state services to students, issuing documents of strict accountability, personal and static records of all categories of students according to the established forms are carried out in the Student Service Center. The entire contingent of students and information on the movement of students during the school year are entered and processed in the AIS "Platonus".

The movement of the contingent is reflected in the monthly reports within the university and in statistical forms 3 - NK and 1 - NK, approved by the MES R.K, as well as in the daily report UMSHE (Unified Management System for Higher Education) of the MES R.K.

The policy of formation of a contingent of students.

The principles of forming a contingent of students at the university, their admission, registration, movement in the learning process and ensuring graduation are determined by: Model rules for admission to educational institutions implementing vocational curricula for higher education, approved by the Government of the Republic of Kazakhstan of January 19, 2012 No. 111 as amended on April 19, 2012 No. 487); Standard rules for the activities of organizations of higher and postgraduate education of 17.05.2013 No. 499. Basic

Provisions ”; Academic policy in S.Seifullin KATU (2018) on the basis of the Rules for the organization of the educational process on credit technology of education, approved by order of the Ministry of Education and Science of the Republic of Kazakhstan No. 152 of April 20, 2011.

The movement of the contingent occurs as a result of expulsion, transfer, resume studies leaving for the second year of study and the provision of academic leave in accordance with the MI QMS 11010.95-2016 "The order of expulsion, transfer, resume studies and provision of academic leave S. Seifullin ”№ 421-H 06/13/2016, Academic policy in S.Seifullin KATU (2018) on the basis of regulatory documents approved by orders of the Ministry of Education and Science of the Republic of Kazakhstan: Transfer and resume studies Rules enrolled for students No. 19 of 01/20/2015 as amended and supplemented as of December 25, 2017 No. 649; The rules for granting academic leave to students No. 506 of December 4, 2014, as amended and supplemented as of March 10, 2017, No. 110; Model Rules for the ongoing monitoring of progress, interim and final state certification of students in higher educational institutions No. 125 of March 18, 2008, as amended and supplemented No. 36 of January 30, 2017.

For all matters relating to resume studies and to transfer the student can get advice at the Student Service Center. In addition to the consultation, the student's AIS personal account is sent in electronic form. Notes on regulatory documents. The student can also receive information about the transfer, resume studies, expulsion,, granting / return from academic leave, re-training, the procedure for transferring credits, mastered in other universities on the University website in the Academic Policy of KATU.

Indicators of student enrollment movement across all levels of education are reflected in Appendix 12. The data show an increase in full-time undergraduate enrollment in undergraduate education by an average of 20% compared to the 2015-2016 academic year, due to an increase in grant resources of the MES RK. Accordingly, the enrollment of full-time students increased (1.6%). The number of retired full-time students from the university for the last academic year is 4.5 times higher than the students who arrived. But, nevertheless, an increase in the number of part-time undergraduate and postgraduate education is observed. Compared to the 2015-2016 academic year, admission to the magistracy increased by 73%.

According to the academic policy in S.Seifullin KATU (2018), the criterion for transferring from one course to another is the university set transfer grade - GPA. Transferable GPA for students of agronomic, technical faculties and faculty of veterinary and animal husbandry technology, who completed the 1st course, must be at least 1.67

points; completed the 2nd course - 1.9; finished 3, 4 course - 2.0. Transferable GPA for students of land management, architecture and design, economics, energy faculties and the faculty of computer systems and software who have completed 1st course, must be at least 1.9 points; for students graduating from the 2nd course is 2.0; for students who have completed 3,4 course is 2.1.

Transferable GPA for undergraduates of all specialties is 2.2.

Transferable GPA for doctoral students of all specialties is 2.5.

The GPA and the mark of transfer from course to course are recorded in the student transcript.

The decision on the student re-training is made by the rector of the university and issued by the relevant order.

The right to retraining is granted to students who have not received the required number of credits provided by the working curriculum.

The student on a contractual basis has the right to transfer to the vacant place of the state educational grant for the relevant specialty on a competitive basis. At the same time, students who have only “good” and “excellent” marks for the entire period of study and the highest GPA enjoy the pre-emptive right to transfer to education under the state educational grant. In the absence of applicants for a particular specialty, vacant educational grants released in the process of obtaining higher education are transferred on a competitive basis within the direction of training following the results of the summer and winter examination session. ” The priority right in this case is the student who has the highest GPA for the entire period of training. Over the past 3 years, 367 students received a state educational grant on a contractual basis.

Information about vacant educational grants based on the results of examinations, students receive through ads through the university site, curators of supervising groups, deans, department chairs, as well as announcements are sent through the AIS to the student's personal account.

In addition to information about available free grants on the website in the “Education” section, students can get information about applicants for the released state educational grants, get acquainted with the Order of the Minister of Education and Science of the Republic of Kazakhstan on awarding grants and with the list of students who have vacant educational grants higher education.

In the 2015-2016 academic year, 123 foreign students from 8 countries of the world: from the PRC, Russia, Mongolia, Uzbekistan, Tajikistan, Ukraine, Azerbaijan and the Islamic Republic of Afghanistan studied at S. Seifullin KATU.

As part of an intergovernmental agreement between the Islamic Republic of Afghanistan and the Republic of Kazakhstan in the field of education, 24 students from the Islamic Republic of Afghanistan undergraduate programs in 3 faculties: agronomical, technical and economics, 10 of which have successfully graduated from the university studied in S. Seifullin KATU.

The majority of foreign students (89%) studied on the basis of state grants, only 10% of foreign students studied on a contractual basis.

In 2016-2017 academic year at S. Seifullin Kazakh Agrotechnical University 113 foreign students from 9 countries studied: Germany, China, Russia, Mongolia, Uzbekistan, Tajikistan, Ukraine, Azerbaijan and the Islamic Republic of Afghanistan. Within the framework of the intergovernmental agreement between the Islamic Republic of Afghanistan and the Republic of Kazakhstan on the educational program in S. Seifullin KATU 13 students studied on bachelor program of agronomy and technical faculties, 8 of them successfully graduated from the University. Most of the foreign students studied on the basis of state grants.

Foreign students of S. Seifullin KATU take an active part in the public and cultural life of the university. With the participation of foreign students at the university various events are held: meetings, round tables, competitions, conferences and seminars.

In the 2017-2018 academic year in the Kazakh Agrotechnical University. S. Seifullin trains 134 foreign students from 9 countries: from Germany, China, Russia, Mongolia, Uzbekistan, Tajikistan, Ukraine, Azerbaijan and the Islamic Republic of Afghanistan.

As part of an intergovernmental agreement between the Islamic Republic of Afghanistan and the Republic of Kazakhstan on the educational program in S. Seifullin KATU 6 students studied from the Islamic Republic of Afghanistan on the undergraduate programs of agronomy and technical faculties, 6 of them has completed their studies this year.

Most foreign students studied on the basis of state grants. Foreign students of S. Seifullin KATU take an active part in the public and cultural life of the university. With the participation of foreign students at the university various events are held: meetings, round tables, competitions, conferences and seminars.

S. Seifullin KATU annually conducts various adaptation and support programs for foreign students who entered S. Seifullin KATU according to the provision of the quality management system on organizing the introduction of foreign students on S. Seifullin Kazakh Agrotechnical University with the rules of stay in the Republic of Kazakhstan.

Responsible curators are appointed at each faculty for foreign students, who provide curatorial support for these students throughout the school year. Also, events are being held to familiarize foreign students with the activities of the university, in particular with buildings, a museum, libraries, dormitories, etc.

The Center for International Cooperation and Multilingual Education (hereinafter - IC and MEDC) is the responsible department for foreign students from the moment of their admission to S.Seifullin KATU.

The IC and MEDC deals with issuing visas and registering passports for foreign students. Also, according to the plan of activities for foreign students, the IC and MEDC organizes various sports and cultural events. Foreign students are particularly actively participating in the celebration of the Day of Unity of the Peoples of Kazakhstan, which is organized annually by the IC and MEDC with the support of responsible curators.

In accordance with the points of the Lisbon Convention, the university is working to develop the courses and credits mastered by students within the framework of academic mobility (Approved Academic Policy of S.Seifullin KATU).

The procedure of accepting disciplines from the transcript. The final document confirming the training of the student on the mobility program is a transcript of training, which is completed in the state, Russian and English languages. Information about the training program (discipline code), the name of the discipline, the duration of the discipline (year, semester, trimester), grade for training (in the national scale and in the ECTS scale), the number of RK credits awarded (ECTS) are entered into the transcript about training.

If the student is in the framework of the program of internal academic mobility to return to JSC "S.Seifullin KATU "provides a transcript in which there are differences from the curriculum of JSC" S.Seifullin KATU "in the names of disciplines and / or in the number of credits, the difference (of credits) is given on arrival on the basis of the direction issued in the Student Service Center.

If the student learns the discipline at the host university, which is absent in the Republican Unitary Enterprise of JSC "KATU S.Seifullin ", the discipline is considered as a completed course, put up in the transcript by the host university, then in the AIS "Platonus "on the basis of an extract of the protocol of the meeting of the department (recalculation of completed disciplines).

Lifelong education is one of the parameters of the Bologna process. This parameter is implemented through the provision of additional educational services to production specialists, teachers of colleges, teaching staff of universities and students. The most

popular among students are language courses (English, French, Russian, German and Chinese). More than 300 students graduate annually.

In order to integrate into the world educational space, aimed at expanding the access of university students to foreign education, together with the Ufa State Technical University, an innovative educational consortium was created for the implementation of additional professional education programs. For the first time in the university, the implementation of the International educational project on double-diploma education “Translator in the field of professional communication” was started. In 2017, the first issue of this sandwich program was made in the amount of 28 people.

In accordance with the Rules of the organization of the educational process on the credit technology of education (order of the Ministry of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152) and the Regulations on the Organization of Academic Mobility within the framework of the Kazakhstan system of credit transfer by ECTS type, the university has implemented academic mobility of students since 2011.

The main advantages of S.Seifullin KATU before universities competitors are: the implementation of the principle of accessibility of education; Financial independence; strong material and technical base; highly qualified staff; introduction of distance learning technologies; favorable image of the university. The university sets itself the task of continuously improving the quality of its activities, closer interaction with employers, increasing competitiveness, and increasing the level of academic mobility at the university.

The work is conducted in the following areas:

- the internal regulatory framework created and systematically updated: QMS 02.2042-2017 Regulations on the organization of internal academic mobility of students at S.Seifullin Kazakh Agrotechnical University number 10-H from 01/09/2018; QMS 11010.98 - 2014 “Regulations on the organization of external academic students at S.Seifullin Kazakh Agrotechnical University. ”dated 10.11.2014 No. 643 on the basis of the Rules of Direction for study abroad (order of the Ministry of Education and Science of the Republic of Kazakhstan dated November 19, 2008 No. 613) and basic provisions of the State obligatory standards of higher education (order of the Ministry of Education and Science of the Republic of Kazakhstan dated November 25, 2014 No. 484);

- agreements on cooperation in the field of internal academic mobility of students with universities in Kazakhstan were concluded. If in the 2015-2016 academic year, 42 contracts were concluded with Kazakhstani universities, in the current school year the

number of agreements concluded with Kazakhstani universities was 108. Statistics of internal academic mobility is shown in Table 6.

**Table 6 - Statistics of internal academic mobility**

Mobility types	2015-2016		2016-2017		2017-2018		total
	fallsemester	springsemester	fallsemester	springsemester	fallsemester	springsemester	
Outgoing academic mobility	8	19	9	26	18	31	111
Inbound academic mobility	5	10	11	38	18	41	123

The list of universities that have entered into agreements on mutual cooperation in the provision of educational services between universities (currently operating) are listed in Table 1 of Appendix 13.

Information about training opportunities in the framework of the program of internal academic mobility and a list of required documents of the information package can be found on S.Seifullin KazATU. Students have the right to choose their own partner university, together with the head of the department and the coordinator at the faculty, to determine the list of disciplines to study, then submit an application to the Center for Student Services. The academic mobility coordinator concludes a Learning Agreement with a partner university, where the names of courses, partner university credits, ECTS credits and a semester are indicated. During training at the host institution, the internal academic mobility program maintains constant communication between the student and the coordinator for the faculty / university. In case of any questions concerning the educational process, the head of the department, the deputy dean or the curator of the student are notified.

Monitoring and analysis of internal academic mobility are carried out by the following employees:

- the coordinator for the university, who coordinates the work on the internal academic mobility of the university, coordinates and controls the work of the faculty coordinators, organizes the conclusion of agreements on cooperation between universities, forms and accepts an information package from a student, controls the procedure for

recognizing learning outcomes after the student returns to the university, enters into the AIS "Platonus" estimates based on the transcript submitted by the student and an extract from the department meeting on the synchronization of disciplines, leads registration and issue of directions for the exam in disciplines studied using DOT;

Faculty coordinators who advise students and teaching staff on academic issues of academic mobility, conduct awareness-raising work among students on the possibility of training under internal academic mobility programs, organize meetings with students, provide comprehensive assistance to students in choosing a university from a number of partner universities, together with the head of the department determines the list of disciplines for study at a partner university, carry out constant communication with the outgoing students academic mobility about their progress, living conditions, together with the heads of departments carry out the transfer of credits, mastered by the student in the university partner in the framework of the program of academic mobility;

- heads of departments who synchronize working curricula and approve the department's list and amount of discipline credits for students in another university as part of internal academic mobility, consider a list of candidates for participation in internal academic mobility programs, extract from the department's meeting, together with the coordinator of the faculty upon arrival of the student from the partner institution of higher education will transfer credited loans to the partner university.

Students S.Seifullin KATU have the opportunity to participate in foreign mobility in universities of near and far abroad on the basis of agreements concluded between universities in Germany, the Czech Republic, the USA, Poland, Russia, the Czech Republic, Lithuania, Italy, and the Republic of Belarus. The external mobility of students in the field of magistracy for 3 years is reflected in tables 2-4 of Appendix 13.

In 2015, they studied in the framework of external academic mobility - 3 people, in 2016 - 8 people, in 2017 - 9 people.

The University informs students about external academic mobility programs through information letters to deans and heads of departments; placing ads on the website and in the hall of the university; coordinators of international cooperation of faculties, as well as e-mailing to interested students.

Information about the beginning of the selection of candidates for participation in external academic mobility is sent by IC and MEDC to the deans of faculties and the heads of departments by e-mail, posted on the KATU website. S.Seifullin, as well as through the direction of the official note on paper or through the electronic document management



system. In addition, informing is done by placing ads on the bulletin board of departments, through curators, teachers, and other available methods.

The information indicates:

- 1 conditions of participation in external academic mobility;
- 2 dates and venues for the selection of candidates for participation in external academic mobility, including:

- Consultations on the conditions for participation in external academic mobility;
- testing to determine the level of proficiency in English;
- - availability of international certificates of the level of a foreign language;
- meeting of the Commission of S. Seifullin KATU;
- - announcement of the selection results;

1 deadline and application form of the student's intention to participate in external academic mobility;

2 list of required documents, terms and form of their submission;

3 contact information of the responsible officer of the IC and MEDC for registering candidates for participation in external academic mobility;

4 link to posting on S.Seifullin KATU;

minutes of the meeting of the S. Seifullin KATU Commission.

Academic mobility of students is carried out within the framework of the financing of the MES RK, as well as on mirror conditions with border universities in the framework of the student exchange program.

#### **The procedure of selecting students for the EU Erasmus + program:**

1. announcement (university website, electronic system ARTA, e-mail of coordinators for international cooperation at the faculties)

2. list of faculties for candidates from among students (bachelors, undergraduates or doctoral students)

3 Testing students' written English

4. Transcript

5. interview with members of the commission

6. candidates are selected from the European side remotely, or with the participation of European partners:

Testing

- interview

- Skype interview

- filling the form

- additional distance learning courses
- 7. Results are announced.
- 8. Work on the comparison of the work program with the departments
- 9. subscribes to the Learning Agreement before mobility, during mobility, after mobility in conjunction with staff
- 10. instruction on traveling abroad
- 11. Consultation on visa procedures and travel procedures to a partner university
- 12. correspondence while studying with a student and with the coordinators of the Erasmus + program in partner universities
- 13. Upon arrival, a package of documents is submitted to the IC and MEDC
  - credits are transferred to the Center
  - report is submitted to IC and MEDC
- certificate
- informing about the results of training and about the program at the faculties

**The procedure of selecting teaching staff for the EU Erasmus + program:**

1. announcement (university website, email system ARTA, by e-mail to the coordinators for international cooperation at the faculties)
2. list of faculties for candidates from the number of faculty members
3. Interview in English
4. protocol of the meeting of the department for the selection of candidates for participation in the competition
5. motivation letter
6. summary
- internship plan
8. Minutes of the meeting of the department
- 9 interview with members of the commission
10. Candidates are selected from the European side remotely, or with the participation of European partners:
  - interview
  - Skype interview
  - filling the form
11. results are announced
12. order
13. Consultation on visa procedures and travel procedures to a partner university

14. Correspondence during the internship with the coordinators of the Erasmus + program in partner universities

15. Upon arrival, a package of documents is submitted to the IC and MEDC report is provided

certificate or letter of confirmation

- informing about the results of internships at a meeting of the department or the faculty council

During the 2015-2016 academic years, 28 students of S. Seifullin KATU for one semester studied in foreign partner universities as part of the program of external academic mobility. At their own expense, 3 students of the agronomy faculty were trained at the Krakow Agricultural University (Poland) and 1 engineering student - at the Belarusian State Agrarian Technical University (Belarus). 24 students of the technical faculty were trained at the Belarusian State Agrarian Technical University in the 2015-2016 academic year.

5 master students were trained in leading European universities and mastered the discipline on the profile of training in the amount of 6-7 credits.

For the 2016-2018 academic years under the EU Erasmus + program "International Credit Mobility", students of S. Seifullin KATU studied:

- 2 undergraduates of the specialty 6M080100 "Agronomy" were studying for 1 year, 1 doctoral candidate of the specialty 6D080100 "Agronomy" during 1 semester at the University of Weihenstephan, Germany;

- 5 undergraduates specialty 6M050700 "Management" for 1 semester at the University of Applied Sciences Weihenstephan, Germany;

- 2 students of the Faculty of Veterinary and Livestock Technology during the 1st semester in Krakow Agrarian University, Poland;

. 1 student of the technical faculty during 1 semester at the Warsaw Polytechnic University, Poland;

- 2 undergraduates of the agronomic faculty of the specialty "Forest resources and forestry" during the 1st semester at the Czech University of Life Sciences, Czech Republic;

- 2 technical students of the technical faculty during the 1st semester at the Higher School of Agriculture Angers, France.

Within the framework of the EU Erasmus + "International Credit Mobility" program and teaching staff also participated:

Community - 1 teacher of the Faculty of Veterinary and Livestock Technology, Department of "Veterinary Medicine" for 1 week passed an internship at the University of Weihenstephan,, Germany;

3 teachers of the Agronomy Faculty, Department of Forest Resources and Forestry for 2 weeks for advanced training and lecturing to undergraduates of the Faculty of Forestry of the Czech University of Life Sciences, Czech Republic;

1 teacher of the technical department for 2 weeks conducted lectures for 2-3 year students of the Faculty of Agricultural Engineering of the University of Aleksandras Stulginskis, Lithuania;

1 employee of the IC and MEDC within 1 week passed training in the Center for International Cooperation of the University of Valladolid, Spain;

- 2 teachers of the department "Foreign Languages" during 1 week passed advanced training at the University of Applied Sciences Weienstephan, Germany;

- 1 teacher of technical faculty for 1 week trained at the University of Applied Sciences Graz, Austria July 1, 2018.

- EU university professors also underwent advanced training and conducted lectures at the KATU. S.Seifullin on the EU Erasmus + "International Credit Mobility" program:

- 1 lecturer at the Warsaw University of Technology, Poland during the week lectured for undergraduates of the specialty "Thermal Power Engineering" of the Faculty of Energy;

- 2 teachers of the Czech University of Natural Sciences, the Czech Republic lectured for undergraduates and bachelors of the specialty "Forest resources and forestry" and improved their qualifications on the basis of ESPC "Saryarka" and the Research Institute of Forestry of the Republic of Kazakhstan;

- 1 teacher within 2 weeks from the Higher School of Agriculture Angers, France visited the university for the organizational purposes of student mobility and taught French courses for students of the Faculty of Veterinary Medicine and Livestock Technology, Technical Faculty;

- teacher within 1 week from the Higher Agricultural School of Angers, France, gave lectures for students of the technical faculty and of the faculty of veterinary medicine and animal husbandry technology;

2 teachers of the University of Applied Sciences Graz, Austria for 1 week lectured for bachelors and undergraduates of the technical faculty;

In 2016-2017, S.Seifullin KATU expanded the geography of countries by academic mobility, as a result of which S.Seifullin KATU students and undergraduates studied for the first time in universities in the USA and France. Thus, 1 student and 2 undergraduates of KATU successfully completed their studies at the world's leading research university of agricultural profile - the University of California at Davis (USA). 2 students and 1 undergraduate student of S. Seifullin KATU were trained at the University of Milan (Italy) and at the Georg-August University in Gottingen (Germany).

In addition, 13 students and 6 undergraduates were trained at the University of Missouri (USA), the LaSalle Bauve Polytechnic Institute (France), the Krakow Agricultural University (Poland), the University of Life Sciences in Wroclaw (Poland), the University of Alexandras Stulginskis (Lithuania) University of Applied Sciences Weienstefan-Triesdorf (Germany), Giessen University (Germany), University of Hohenheim (Germany).

2 students of the agronomical faculty were trained at the Krakow Agricultural University. Hugo Collantay (Poland) at his own expense.

Along with studying under the program of external academic mobility in the countries of the European Union and the USA, students of our university also go to study in the countries of the near abroad.

In 2016-2017 year 50 students of the technical faculty were trained in the Belarusian State Agrarian Technical University.

It is gratifying to note that in the 2016-2017 school year, S. Seifullin KATU for the first time accepted 10 foreign students of the Yakut State Agricultural Academy (RF) under an exchange program as part of external academic mobility. Accordingly, 10 students of S. Seifullin KATU studied at the Yakutsk State Agricultural Academy.

Furthermore, 1 student (Zhasulan Kadyrbekov, graduate student, agronomy faculty) and 4 teachers of the faculty of agronomy (Bekbergenova Zhuldyzay, Kurmangaziev Aizhan, Rakipsiz Dina, Zhumabekova Zhazira) sent to PRC for entering PhD in Xinjiang Institute of ecology and geography, Chinese Academy of Sciences, this year 4 teaching staff of the University enrolled for a grant to PhD students and 5 students of S. Seifullin KATU received a grant for a master's degree in the North-Western University of agriculture and forestry (China), 1 teacher entered the PhD at the University of California in Davis (USA) and 1 student entered the University of Canada for a master's degree in the framework of "Bolashak".

In 2016-2017 academic year, 4 faculty members and 1 undergraduate student of S. Seifullin KATU enrolled in a doctoral program in the PRC.

In the 2017-2018 academic year, 7 people were trained at the expense of the MES of the RK. Also during this period, S. Seifullin KATU for the first time 8 students were sent under the student exchange program as part of academic mobility to Irkutsk State Agrarian University (IrGAU), and accordingly received 8 people from IrGAU to S. Seifullin KATU.

At the expense of the university sent 50 fellows, at the expense of the Erasmus program - 3 fellows. As part of the agreement on the double-degree program, 4 undergraduates from the faculties were sent to the University of Milan, Italy. Among the students there are 4 fellows in the double-diploma master's program, 65 students in the undergraduate program in academic mobility, and 3 in the master's program.

In the first half of this year, S. Seifullin KATU 2 engineering students were sent to the Agricultural University of Angers, France under the Erasmus + program, 50 engineering students to the Belarusian State Agrarian Technical University and received 6 students of the Irkutsk A.A. Ezhevsky on the exchange program in the framework of academic mobility for one semester. Accordingly, 6 students of KATU study at A.A. Ezhevsky. Irkutsk State Agrarian University. In addition, 2 students of the Yakut State Agricultural Academy are currently studying at S. Seifullin KATU under the program of academic mobility.

6 undergraduates of KATU undergo a short-term scientific internship for conducting scientific research at the Novosibirsk State Agrarian University as part of an agreement between universities.

Currently, work is also underway on the direction of KATU students to foreign universities in the framework of academic mobility in the framework of financing the Ministry of Education and Science of the Republic of Kazakhstan for 2018.

The monitoring of academic mobility and analysis of its results are carried out by the Department of Higher and Postgraduate Education of the Ministry of Education and Science of the Republic of Kazakhstan, the Center of the Bologna Process and Academic Mobility of the Ministry of Education and Science of the Republic of Kazakhstan.

The problem of employment of young professionals in an environment where there is no mandatory distribution of graduates for universities is one of the most acute. This imposes enormous responsibility for the training of not only highly qualified, but most importantly, specialists in demand in the competitive labor market.

In this regard, the university is faced with the task of strengthening the work of graduates in employment.

The transition to a modular system of developing educational programs for students is based on the implementation of the principles of the Bologna process and is aimed at satisfying the labor market with demanded specialists.

In order to improve the quality of training, employers and specialists from enterprises are involved in the development of educational programs.

In order to ensure the quality of students' knowledge and education in general, a close relationship between education and production, cooperation of the university with employers is necessary. The university takes the following measures to improve the quality of students' knowledge:

- conducting an interview of students of the main specialties of the university with employers;
- study of the labor market (which is necessary for production) through interviewing students with employers;
- Discussion with the employers of the list of elective disciplines and individual topics of courses relevant to production with the aim of including them in WCs, and syllabuses;
- expanding the base for practical training of students;
- development of modular educational programs in accordance with the Dublin descriptors;

The training of highly qualified graduates who are competitive in the labor market is a priority task of the S.Seifullin Kazakh Agrotechnical University.

The success of our graduates, its image and further employment depends on the successful solution of this task.

The University conducts systematic work to promote the employment of its graduates.

In the framework of building a social partnership system, S.Seifullin Kazakh Agrotechnical University is conducting such areas of work:

- 1) meeting the need for personnel at the request of regional and city local executive bodies;
- 2) job placement for graduates, which includes a range of works on providing information, methodological, psychological and organizational support to graduates in order to adapt to the labor market and employment.

The demand for graduates is one of the most important characteristics of the effectiveness of the work of the university and makes it possible to judge the quality of the specialists training.

Employment issues are resolved upon receipt of applications from employers, in particular from local executive bodies of regions, the city of Astana and Almaty. The customers and consumers of graduates are educational institutions, organizations, enterprises of the regions.

Employment of graduates is carried out jointly with the deans and the center for the development of entrepreneurship, career and business.

In order to effectively carry out the distribution of graduates and provide information to all interested parties in terms of improving career guidance, the annual tradition has been to distribute young professionals. Each year the distribution of graduates is preceded by a large organizational work: this is organizing and holding graduates meetings with potential employers, preparing a summary of graduates.

In S.Seifullin KATU the distribution of graduates is held in order to meet the needs of the labor market in personnel and promote the employment of university graduates.

The distribution of bachelors who have studied under the rural quota by specialties: 5B120100 - "Veterinary Medicine", 5B120200 - "Veterinary Sanitation", in the specialty 5B012000 - "Professional grants. training "in the framework of rural quotas and in the framework of state educational programmes

As well as the distribution of graduates of the educational order. Doctors of philosophy (PhD) who studied on the basis of the state grant.

Cooperation of S.Seifullin KATU with practice bases promotes marketing of the regional labor market and, as a result, expanding the circle of potential employers. The results of the survey of representatives of industry institutions indicate a high demand for graduates. According to the majority of respondents, the benefits of specialists who graduated from the S.Seifullin Kazakh Agrotechnical University is a good theoretical preparation, the ability to carry out research searching and the ability to apply this knowledge in practice. This is the basis of labor growth in the demand for graduates of S.Seifullin KATU in the regional market.

During the reporting period, the share of graduates employed by the profile of the received specialty amounted to an average of 80% in undergraduate speciality.

*Class* . Over the 60 years of its activity, the university has prepared and graduated 67,215 specialists and bachelors or agriculture and other sectors of the economy. Since the opening of educational programs for postgraduate education, 1,756 people received a master's degree. The total university graduation for all levels of education is 68,971 people (Table 7).



In the 2016-2017 academic year, 2365 students were graduated in 37 bachelor and specialist programme (2220 of them were full-time students, 193 with honors, 145 were part-time students). Graduation in postgraduate education amounted to 405 masters in 30 specialties of profile and scientific and pedagogical areas. Out of those who graduated from the university, 193 bachelors and specialists (8.7%) received diplomas with honors. The highest percentage of diplomas with honors were received by students of faculties: land management - 12.2%, agronomic - 9.7%, veterinary medicine and animal husbandry technology - 9.3%.

Table 7 - Indicators of graduation for 3 years

№ so	Academic years	TOTAL / incl. with honours	Specialists		Bachelors		Masters	
			Total	Including with full honours	bcero	Including with full honours	Number of diplomas.	Certificate to dipl.
1	2015-2016	2767/209	141	15	2291	194	335	0
2	2016-2017	2770/193	160	17	2205	176	405	1
3	2017-2018	2723/179	157	14	2022	165	544	8

Analysis of graduation shows that over the past 3 years there has been a slight decrease in the number of graduates of bachelors (11.7%), while the graduation of masters has increased by 38.4%. The graduation of specialists remains at the same level.

Information on the graduation for 3 years in the context of training areas is "Technical Sciences" for undergraduate and graduate training are listed in Appendix 14. The result of the completion of the educational process is a diploma with the application of the state sample. According to announcement of graduating students, the European Diploma Supplement is issued. Also, at the request of former graduates who have undergone a linear system of education, they are recalculating the grades on the credit technology of training and they are given transcripts of the new sample in three languages for admission to other higher educational institutions of the Republic of Kazakhstan and foreign universities.

At the university, students can receive certificates during training, for example, by technical specialties - the rights of a tractor driver, by specialties of education - a certificate of a translator in the field of professional communications.

Work on the employment of graduates in the specialties of the university is carried out in accordance with the work plan with graduates. Consultations are held with graduates on a number of issues of distribution and employment. Departments carry out relevant

work with organizations, enterprises, institutions in terms of employment of graduates. Information on the employment of graduates by faculty is given in table 1.

The main activities of the university in the employment of graduates. Employers have the opportunity to get a complete database of graduates resumes.

After reviewing the resume in advance, having determined the range of vacant positions, at the Job Fair HR specialists conduct interviews with candidates who are interested.

In this aspect, the purposeful organization and annual holding of the “Graduate” fair also contributes to a closer acquaintance and exchange of views between business leaders and graduate students. During such fairs, employers come up with information about the characteristics of their enterprises, working conditions, proposed vacancies and other parties for employment. They are given the opportunity to get acquainted with the performance, resumes and characteristics of the students. Students' resumes contain data on academic performance over 4 years of study, place of residence of parents, feedback from supervisors and other additional information. Employers conduct personal interviews with graduate students. At the end of the interview, preliminary employment agreements are concluded, subject to the satisfaction of mutual interests.

Assistance in the employment of graduates in accordance with the requests of sectoral ministries, heads of local public service bodies, employers' enterprises and other business entities are provided by deans and faculty departments.

The main goal in the field of quality education is to constantly keep in touch with employers, to improve the employment of university graduates.

Dean's office together with the departments annually systematically conducts a complex of events, such as open doors of faculties, departments, specialists' fairs with the invitation of the heads of enterprises, i.e. employers.

Information on the employment of graduates is given in table 8.

Table 8 - Information on the employment of graduates for the years 2013-2017 in the context of the faculties

	№	2012-2013			2013-2014			2014-2015			2015-2016			2016-2017		
		Faculty	the number of graduates	the number of employed	%	the number of graduates	the number of employed	the number of graduates	the number of employed	%	the number of graduates	the number of employed	%	the number of graduates	the number of employed	%
1	Agro	135	76	56	208	140	67,3	283	146	51	347	272	78,3	373	290	77,7
2	Apx	61	41	67	65	65	100	71	71	100	109	102	93,5	97	95	97,9
3	VET	172	124	72	180	140	78	330	301	91	330	275	83,3	365	310	84,9
4	LM	120	74	62	121	86	71	146	46	31	192	122	63,5	180	120	66,7
5	CSandPE	130	100	78	167	121	72,4	198	157	79	228	204	89,4	180	152	84,4
6	Tech	241	159	66	282	233	83	384	353	91	474	358	75,5	499	390	78,2
7	Econom	218	102	47	262	154	59	245	194	79	223	199	89,2	245	219	89,4
8	Energet	145	109	75	233	170	73	340	292	86	339	254	74,9	281	200	71,2
Total		1222	785	64,2	1518	1109	73,0	1997	1560	78,1	2242	1786	79,6	2220	1776	80

Thus, as can be seen from table 7, the most popular students are students of architectural, veterinary and animal husbandry technology, technical faculties and the faculty of computer systems and professional training. Least of all graduates of land management faculty are in demand.

General information about the employment of graduates of S. Seifullin KATU is given in table 9.

Table 9 - Information about the employment of graduates of S. Seifullin KATU for the period from 2013 to 2017

Academic year	Total number of graduates	% of employment
2012-2013	1224	64,2
2013-2014	1518	72,6
2014-2015	1997	78,1
2015 - 2016	2242	79,6
2016-2017	2220	80

Analysis of employment over the past five years shows that compared with the 2012–2013 academic year (64.2%), the percentage of employment in the 2016–2017 academic year has increased to 80.

This can be explained with the gradual overcoming of the global economic crisis, the creation of jobs in public and private enterprises and the flexibility of the labor market.

The university has introduced a flexible response mechanism for educational programs to the needs of the labor market. Through continuous monitoring, the need for a program of certain specializations is identified. At the request of employers, new elective courses are introduced into educational programs, which will undoubtedly be reflected in improving the competitiveness and competence of university graduates.

The university annually organizes a summer semester, under which students can master additional elective courses outside the main educational program (Regulations on the organization of the summer semester).

The material base of the university meets the requirements of students for self-education. The university library meets modern requirements and is equipped with advanced computer and information library technologies and has more than 1.5 million copies of literature. The library and information complex is equipped with computer equipment. The local network is integrated into the university-wide computer network with Internet access, which allows students to work independently with online information resources in reading rooms and media libraries. All amenities are created for visitors: automated literature distribution points based on RFID technologies, specialized reading rooms with a WiFi zone. In the electronic hall and in the reading rooms of the veterinary, agronomic and faculty of land management, architecture and design, 80 new monoblocks have been installed.

Through the university's electronic library by the university's IP address range, access is provided to remote information resources of the Kazakhstan inter-university

electronic library, as well as to the world's advanced electronic libraries, such as Thomson Reuters, Springerlink, Elsevier, Cabi Abstract. Since 2013, in connection with the introduction of multilingual education, the library fund began to replenish with books in English, opened the hall of foreign literature. On the recommendation of leading professors and scientists of the University of California at Davis (UC Davis) books were purchased for masters in technical and agronomic faculties. Librarians conduct trainings for researchers and undergraduates on the topics: “How to publish an article in a foreign journal”, “How to avoid publication in dishonest journals”, sections “Scientific citation indices”, “Scientists' Identifiers”, “Scientometrics: definitions and sources of information”, and etc. To help students of English, at the initiative of librarians, the English Speaking Club has been opened. The university actively stimulates students to self-education and development outside the main program in the following areas:

- - Intensification of the work of youth organizations on the right of self-government and the formation of culture among students to increase the prestige of their educational institution;

- The development of creative activity of youth;

Non-educational development of students in higher education institutions in the above mentioned areas is carried out through the creation of student organizations of self-government in faculties, as well as at the university level, which is governed by the Committee on Youth Affairs (hereinafter CY) under the department of educational work. At the moment, the following organizations of the local government are implemented at the University's CY: CY faculties, student trade union committee “Samhau”, student leagues, student clubs, student organizations such as the MK Zhas Otan, the Student Parliament, S. Seyfullin Student Alliance, S. Seifullin KATU, student Dormitory councils, “Volunteers”, Guardians of order. Quantitative indicators of these circles are presented in table 10.

Table 10. List of self-governing organizations

<b>P/ C</b>	<b>Youth clubs</b>	<b>2014-2015 academic year; I sem. 2015-2016 academic year; number of students</b>	<b>2015-2016 academic year; I sem. 2016-2017 academic year; number of students</b>	<b>2016-2017 academic year; I sem. 2017- 2018 academic year; number of students</b>
1	CY	409	615	519
2	Students Trades Committee	44	26	40

3	Student leagues	531	447	464
4	Student clubs	1057	1267	1992
5	University Department of youth wing "Zhas Otan"	34	57	34
6	"Student Alliance KazATU"	25	7	16
7	Student Parliament	20	23	31
8	Student hostels union	111	132	141
9	"Volunteers"	-	-	47
10	Guardians of order	10	10	10
Total:		2241	2584	3294

It should be noted that student self-government organizations of S.Seifullin KATU understand and assist in enhancing the authority and image of our university at the republican level through its activity. We can proudly declare that our active students with their civil position contribute to the development of our country.

Considering the diverse interests of students, 28 creative clubs were created at the KDM, 9 cognitive clubs were created at the Faculty of Humanities, and 3 clubs were created at the Foreign Languages department. 37 creative clubs in the faculties were also created. In all clubs, students are involved from the 1st to the 4th courses. These clubs are created in order to combine student youth to exchange interesting opinions, creative ideas and at the same time effectively spend their leisure time.

In order to increase the creative activity of students and to maintain young talents among students, various traditional social events are held. Students are eagerly awaiting these events and are participating with special preparation. These are "First student autumn", "Kyz syny", "Zhigit sultany", "Miss KazATU", flash mob between hostels "KazATU is my pride", parade to the "Day of Patriots", competition "REP Bat", competition "Sports dances", "Day of open doors in hostels", intellectual games "Altyn saka", "Kyzyk ken", "Kim zhirik", KVN League and the Republican student forum "Tauelsizdik-tiregim, elim dep sokkan zhregreg" and others.

Each of these social events helps to increase the intellectual, moral, creative and physical potential of students. Student groups organized at the university form a plan for the academic year and participate in various public events. In the conduct of free time of students, the Faculty of Arts and Creativity plays a large role, where students reveal their creative abilities. At this faculty, students have the opportunity to work at a professional

level. Also, students participate in various clubs organized at the faculties, sports club (Table 11). Thus, they participate in various events at the city and republican levels. All these activities are held during extracurricular time under the guidance of the department for educational work of the university. Table 11 - the level of student activity

P/C	Structural divisions of the Department for the development of student activity	2015-2016 academic year; I sem.	2015-2016 academic year; I sem. 2016-2017 academic year;	2016-2017 academic year; I sem. 2017-2018 academic year;
		2016-2017 academic year;	Number of students 9573	Number of students 9671
1	CY	653	870	838
2	Sport Club	531	447	464
3	Subject clubs of faculties	459	647	873
4	Military Department	442	534	546
5	FIT	344	154	199
6	DVR clubs	258	557	1143
7	Humanities Faculty Clubs	180	141	151
8	Creative clubs of faculties	88	43	66
9	Student Council Sports Leagues (football, volleyball, basketball)	497	469	536
10	Club, organized by the press service	13	10	8
11	Creative clubs, organized by the Department of Foreign Languages	21	47	88
12	Students attending city sports clubs	202	263	329
13	Students attending language courses	131	105	55
	<b>Total:</b>	<b>3819/42%</b>	<b>4287/44,7%</b>	<b>5296/55%</b>

All student circles of the university are organized to ensure the educational process with young people, as well as the full development and self-realization of the personal qualities of students. Student groups have already proven their ability to make a worthy contribution to the development of Kazakhstan society. How effective student organizations can be noted:

The student parliament, which unites all public associations of S. Seifullin KATU, forming the correct moral and psychological environment among the youth, supports the

youth from the social side. The youth wing of “Zhas Otan” at the party “Nur Otan” unites students of S. Seifullin KATU and expresses the interests of young citizens of various social groups, representing them in representative and executive bodies of state power, local self-government.

**The Alliance of Students is an organization that embodies the intellectual, creative, spiritual, innovative state of students of S. Seifullin KATU.**

Student Dormitory Council - carries out educational work outside the university. The organization of the Student Council helps young people to make the right decisions in problem situations.

The Student Trade Union Committee “Samhau” is a public association that performs the following tasks: protection of the rights of students; assistance in organizing students' health improvement; providing material assistance to students without parental care, student families and low-income families; rewarding students who took an active part in the public life of the university and achieved academic success; supporting the creative direction of students, etc.

Today, the interests of youth are many-sided; in this connection, work with young people requires the improvement of educational work. With this purpose, work is being carried out to improve entrepreneurship among students. According to the results of the conducted work within the walls of the university, two clubs were created. «English speaking club»- english language club, free of charge teaches students from families with low social conditions, the club "Business and development of entrepreneurship", provides for the development of entrepreneurship among students. The university focuses on the disclosure of creative abilities of students. This work is carried out at the Faculty of Art and Creativity, where professional professionals work in different creative areas: Student Theater “Akzhelken”, vocal studio, vocal group, dance ensemble “Shattyk”, national-instrumental ensemble “Shabyt”, team of KVN “KazATU Saramasy” ". Also, at the initiative of the students, the Nirvana guitar club was created. In particular, in November 2017, in Astana, the “Union of KVN of Kazakhstan” organized the final games of the “KVN” of the city league. The team "AgroLife" of S. Seifullin KATU was awarded the title "Champion 2017".

Students take an active part in all events held in the republic and in the city, take prizes, thereby raising the image of the university.

For the purpose of professional development of students, a sports club at the department of educational work, a military department at the university, and creative circles at faculties are organized (table 12).



Table 12 - Composition of structural units to improve the professional and creative level of talented students.

P/C	Structural units for the organization of work to improve the professional and creative level of talented students	2014-2015 academic year; I sem 2015-2016 academic year	2015-2016 academic year; I sem 2016-2017 academic year	2016-2017 academic year; I sem 2017-2018 academic year
1	The staff of the sport club	531 students	447 students	464 students
2	The staff of talented FIT students	344 students	154 students	199 students
3	The staff of the students of the military department	442 students	534 students	546 students
4	The staff of the scientific clubs of faculties	459 students	647 students	873 students
	<b>Total:</b>	1776 students	1782 students	2082 students

From year to year the number of students who lead an active lifestyle increases. This is one of the indicators of student satisfaction in organizing extra-curricular student time. And also a survey is conducted to determine student satisfaction.

The university has a public association “Graduates Club of the S.Seifullin Kazakh State Agrotechnical University. Graduates actively participate in the life of the university, attend forums, meetings, and seminars organized by universities; take part in the survey.

The University’s website contains the Charter and the list of founders of the association.

The process of designing individual trajectories of students is carried out on the basis of its individual qualities. For example, by identifying linguistic competencies, abilities for students' research work, specialized academic language groups are formed on the levels of knowledge of foreign languages, Kazakh and Russian languages, scientific clubs. The level of definition of language competence of students is carried out by testing and interviewing language departments. Ability to research by conducting surveys, interviews, analysis of scientific achievements, GPA points, recommendations of scientists.

## **9 HIGHER-EDUCATION TEACHING PERSONNEL**

The teaching staff plays a major role in ensuring the quality of the educational services provided and the implementation of educational programs. The HR policy of the university is aimed at the formation of a professional-competent staff corresponding to the requirements of the educational programs of the faculty and supporting staff.

Personnel policy is reflected in the Charter, the collective agreement of the university, the documented procedure - Personnel Management, internal labor regulations, employment contracts, compensation and benefit policy, the provision on personnel certification, the rules for competitive substitution of teaching staff, job descriptions. When applying for a job, an employee familiarizes himself with the internal regulatory documents governing the personnel policy of the university; copies of these documents are also located in each department of the university and are placed in the document storage in the electronic document management system.

The transparency of personnel procedures is ensured by holding weekly operational meetings of the administration with the submission of protocols, monthly meetings of the Academic Council of the university, the Board of S. Seifullin KATU, publication of strategically important orders that are sent to the heads of departments and communicated to the team through them.

Requirements for the staffing of the university are determined by the qualification requirements for licensing educational activities.

Educational programs in relation to teaching staff require compliance with basic education, teaching experience, competence in the discipline being taught.

Ensuring the compliance of the teaching staff with the qualification requirements, level and specificity of the educational program is carried out in accordance with the job descriptions and the standard discipline program.

Educational activities at the university are carried out by teachers who have the appropriate education in the current educational programs of the specialty.

In order to effectively implement their processes, to involve personnel in the implementation of policies and strategies, the management of S. Seifullin KATU develops and implements personnel motivation plans, including: ensuring working conditions in accordance with the position held; timely solves issues of remuneration and personal allowances for quality work; moral encouragement and bonuses; social development of the university; compliance with professional ethical standards; informs the workforce about

the development prospects of S. Seifullin KATU and its financial condition; organizes work aimed at the implementation of the Rules of internal labor regulations, labor and production discipline, the involvement of the team in the system of advanced training and personnel training.

Qualification requirements for the faculty of the university are determined in accordance with the “Typical qualification characteristics of teaching staff and persons equivalent to them”, approved by order of the Minister of Education and Science of the Republic of Kazakhstan dated July 13, 2009 No. 338.

Recruitment for vacant positions of teaching staff is carried out in accordance with the Rules of competitive replacement of faculty members and researchers of higher educational institutions, approved by Order No. 230 of the Minister of Education and Science of the Republic of Kazakhstan dated April 23, 2015.

The competition for the filling of vacant positions of faculty members and information about vacant positions is announced through the republican mass media, and is also posted on the website of S. Seifullin KATU in the “Vacancies” section. The announcement of the competition is made on the basis of the staffing requirements of the departments before the beginning of the academic year, as well as, if necessary, in the event of vacancies.

The decision of the competition commission on the election of a person by competition is the basis for concluding an employment contract for the teaching staff of the university. Contestants and candidates for their part may get acquainted with the tender documents and decisions of the commission. Participants and candidates of the competition have the right to appeal the decision of the commission in the manner prescribed by the legislation of the Republic of Kazakhstan.

Teachers and staff of the university, as a rule, at least once every 5 years, are certified for compliance with the position on qualification requirements based on the assessment of their professional competence (Regulations on the certification of teaching staff in S. Seifullin KATU and Regulations on certification of employees in JSC “S.Seifullin KATU ”). The reasons for the dismissal of faculty and staff of the university is the initiative of the employee, the expiration of the employment contract, reduction of staff.

The staff of educational programs and individual teaching staff plans are formed through the Platonus AIS, which all departments, faculty and support staff of the university have access to.

All personnel procedures at universities are accessible and transparent: the automated

information system “Personnel of the University”, the module “Employee's Cabinet” function, the University website has personal pages of faculty members.

To assess the quality of teaching at the university, a comprehensive program for the introduction of innovative technologies in the educational process has been developed.

Monitoring the quality of teaching, the methods used and the technology of teaching at the university is carried out by the methodical, academic council of the university, the methodical commission, the council of faculties, the committees for curricula, syllabus, independent work of students for each educational program. The results of the monitoring are discussed monthly at the methodological Council of the University, the methodical commission of the faculties. Evaluation of the teacher’s competence is carried out by mutual attendance of classes, questioning students "The teacher through the eyes of students", "The teacher through the eyes of colleagues", conducting open-door classes, participating in competitions "The best teacher of the university", the annual ranking of teaching staff. The university has experience in attracting practicing teachers from production to guide professional, research practice, theses (projects), master's theses (projects) of students. The main requirements for practical teachers are experience in the real sector of the economy, technological, research and development work in production.

The need of the university in the teaching staff is determined by the number of educational services provided for undergraduate students - masters - doctoral programs in the specificity of EP. The faculty consists of 870 full-time teachers, including 83 doctors of science, 378 candidates of science, 51 doctors of PhD. The quantitative and qualitative composition of the TS is presented in table 13.

In the university is leading monitors the further professional growth of our graduates: in all deans have computer databases of graduates of the past three years.

Trainees, employees and teaching staff confirm document their consent to the processing of personal data.

In order to regulate the procedure for carrying out transactions with personal data of employees, establishing the rights and obligations of employees of S.Seifullin KATU, in terms of working with personal data approved the Regulation on the protection of personal data of employees of S.Seifullin KATU.

In hiring, employees confirm their consent to the collection and processing of personal data (the consent form is attached).

Graduates of the Bolashak scholarship are 44 university lecturers, 19 teachers entered the TOP-50 of the best teachers of Kazakhstan, during the reporting period 11

teachers won the title “Best University Teacher” (Appendix 15), 126 teachers teach classes in English.

The head of the department and the Chairman of the Board are responsible for the employees at the university.

Ensuring favorable conditions of work at the university and the processes related to responsibility are reflected in the collective agreement, the individual labor contract and in the job descriptions of employees.

In order to identify harmful and hazardous production factors and take measures to bring working conditions into compliance with state regulatory labor protection requirements, at the university, attestation of workplaces is carried out once every 5 years (Certificate on certification of workplaces in 2014).

The role of the faculty in connection with the transition to student-centered education has become one of the key points in the university's development strategy. The formation of the faculty, its career growth is given great attention through the provision of social support and improvement of their skills. Over the past 3 years, the university has fully provided its employees with office accommodation (dormitories and apartment-type office accommodation). In all buildings and hostels of the university, public catering facilities, a social store, a pharmacy with an affordable price are opened, the recreation center of the Sary-Arka UNPK operates in Schuchinsk, the University's medical clinic is provided with the possibility of first aid agricultural products. The university has technological platforms for the production of agricultural products. Employees of the university at the cost of purchased meat, dairy and fish products, bakery products and vegetable oils.

The need for specialists in the development of professional and general competencies is revealed with the introduction of new EPs, courses of disciplines, methods and technology of training. To meet the needs of specialists at the university, a plan for career development of faculty staff for 5 years has been developed.

Satisfaction monitoring of the working conditions of the university staff is carried out annually through surveys, individual reception of employees by the Chairman of the Board, the rector's blog on the university website, using trust boxes.

The development strategy of the university is aimed at integrating into the global scientific and educational space, expanding partnerships with leading international research universities and research centers of a similar profile.

In accordance with the principles and parameters of the Bologna process, the university implements a three-level model of education (bachelor-master-doctor PhD), combining traditional academic fundamentality, dynamism in introducing new educational

technologies and training courses in the educational process, taking into account the real needs of the labor market. In order to transform the university into a modern research agricultural university of Western type, a strategic concept for the development of the university has been developed, large-scale work has been started on the development of modern educational programs for bachelor, magistracy, doctoral studies, modernization of the material and technical base, research laboratories have been created, modern technologies are used in the educational process learning.

Based on the strategic development plan of the university, an action was developed to implement the strategy, indicating indicators for each university division, which are included in the long-term plans for the development of teaching staff.

The implementation of indicators of measures to implement the strategy twice a year are reviewed at meetings of departments, faculty councils, methodical Council and once a year is discussed at the academic council of the university.

In the past 5 years, the university has created 6 technology platforms, 24 research centers and laboratories, an experimental production campus covering an area of 1,159 hectares. The university cooperates with 26 international organizations from 9 countries of the world, signed over 200 agreements and memorandums of cooperation with universities and research centers from 35 countries of the world. Among them: University of California at Davis, University of Arkansas, Oklahoma State University (USA), University of Adelaide (Australia), Agricultural University in Plovdiv (Bulgaria), Humboldt University of Berlin, Giessen University. Justus Liebig (Germany), University of Brno (Czech Republic), Warsaw University of Natural Sciences (Poland), University of Milan (Italy), Slovak University of Agriculture in Nitra (Slovakia), Chinese Academy of Agricultural Sciences, Xinjiang Agrarian University, Harbin Veterinary Institute, North Western University of Agriculture and Forestry (PRC) and others.

Accounting for the introduction into production and promotion in business structures (consulting) of scientific developments of teaching staff and employees is carried out by the technology commercialization center and the university's knowledge distribution office.

For the development of research activities of the faculty and staff, internal regulations of the QMS on the establishment of allowances for scientific achievements, the publication of scientific articles in rating journals have been developed, and the workload has been reduced.

Scientific research of the faculty is carried out in areas of EP (agricultural, veterinary sciences, engineering sciences and technology, natural and humanities, education, social

sciences, economics and business, services, art), which are carried out in the framework of international programs (Erasmus + and etc.), budget programs of the MES RK (grant and program-targeted funding, the Science Foundation, technology commercialization), the Ministry of Agriculture of the Republic of Kazakhstan, local executive bodies (LEB), under direct contracts with E entities.

Students, undergraduates and doctoral students are involved in the implementation of research. Theses of students, dissertations of undergraduates and doctoral students are carried out on the basis of the research projects of the teaching staff. The results of research are included in the training courses of disciplines of educational programs.

Professional development of university employees is carried out taking into account the requirements of the priority areas of the strategic programs of the Republic of Kazakhstan, the Ministry of Education and Science, the Ministry of Agriculture, and the development strategy of the university.

Every year, 20% of the total number of staff members undergo advanced training in the following main areas:

- increase the language competence of teachers;
- increase professional competence in the direction;
- increase of pedagogical competence;
- increase information and communication competence;
- increase of methodological, research competencies.

Advanced training is implemented in the following forms:

- intra-university advanced training courses for teachers and specialists in certain programs (qualification programs, professional development programs);
- internship in leading educational and research institutions abroad;
- internship at enterprises, organizations, industrial structures, educational and research institutions in the territory of the Republic of Kazakhstan;
- participation in the work of international, intercollegiate and intra-university scientific seminars and conferences in order to discuss and develop common approaches to solving professional problems;
- participation and organization of web seminars, online conferences and virtual meetings.

At the expense of the University's own funds, it is planned to undergo advanced training for teachers on the basis of cooperation agreements with universities (academic mobility, scientific internships, advanced training courses) at leading universities in the near and far abroad (Poland, Slovakia, Germany, Mongolia, China, Turkey, Russia,

Ukraine and Belarus). Also, advanced training is carried out off-plan at the expense of other sources of funding, these are funds from scientific grants, the Bolashak program, the grant “The best teacher of the university”, etc.

As part of the State Program on Forced Industrial-Innovative Development of the Republic of Kazakhstan in order to familiarize teachers with modern technologies, technological processes used in production, the university annually organizes internships for faculty members at domestic enterprises and research centers of the Republic of Kazakhstan.

A creative relationship has been established with scientists from scientific research institutes and centers of the Ministry of Agriculture and the Ministry of Education and Science of the Republic of Kazakhstan in carrying out complex projects within the framework of Republican scientific and technical programs on the basis of mutually beneficial contracts.

Professional and personal career growth is provided for by the Plan for the development of personnel potential (career growth) of the faculty for 2018-2020. The evaluation is conducted during the certification period and according to the results of the university’s annual teaching staff rating.

20% of the full-time faculty members who have experience in production on a permanent basis, and 20% part-time and as guest lecturers are involved in the implementation of the University EP.

In order to familiarize themselves with the current changes in the legislative, regulatory and legal framework, technological processes occurring in production, institutions, departments, as well as for the acquisition of practical skills by students, the heads of the department attract practitioners to implement EPs. Work experience in the real sector of the economy, the availability of professional skills, leading experts, managers of existing enterprises, is the main criterion for the selection of teachers, practitioners, which are reflected in the workbook, employee resume. Practicing teachers are attracted to give lectures on topical issues of the real sector of the economy, to conduct practical classes with elements of dual training, to conduct professional practices in production, to manage graduation projects, dissertations.

In order to provide the EP with professional highly qualified scientific and pedagogical staff in the direction of training specialists at the university, a personnel reserve plan has been developed. Heads of structural divisions (deans of faculties, heads of departments) carry out the selection of young specialists while maintaining the continuity of personnel for the implementation of EP. Selection and training of young professionals is



carried out during training in undergraduate, graduate and doctoral studies in scientific and pedagogical direction from among talented, creative students prone to pedagogical and research work, through involvement in the implementation of EP during training, passing pedagogical and research practice, participation in the implementation of the research department of the budget programs of the Ministry of Education and Science and the Ministry of Agriculture and other institutions and departments. Subsequently, after the completion of training, young specialists are sent for employment to the department as an assistant. During the period of work as an assistant, mentors from among the experienced teachers of the department are assigned to the young teachers.

The University has a Council of Young Scientists with a Plan and a Program to support young specialists. In the university staff, young scientists under 40 make up 30%, 251 people, of which 24 are PhDs, 28 are PhDs and 189 are Masters.

Every year more than 50 people are sent to participate in the Republican competition of young scientists for scholarships in the field of science and technology on the recommendation of the academic Council of the University. For example, every year more than 3 people become owners of the State scholarship for talented young scientists of the MES RK (in 2017, Utelbaev Yerlan Amanzholovich, Nogayev Adilbek Aidarkhanovich and Bakhralinova Aizhan Sagidulovna). Young scientists of the university are actively moving to participate in the scientific activities of the country. For example, VS Kiyan, Chairman of the Council of Young Scientists of the University, became a member of the NNS in the priority direction "Life Sciences and Health", a young scientist of the Faculty of Architecture S. Tyurin - July 03, 2017 in the days of the EXPO 2017 in the Israel pavilion held an interactive lecture for foreign students and teachers of Israel.

The university has traditionally held annual courses to improve pedagogical skills for young teachers "Innovations in the educational process of higher education" in the amount of 120 hours at the expense of the university's own funds. During the courses, young teachers master the basics of pedagogy, psychology and teaching methods, become familiar with the methodology of the educational process, and master modern technologies of teaching. Each year, they successfully complete the courses and receive certificates from more than 60 young teachers.

Professional and personal development of the faculty, self-improvement of skills, the acquisition of knowledge on the taught course of disciplines, implementing the EP is stimulated by the following types of allowances to the salary of employees: for teaching in English; for internship or study abroad; for the quality of scientific results; for the performance of administrative functions; according to the results of the rating system for

assessing the activity of a teacher (Regulations on the setting of allowances for the teaching staff of PUNPPS QMS 02.2052 - 2017).

Modern IT tools and technologies play an essential role in the formation of a new education system, and they make it possible to increase the efficiency and quality of the educational process in the context of transition to new educational programs. The implementation of standards in the conditions of the development of the information society makes new demands on the modern educational process and its subjects: the teacher and the student. One of the main principles of the implementation of EP is the active introduction of ICT in the educational process, and as a result, the development of IT competence of the faculty.

The main requirements for the IT competence of faculty members defined at the university are the formation and development of competence in the use of information and communication technologies at the public level, including the possession of IT technologies, search, construction and transmission of information, presentation of work performed, the basics of information security, the ability to safely using the Internet, watching videos, videos, animations when learning new material, developing multimedia presentations, conducting using a multimedia projector, electronic applications for textbooks and simulators, communication in the digital environment (e-mail, social network), creating presentations for classes, preparing and organizing the participation of students in Internet contests and quizzes, using the method of projects in extracurricular activities, to which students independently, using Internet-resources, prepare reports and multimedia presentations, use AIS "Platonus", electronic document management "ARTA", distance learning technologies, which paternoster testing, computer simulation and practical analysis of the results.

Over the past 3 years, the "Course project implementation system", the AC "Testing and Training System", the AC "Student Performance Monitoring System" have been developed and implemented, the Platonus AIS has been improved (PPS electronic journals, planning and formation of full-time faculty) , lecturing with the use of IT-technology; application of Delphi software in modeling agro-engineering systems; a new class of electronic educational materials has been created using all the possibilities of the Internet for teaching The students are doing. E-learning materials that are being developed and used at the present time by university teachers have both a linear structure (the material is presented sequentially page by page) and a hierarchical structure. They contribute to better assimilation of the material and are intended for interactive presentations. In the practice of conducting laboratory and practical classes, the faculty uses an interactive tour of Internet

resources, where students have the opportunity to familiarize themselves with the regulatory and technical base, how to use it, and solve situational problems. Great importance is attached to the provision of the educational process with modern technical teaching aids, in particular, projection and interactive equipment. Currently, the multimedia teaching equipment fleet consists of more than three hundred units: multimedia projectors - 237 units, interactive projectors - 49, interactive boards - 34. The speed of broadband Internet access in the 2015-2016 school year has been increased to 525 Mbit / s.

To improve the competencies of the faculty in the field of information and communication technologies, courses on the “Information Competence of the Teacher of Modern Higher School” are held.

One of the indicators of the Program and action plan for the introduction of innovative technologies for 2016–2020 into the educational process is the introduction of innovation and information technology into the educational process. The results of the achievement of the program indicators, monitoring the quality of teaching and students' knowledge, acquired skills and competencies of students in connection with the introduction of technology are reflected in the reports of the chairmen of the methodical commission of faculties, heads of departments, which are heard at the Methodological Council of the University educational process). The competence of teaching staff in the use of information technology is checked during the school year during reciprocal visits, holding open classes, intermediate and final controls, reports at university seminars and conferences. For example, university teaching staff is 100% using multimedia teaching aids in the educational process. All classrooms, laboratories are equipped with modern information technical training aids (projectors, interactive whiteboards, connected to Internet resources). Monitoring and evaluation of students' progress, conducting intermediate and final control is carried out through the AIS "Platonus". The university together with TsentrSOFT develops a new AIS 1C "UniversitetPROF" for the automation of educational services.

Leading foreign scientists are actively involved in the educational process at the departments of the university. Thus, in the 2015-2016 academic year, 27 foreign scientists were attracted from the state budget funds allocated by the MES of the Republic of Kazakhstan from leading universities in 13 countries of the world. In the 2016-2017 academic year, no budget funds were allocated to attract foreign scholars. However, the university has done work on finding other ways to attract foreign scientists to S. Seifullin KATU. Thus, during the reporting period, 4 foreign scientists gave lectures for students of S.Seifullin KATU within the framework of the Fulbright program of the USA, the EU

Erasmus + program free of charge for students of the university. Asym Yesen, a professor at the Polytechnic Institute and the University of Virginia (USA), during one academic year, gave lectures to students in the agronomic and VITZ faculties as part of the Fulbright program; Doctor of Agricultural Sciences of the Krakow Agricultural University (Poland), Maria Pobjniak, within the framework of the EU Erasmus + program, gave lectures for students of the agronomical faculty; Doctor of Veterinary Medicine, University of Giessen Y.Libiha Christian Bauer gave lectures for students of the veterinary faculty and a professor from the Korean University (Seoul, Korea) Son Soo Lim for one month gave lectures and conducted practical exercises at the Faculty of Economics free of charge.

Along with foreign teachers, in the 2015-2016 school year, S. Seifullin KATU was visited by 4 experts, and in the 2016-2017 school year, 6 experts from the University of California Davis (9 people) and the University of Arkansas (1 person) for joint development 6 educational programs of magistracy in the framework of the SPIID.

In addition, from 15 to 24 October 2016, S. Seifullin KATU was visited by Honorary Professor Paul Singh from the University of California at Davis (USA) to conduct seminars and master classes for teachers, specialists and students of S. Seifullin KATU also within the framework of the SPIID.

In the 2017-18 school year, 9 foreign scientists were involved in the framework of the EU Erasmus + program, who gave lectures for students in the agronomic, technical, energy faculties, 1 foreign scientist gave lectures for students in the VTZh faculty under the DAAD program.

The faculty of the University takes an active part in the development of Astana, participates in various activities of the republican, regional, city akimats, MES RK, Ministry of Agriculture, educational institutions, science and culture. Supporting initiatives in the field of education, science, branches of economy of the Republic of Kazakhstan; the faculty of the University actively participates in the development of the regulatory framework, recommendations, test items; preparing expert opinions on the quality of textbooks, monographs; organizing exhibitions of education and scientific achievements, subject Olympiads for students and schoolchildren. For example, university scientists are invited to speak on television and radio of the republican broadcasting. The media publishes articles of teachers on topical issues in the field of agrarian economics, agriculture, etc. The university holds annual sports events among the faculty members of the university "Vigor and Health". There are sports sections in basketball (men, women), volleyball (men, women), futsal (men, women), boxing, weight-lifting, arm wrestling, togyzkumalak, chess, belt wrestling, Kazakh kuresi, judo, table tennis, athletics, skiing and

2 groups of health (men, women), where more than 464 teachers and employees of the university are involved.

University teams annually take part in the city university game among universities in 15 sports, where they are not winners in the team event. The combined futsal team of teachers and university staff are the owners of the Cup of the Ministry of Agriculture.

Abidildin Zhanat, trainer and teacher at the Department of Physical Education, won the silver medal at the 2016 World Weightlifting Championships in Germany and became the 2018 Asian Arm Wrestling Champion. The university staff is actively involved in charity events to provide material assistance to victims of natural disasters, low-income large families, treatment of seriously ill children, etc.

Development of activities in the life of society and stimulation of teaching staff is carried out by including in the rating points for participation in public work (Regulations on the setting of allowances for teaching staff).

## 10 RESEARCH WORK

To date, research and innovation activities S.Seifullin KATU is aimed at the scientific and technological development of the agro-industrial complex:

- creation of highly productive agricultural breeds of animals and stress-resistant varieties of plants, using advanced biotechnological methods of selection;
- development of complex technologies of precision agriculture based on “big data”, electronics and robotics, unmanned aerial vehicles, nano and picosatellites, swarm intelligence, highly accurate weather forecasting, etc.
- development of technologies for resource-efficient local agriculture (\* LEISA technologies), including organic agriculture, integrated protection against pests and diseases, water and soil conservation agriculture, natural resource management;
- development of smart technology and power engineering;
- processing of agricultural products of plant and animal husbandry, veterinary medicine; fish farming.

The basis for the development and implementation of research and development at the university is the Law of the Republic of Kazakhstan "On Science" dated February 18, 2011 No. 407-IV; Decree of the President of the Republic of Kazakhstan of December 7, 2010 No. 1118 “On Approval of the State Program for the Development of Education of the Republic of Kazakhstan for 2011–2020”, Model Rules for the Activities of Higher Education Organizations No. 495, approved by the Government of the Republic of Kazakhstan dated May 17, 2013 Additions to the Decree of the President of the Republic of Kazakhstan dated March 19, 2010 No. 957 "On approval of the List of state programs"; The state program "Digital Kazakhstan", approved by the Government of the Republic of Kazakhstan No. 827 of 12/12/2017; aimed at the implementation of the Strategy "Kazakhstan-2050", the message of the Head of State "The Third Modernization of Kazakhstan: Global Competitiveness" dated January 31, 2017; The state program of industrial-innovative development of the Republic of Kazakhstan for 2015-2019, the State program for the development of the agro-industrial complex of the Republic of Kazakhstan for 2017-2021, the State program for the development of education and science of the Republic of Kazakhstan for 2016-2019, as well as the "Development Program S.Seifullin University "for 2016-2020".

The research activities of S. Seifullin KATU are carried out within the framework of republican priority areas:

- Rational use of natural, including water resources, geology, processing, new materials and technologies, safe products and structures;
- Energy and engineering;
- Information, telecommunication and space technologies, scientific research in the field of natural sciences;
- Life and health sciences;
- Scientific basis "Magilik el" (education of the XXI century, basic and applied research in the field of humanities);
- Sustainable development of the agro-industrial complex and the safety of agricultural products.

JSC " S.Seifullin KATU" since November 2016 is part of the Alliance of Agricultural Education and Scientific Innovations of the Silk Road and unites 69 leading agricultural universities and research centers from 13 countries. At the second meeting of the Alliance, held at the base of S. Seifullin KATU on July 3-4, 2017, general technological problems in the agro-industrial complex were solved in Astana. In addition, the participants discussed the prospects for the further promotion of energy-saving technologies and alternative energy sources in the agricultural sector for 2018 - 2020. During the Astana meeting, a Memorandum was signed on the entry into the Alliance of another 10 higher educational institutions from Kazakhstan, China and Russia. The third meeting of the alliance will be held in July this year on the basis of the Institute for Field and Vegetable Crops in Serbia. In the creation of the Alliance, the advantage is that common problems in the field of agriculture are identified and solved together, training for the agricultural sector, exchange of agricultural innovations, technology transfer in the agro-industrial sector.

Research activities of the Kazakh Agrotechnical University. S.Seifullin is built on the principle of improving the knowledge generation system, building an effective transfer system, commercializing scientific knowledge and developments in various sectors of the country's economy, engaging all the main units of the university in the research process and creating appropriate conditions for scientific activity.

PPS Kazakh agrotechnical University. S.Seifullin carries out fundamental and applied research and development with technology transfer, which are an integral part of the training of specialists. Teaching staff and students are maximally involved in funded scientific research, which has created favorable conditions for the continuous improvement of the scientific competence of the teaching staff. Such an approach made it possible to increase the effectiveness of scientific research at S. Seifullin KATU and ensured the

synchronization of the processes of generating new knowledge and its transfer to students. The results of research have become part of the new educational curriculum, with the aim of possession of graduates, at the end of training advanced knowledge, skills of scientific work and the practical application of innovation.

The development program of the S.Seifullin Kazakh Agrotechnical University JSC for 2016-2020. is the main strategic document. The same document regulating research and development is the organization standard: "Maintenance of educational and scientific equipment", "Regulations on the establishment of allowances", "Regulations on the encouragement of employees of S.Seifullin KATU" for publications in cited scientific publications ", " Regulations on attracting foreign scholars at JSC S. Seifullin KATU, "Regulations on the system of material incentives for teaching staff, departments and faculties in nominations".

On the basis of KATU, in partnership with the world's leading research universities, research organizations, domestic research organizations and universities, competitive research is being conducted using the mechanism of integrated scientific and technical programs. So, according to program 217 "Development of science", subprogram 101 "Program-targeted financing of subjects of scientific and / or scientific and technical activities", by priority "Life Sciences", by sub-priority "Scientific bases of increasing productivity and sustainability of plants and animals" in partnership with the University of Adelaide (UA, Australia), with Karaganlinsky Scientific Research Institute of Crop Production and Breeding LLP, with the Niva Farm, and the AIT Barayev Scientific and Production Center for Grain Farming 2015-2017: Implementation of Modern Foreign molecular technology oh biology and genetics in the selection process of crops in order to create a fundamentally new high-yielding drought-resistant varieties for the arid climate of Northern Kazakhstan. The goal of the Program on the integrated transfer of modern technologies to create fundamentally new, stress-resistant genotypes of wheat and other crops with the aim of their subsequent use to improve and update the lines and varieties cultivated in North and Central Kazakhstan is fully implemented.

The fundamental transformation of the system of training highly qualified personnel and scientific research is carried out with the participation of research partners of the University of California at Davis (UCDavis, USA), the world's leading research university in the field of agricultural education and science.

For the implementation of the university development program, gradual indicators of the implementation of R & D activities have been brought to the faculties. At a meeting of the Scientific and Technical Council of KATU them. S. Seifullin, taking into account



national priorities and objectives under the program "Strategy" Kazakhstan-2050 ": a new political course of the established state", the State program for the development of the agro-industrial complex in the Republic of Kazakhstan for 2013 - 2020, "Agribusiness 2020", "Strategy "Kazakhstan-2030": Prosperity, security and improvement of the welfare of all Kazakhstanis ", the State Program for Industrial Innovative Development of the Republic of Kazakhstan for 2015-2019, the State Program for the Development of Education The Republic of Kazakhstan for 2011-2020 approved the priorities of the scientific activity of the university.

The spectrum of scientific research at the University is aimed at solving urgent problems of paramount importance for increasing the efficiency of the agro-industrial complex. The priority research identified:

1) .Sustainability of agricultural production in Kazakhstan: a stable level of production, quality and range of domestic agricultural products, sufficient to meet their own food needs and sustainable exports.

2) Adaptation of agriculture of the Republic of Kazakhstan to the effects of global climate change: increasing the stress tolerance of agricultural crops due to genetic and technological factors, introducing new types of agricultural crops into circulation, monitoring changes in the cow base, background of pests and diseases, and other issues.

3) Rational use of natural resources in the process of agricultural production: prevention of soil degradation, organic agriculture, restoration and improvement of soil fertility, sustainable management of pasture, forest, water resources, reduction of greenhouse gas emissions, other issues.

For the future, the research activities of the university are focused on increasing the share of income from research in the total income of organizations. To perform the tasks, problem scientific laboratories, centers, and research institutes are being opened. The material and technical base of research institutes, centers and the university itself is being strengthened to carry out research and development. The number of funded projects is increasing, where the faculty of the university is maximally involved in the research process. The opening of scientific research institutes and the increase in projects gives the opportunity to actively attract leading scientists from other scientific organizations and universities, who publish works in various international cited scientific journals, undergo training, report research results in republican and international scientific conferences and take part in scientific competitions.

Today, on the basis of 43 departments, there are 24 research institutes, centers and platforms, the Northern branch of the Kazakh Research Institute of Fisheries, a milk

production processing workshop and a meat processing production workshop, an experimental mini-bakery and mini-farm, poultry laboratory, laboratory "Agri-environmental research" and laboratory "Soil research", a list of research institutes and centers in the annex and 16.

An office for technology commercialization has been established and is functioning.

The reporting year is a continuation of the implementation of S. Seifullin's KATU strategy on transformation into a modern "Western type" research university with a phased transition to autonomy and further deepening of integration into the global scientific and educational space, and provided for solving such tasks as:

- training of specialists and scientific and pedagogical personnel that meet the needs of the industrial and innovative development of the Republic of Kazakhstan;

- integration into the international educational and scientific space in order to establish mutually beneficial cooperation with leading universities and research centers of a similar profile;

- improving the efficiency of knowledge generation and ensuring effective management of knowledge transfer processes in the real sector;

- Strengthening the connection of education, science and production through the development of scientific products and technologies demanded by practice;

- improvement of social protection and material and technical base of the university.

To fulfill the university development program, target indicators of the implementation of R & D activities were brought to the faculties. In order to achieve indicators of the participation of faculty members in the state programs for financing science, a plan was developed for the development of research activities of the departments, reviewed at a meeting of the Scientific and Technical Council of S. Seifullin KATU.

Weekly, during the preparation of projects and programs, step-by-step monitoring of the state of readiness of the teaching staff applications was carried out to participate in announced competitions.

As a result, in 2015, 232 applications were submitted for grant financing and were approved by 53 projects according to 5 priorities: "Rational use of natural resources, processing of raw materials and products" - 16 projects, "Information and telecommunication technologies" -1 project, "Life Science" -24 projects, "Intellectual potential of the country" -12 projects. 9 applications were submitted for program-targeted funding and were approved: 1 program on the priority "Science of Life".

In 2018, the same activities were carried out for the preparation of the teaching staff applications for competitions for grant and program-targeted funding and stage-by-stage monitoring. 211 applications were prepared, of which less than 20 to 36 points received 181 applications, but only 25 projects were approved for funding, table 14.

Table 14 - Number of applications submitted for grant financing and targeted funding for 2015-2017 and 2018-2020

	For grant financing		On program-targeted funding	
	2015-2017	2018-2020	2015-2017	2018-2020
Number of projects and programs submitted	232	211	9	19
Received funding	53	25	1	1

Concerning the monitoring of the effectiveness and efficiency of research, it should be noted that commissions are received annually at faculties for accepting experiments and maintaining primary documentation for projects carried out within the framework of funded research.

Within the framework of the program 217 “Development of Science” of the MES RK, monitoring of the implementation and effectiveness of scientific, scientific and technical projects and programs No. 13 / 16-5 was held, chaired by the Vice-Minister of Education and Science of the Republic of Kazakhstan Amrina A.K June 2017, with departure to the monitoring sites of expert groups, approved by order of the Committee of Science of the MES of the Republic of Kazakhstan No. 42-h of June 9, 2017.

In 2015-2017, S. Seifullin KATU conducted research within the framework of grant, program-targeted funding for the budget programs of the MES RK: budget program 217 "Development of Science" subprogram 102 "Grant funding for research" - 48 projects Targeted program financing”- 1 project and the Ministry of Agriculture of the Republic of Kazakhstan on the budget program 212“ Applied scientific research in the field of agriculture”- 13 projects. For all 48 projects and 1 program, the Monitoring Report and the report on the expenditure of funds were prepared and signed.

As part of program-targeted funding of the program 212 “Applied scientific research in the field of the agro-industrial complex”, the Ministry of Agriculture on 13 projects annually received tests and checked the progress of research, in accordance with the orders of coordinating organizations.

The analysis of the monitoring showed that all the activities in the framework of the schedule and the R & D schedule were fulfilled, for all the years the published materials were provided and are available, the expected results were achieved, the allocated funds were aimed at achieving results and project implementation.

The university, in partnership with the world's leading research universities, research organizations, domestic research organizations and universities, has identified research areas. Priority scientific directions of the university are based on the achievement of the objectives of the Strategy “Kazakhstan - 2050”, the Program of development of the agro-industrial complex in the Republic of Kazakhstan for 2013-2020 “Agribusiness - 2020” and on other program documents determining the priority directions of the development of science of the Republic of Kazakhstan and priority ones for the world agricultural Sciences aimed at the formation of competence, missing or not developed in Kazakhstan.

Further, from the priority directions of the university, faculties and departments form their own directions. When forming research programs in priority research areas, it is necessary to ensure the integration of advanced fundamental and applied research within a single organizational structure, research objectives and research infrastructure.

After signing contracts with program administrators, internal documents are drawn up. Based on the approved estimates of project costs, staffing and staff information, the personnel management department issues an order to accept employees (members of the research team) for the period of research into the project. In order to record and monitor the participation of teaching staff in research, after the issuance of an order, the entire research group is listed in a family-owned way into the automated information system “Personnel of the University” where employees are kept in categories, separately teaching staff, taking into account their academic degree, as well as students undergraduates and doctoral students.

Issues of the effectiveness of research in the first place are considered in the departments: hearing the calendar plans of research, programs and methods of research, annotated and annual reports, purchase of purchased equipment, distribution of students and undergraduates and doctoral students. The Department of Science and Innovation, in order to achieve the effectiveness of research, monitors the implementation of the calendar plan by project managers. According to the agreement, the program administrators, the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan, the Ministry of Agriculture and others request quarterly or semi-annual annotated reports on the results of project implementation. On the basis of reports, the Department of Science draws up acts of completed work and the administrators of

programs and projects evaluate the results obtained for completed tasks of schedules, on the basis of which the university obtains approval for the next funding tranche.

Heads of projects and programs on the conduct of research and the results obtained, and other issues arising in the conduct of research, report to the Scientific and Technical Council of the University (Next-NTS).

Reports are usually divided into chapters, and when writing a consolidated report, each project performer, consisting of the number of faculty members of the university, provides information for its specific section of work.

The amount of funding for the reporting period with the titles of the programs are presented in Table 15.

№	Program Name	2015		2016		2017 ( 15.12.17)	
		Number Of proj.	amount of financial development	Number Of proj.	amount of financial development	Number Of proj.	amount of financial development
1	212 "Applied scientific research in the field of agriculture", Ministry of Agriculture of the Republic of Kazakhstan	12	46754,12	13	54732,82	13	59732,82
2	217 "Development of Science", sub-program 102 "Grant funding for research", MES RK	56	412664,82	48	364791,62	48	307944,07
	217 "Development of Science", sub-program 102 "Grant funding for research", MES RK	1	30000	1	80000	1	80000
3	The program "People in the stream of history", the Foundation of Science	2	5 520,00	2	6570,704		
4	Contracts with economic entities	7	21079,263	28	35863,602	26	44342,846
	<b>total</b>	<b>78</b>	<b>516018,2</b>	<b>92</b>	<b>541958,7</b>	<b>88</b>	<b>492019,7</b>

Analysis of the table shows that the amount of financing in 2015 amounted to 516018.2 thousand tenge, in 2016 financing is 5.03% higher than in 2015 and amounted to 541958.7. Financing in 2017 was 492019.7 thousand tenge, which is 9.2% lower than the previous one, due to the fact that the “People in the stream of history” program for the Science Foundation was completed in 2016, and in 2017, due to by carrying out the International Specialized Exhibit EXPO Program 217 “Development of Science”, subprogramme 102 “Grant funding for scientific research”, the MES RK was sequestered by 10% throughout Kazakhstan, including our projects.

The effectiveness of research in the university is evaluated by the quality of the implementation of the tasks of schedules and the achievement of goals. Analysis of the effectiveness of research on the final result obtained by the department of science. Vice-Rector, Head of the Center for Science and Innovation, reports on the effectiveness of research at the academic council of the university. This is a complete analysis of research results, the number of new technologies developed, experimental design developments, scientific methods, patents obtained, the number of articles included in the Web of Science, Scopus, RINZ, SCEC, recommendations, monographs, and others. the interim and final reports at the NCSTE shall be filled out with an information card describing the specific results obtained for the evaluation of Kazakhstani and international experts.

On the basis of applications from faculties, the university draws up a consolidated plan of publications of scientific publications of the faculty of the university, in journals included in the Web of Science database, Scopus, RSCI, CCIA, which is approved by the vice-rector and head of the center of science and innovation, the plan is supervised by the science department. In order to conduct high-quality research and the correctness of the research results, the executive responsible from the department of standardization of metrology and certification annually collects from the department a list of verified equipment for the coming year and draws up a plan for carrying out scientific equipment verification at the university through the public procurement department.

In order to ensure objectivity of R & D assessment, the science department through the electronic document management program ARTA Synergy notifies faculties and at the same time all project and program managers about the creation of commissions for accepting primary documentation and experimental field research conducted within the framework of funded R & D. The results of the acceptance of scientific field experiments are discussed at the faculties, then at the NTS. If comments are found, measures are taken to eliminate them. The department of science participates in the work of the commission of

experiments and controls the conduct of research, checks reports for compliance with the calendar plan, prior to their submission to the NCSTN.

The effectiveness of research is assessed by published recommendations, monographs, articles, etc. According to the results of research work, the number of scientific articles published in journals with non-zero impact factor included in the Web of Science and Scopus database are presented in Table 16.

Table 16 - Scientific publications of the faculty of the university (12/15/2017)

Year	Monographs	recommendations	Total articles	In Kazakhstan scientific journals, listed in the Committee on Control in the Field of Education and Science	In magazines with impact factor (in the Web of Science (Thomson Reuters) and Scopus	In scientific journals indexed in the Russian citation database of the RSCI	Other publications (in journals without impact factor, in collections of conference materials)
2015	12	7	1401	196	39	160	1017
2016	14	20	1643	206	103	136	1231
2017	41	63	1693	386	117	450	738
2018	7	-	807	168	25	189	425
	74	90	5544	956	284	935	3411

From 2015 to 2017, the dynamics of scientific publications can be traced. However, it should be noted that the main results were obtained in 2016 and 2017, and therefore the number of monographs, recommendations and published articles in these years is greater. A total of 284 articles published in the Web of Science database in the reporting years, including two articles in journals with an impact factor of 4.0-4.45, 74 monographs, 90 recommendations, and 7 Eurasian patents received.

To date, within the framework of the budget program 217 of the Ministry of Education and Science of the Republic of Kazakhstan for grant financing from among the submitted 230 projects and programs for 2018–2020, 24 scientific projects have been supported by the NNS decision and by the decision of the All-Russia Scientific and Technical Committee 1 a total of 301,503.26 thousand .tenge

All projects and programs for the research conducted in 2015–2017 and started in 2018 are registered at the National Center for State Scientific and Technical Expertise and are listed in Appendix 17.

The research work of students is one of the most important means of improving the quality of training and education of specialists with higher professional education who can creatively apply the achievements of scientific, technical and cultural progress in practical activities. Attracting students to research work allows you to use their creative potential to solve actual problems of research.

The research work of students is a continuation and deepening of the educational process and is organized directly in the departments. The management of the research work of students is carried out by professors and teachers of the university

According to the regulations on the research work of students, the regulations on the student scientific circle in each department there is a scientific student circle, where work is under way to attract students to engage in research work.

It discusses with students the elements of independent scientific work, the topics of course and theses and their implementation. The best authors participate in scientific conferences, competitions and are involved in funded R & D.

At the Academic Council, where the Vice-Rector, the Head of the Center for Science and Innovation, reports annually on the results of the university's scientific activities, the decision of the Council to execute the project and program managers are students, undergraduates and doctoral students. As a result, students were involved from 2015-2017 in 56 projects within the framework of grant financing, in 13 projects within the program-targeted financing of the MES RK and the Ministry of Agriculture of the RK and in 25 projects and programs.

Students involved in the SRW perform term and theses, master and doctoral dissertations in the framework of the project. At the agronomical, technical and faculty of veterinary and animal husbandry, the involvement of students in the summer period for field work is widespread. Students are massively involved in the experimental plot to carry out planting, weeding, watering, cleaning, preparation of experiments for acceptance, removal of equipment to the field and assembly of working bodies, taking blood from animals, taking into account the reproductive function of animals, curating sick animals with various pathologies, examination of food products, for the study of the sanitary condition of livestock farms, veterinary clinics of Astana city, when performing health and recreational activities of utilities, etc. aspirants in SRW included in the staffing of the project schedule, in the calculation provided for salaries, travel expenses. The certificate of



the employees involved in SRW spells out the deadlines for their participation by months, and the labor contract for the duration of the SRW part-time job contains an employee schedule with the name of the list of works in the project. All students are accepted into the project as: agronomists, engineers, laboratory assistants, researchers, employees, etc. Table 17 shows the number of students involved in the SRW.

Table 17 - Participation of students of S. Seifullin KATU in SRW for 2015-2017

Categories involved	2015г.	2016г.	2017г.	2018 (на 01.06.2018)
doctoral students	26	30	20	19
undergraduates	92	70	67	30
students	98	122	149	42

Attracting students to SRW will allow students to master the scientific method of knowledge, in-depth and creative development of educational material; teaching methodology and means of self-solving scientific problems; instilling skills in research teams, familiarization with the methods and techniques of the organization of SRW

In order to facilitate the presentation of scientific positions of researchers, teaching staff and students at various scientific sites, including publications of scientific results of the university, 29 electronic resources are available to users of a higher education institution, from 11 to 11 licensed, 18 to open access. Since 2017 in the scientific library of KATU named after S.Seifullin, access to the Scopus and "Scival" databases has been organized.

University librarians carry out an active function of supporting the publication activity of scientists, providing advice, informational support and educational services.

Employees of university libraries advise teachers and employees of the university on the use of Russian and international scientific citation databases, including: search for authors' publications; attaching publications and links to the author's profile; identification of the organization in the publications of the author; determination of the citation index and the author's Hirsch index; determining the impact factor of journals in which the author is published; assist in the selection of magazines for publication.

Library specialists create and place on their websites annotated lists of scientific citation databases, methodical recommendations for effective work with databases, dictionaries of terms. For example, the list of "International citation bases", "Terms and definitions", links to the presentation of "Instructions for the use of electronic resources", an invitation to seminars on the website of the scientific library.

Using the methods of bibliometric analysis, reports are prepared in numbers, which

objectively characterizes the scientific productivity of an individual scientist; identifies potential collaborators and partners for him; determines the cooperation potential, etc.

Bibliographic and scientometric studies are conducted at the request of scientists and the university administration; Work is underway with the profiles of scientists in the Scopus database.

The library conducts training seminars and trainings on working with the database of scientific citing and improving the indicators of authors' publication activity on the topics: "Using Scopus to improve research results", "Research and writing papers: increasing your research productivity" and "Who quotes you? Tracking the effects of your research. "

Traditionally, for orientation in matters of modern science assessment by bibliometric methods for teachers and scientists of S.Seifullin KATU, the library organizes training seminars, including with the assistance of specialists from leading international scientific publishers, aimed at improving the quality of publications and research.

The total number of training workshops held in 2017 alone is 53, the number of participants is 1131 people, of which: 5 seminars with the participation of representatives from companies; 411 participants; Librarians conducted trainings on the use of electronic resources - 48, participants - 720 people. Almost every university faculty interested in writing high-quality articles has been trained more than once. The results of the conducted assistance for the teaching staff and students are presented in the table of published publications, where the dynamics can be traced many times in Scopus and Web of Science, presented in Table 3 above.

In order to promote the scientific results of S.Seifullin KATU, the university publishes a quarterly scientific journal "Bulletin of Science of the Kazakh Agrotechnical University. S.Seifullin "in the following areas: biological sciences; Technical science; agricultural sciences; economic sciences; veterinary sciences and humanities. Electronic versions of scientific journals "Herald of Science of the Kazakh Agrotechnical University. S.Seifullin "available on the university website [www.kazatu.kz](http://www.kazatu.kz).

According to the National Center for Scientific and Technical Information, the scientific journal of the university "HERALD of Science of the Kazakh Agrotechnical University. S.Seifullin "is included in the list of leading Kazakhstan scientific journals with high impact factor (IF) by the branches of the agro-industrial complex and is included in the list of scientific journals recommended by the Committee on the Control of Education and Science of the MES RK for publication of the main results of scientific activities on agricultural and veterinary sciences. In Kazakhstan, the KazATU Science Bulletin magazine's IFU Citation Base is 0.012 in 2013, and 0.028 in 2014, 0.055 in 2015, which is

0.027 units higher, and 0.053 in 2016, which indicates an improvement in the quality of published articles in the journal. The faculty of the university are actively printed in the Bulletin of S. Seifullin KATU.

Today, we strive to enter the world's largest single reference database SCOPUS. The criteria for including scientific journals in the Scopus database, as in the list of publications recommended by the Committee (in our case for other branches of science), are almost identical. In order to publish a high quality journal that determines authority, it is necessary to publish articles by authors from different workplaces, international scientific authority of leading members of the editorial board and diversity of their workplaces, quoting of members of editorial boards and authors of journals that are already indexed by Scopus. own website with English versions of pages.

An important indicator of the effectiveness of the university is the level of demand for scientific production of university staff published on the basis of scientific conferences.

In 2015, the International Scientific Forum "Restoration and recultivation of degraded forests", the First International Scientific and Practical Conference "Healthy Nutrition, the Ark of Taste of Kazakhstan", the Third International Forum "Gymyz - 2015", and also the 1st Republican Scientific and Theoretical Conference "Seifullin Readings" were held 11: Youth and Science ", scientific-practical conference" Prospects for the profitability of high-tech projects in rural areas ", round table" Training and advanced training of specialists for the use of GIS technologies. " Total published 8 collections of papers.

In 2016, on the basis of S. Seifullin KATU, the Republican scientific-theoretical conference "Seifullin readings - 12: " Young people in science - the innovative potential of the future ", the International scientific-practical conference " Economic problems of industrial-innovative development of the agro-industrial complex: state and prospects "Dedicated to the 70th anniversary of the academician, Abuova K.K. Also on the basis of the university an International Scientific and Practical Conference was held: " Organic Agriculture in the Republic of Kazakhstan: Present and Future "(June 30-June 1 I, 2016) October 27 - 28, 2016, the International Scientific and Practical Conference: "Veterinary in the XXI century: problems, methods, solutions" was held, dedicated to the 100th anniversary of the birth of the founder of veterinary helminthology in Kazakhstan, doctor of veterinary sciences, professor Kadyrova N.T. According to the results of the conferences 7 collections of papers were published.

- In 2017, the university held a conference "Seifullin readings - 13: Preserving traditions, creating the future", dedicated to the 60th anniversary of the S.Seifullin Kazakh

Agrotechnical University, focused on unlocking the potential of talented youth and creating an open discussion platform to discuss issues of their interest. Following the conferences, 10 collections of papers were published. The University also hosted the XIII International IEEE and Eurasian Energy Conference SIBCON-2017 (June 29-30, 2017). This scientific symposium was held for the first time in Kazakhstan. The initiator of the forum, organized as part of EXPO-2017, was S.Seifullin Kazakh Agrotechnical University. The conference was attended by over 120 scientists from 10 countries. His program includes 167 works of scientists from Kazakhstan, Russia, USA, Germany, Poland, Ukraine, Belarus, Iran, Syria, Egypt.

July 3-4, 2017, the second meeting of the Silk Road Alliance for Agricultural Education and Scientific Innovations was held. The main topic of the meeting was the development of a Joint Work Plan for agricultural universities and research centers of the Silk Road region for 2018–2020 to solve common technological problems in the agro-industrial sector. Rectors, heads and leading scientists from 50 universities and research centers of the Republic of Kazakhstan, the People's Republic of China, CIS countries, the European Union and the Middle East took part in its work.

On April 25, 2018, the Republican Scientific-Theoretical Conference "Seifullin READINGS - 14: Youth, Science, Innovations: Digitalization - A New Stage of Development" was held. Following the conferences, 5 collections of papers were published.

On May 30-31, 2018, the First German-Kazakhstan Agrarian Forum "Digitization of Agriculture" was held. In the future, to enhance the reputation of S. Seifullin KATU in the system of world agrarian science, together with partner organizations, international conferences on the most relevant areas of scientific research starting from 2019, the conferences will be fully held in English.

Since 2014, the university has developed a provision for the establishment of allowances for faculty, including a premium for the quality of scientific results, ie for the Hirsch index and a provision for encouraging employees for publications in cited scientific journals. The size of the award depends on the impact factor of the article and on the frequency of publication and quartile of the journal.

In addition, within the framework of the developed regulation on the system of material incentives, the faculty of the university for the year are awarded in the following nominations:

- 1) "The best teacher";
- 2) "University Leaders";

- 3) "Effective teachers";
- 4) "The best dean";
- 5) "Effective deans";
- 6) "The best department heads";
- 7) "Effective department heads";
- 8) "Effective scientist";
- 9) "The author of the textbook / scholarly manual";
- 10) "The author of the best article";
- 11) "The best language training";
- 12) "The best curator";
- 13) "Effective curators";
- 14) "The best coaches."

In order to encourage collective achievements, the following nominations have been established:

- 1) "The best department";
- 2) "The best faculty."

By providing assistance to the implementation of research team achievements in the educational process, the university provides a modern and relevant nature of education, a high scientific and methodological level, students' interest in acquiring knowledge and prospects for their use in their future profession, and also introduces students to such forms of scientific activity, as a design and research work, performances at scientific conferences, participation in competitions of scientific works, publication in periodicals , Collections of works, co-author with patenting.

The implementation of the obtained scientific results in the educational process at the university is carried out in various forms: in developing courses of lectures, workshops, textbooks and teaching aids, introducing the results of dissertation research in the form of methodological developments, attracting students to educational and scientific work, proposals, recommendations, references , reviews, analytical notes; monographs, articles, theses; scientific reports, new methods, research methods and other scientific achievements.

According to the results of research in the framework of the budget program 217 “Development of Science”, under subprogramme 102 “Grant funding for scientific research” for 2015–2017, 41 monographs, 63 recommendations, more than 16 textbooks and teaching aids were published as part of program-oriented funding of scientific research. that are embedded in the educational process.

Academic disciplines that use research results.

At the Faculty of Veterinary and Livestock Technology, the results of SRW, obtained in the framework of completed research projects, are reflected in the educational process as follows.

The monograph "Resource-saving feed additives to increase the productivity of cattle", the authors Baldzhi Yu.A., Sheyko Yu.N., Polyakov V.V and others, 2017, the monograph "Modern aspects of quality control and food safety," the authors Baldzhi Yu.A., Mikanov B.S, Adilbekov Z.Sh., 2017, is used in studying the discipline "Industrial production technology and processing of livestock products "for undergraduates of the profile direction of the specialty 5B080200 -" Technology of production of livestock products ". And also for undergraduates of the scientific and pedagogical direction of the specialty "Technology of production of livestock products" in the discipline "Innovative technologies in animal husbandry." In addition, the results of SRW are included in the discipline "Veterinary-sanitary examination of livestock products" on the topic "VSE and basics of milk production technology" for students of the specialty 5B120200 - "Veterinary Sanitation", "Food Safety".

In the magistracy in the specialty 5M120200 - "Veterinary Sanitation": on the subject "Modern Problems of Veterinary Sanitation", "Safety of National Dairy Products", "Safety of National Meat Products." In the doctoral program on the specialty 5D120200 - "Veterinary Sanitation": on the subject "Veterinary- sanitation examination of livestock products under the influence of man-made factors ”,“ Veterinary-sanitary examination of national products (koumiss, shubat, kazi, meat products) ”.

When studying the Rabbit discipline, the recommendation “Technology of growing accelerated rabbits in the conditions of Northern Kazakhstan” is used (authors, Islamov E.I., Shauenov S.K., Kazhgaliev N.Zh., Saginbaeva M.B, 2017) developed according to the SRW results for the project “Develop a technology for growing accelerated rabbits in the conditions of Northern Kazakhstan”.

When studying the undergraduate and graduate disciplines "Ichthyology", "Aquaculture", "Artificial fish farming", "Fish farming", "Fish nutrition" recommendations are used "Increasing the production of fish products in conditions of lake-commercial fish farms" (authors Syzdykov K.N. , Kurzhykaev Zh.K., Kuancheleev Zh.B., 2014), “Integrated cultivation of fish and plants in aquaphone installations” (by Syzdykov K.N, Kurzhykaev Zh.K., Kuancheleev Zh.B., 2017).

In the disciplines of baccalaureate "Epizootiology and Infectious Diseases of Animals", "Epizootological monitoring and organization of veterinary activities", the

Master's discipline "Prevention and control measures against infectious animal diseases" began the use of the monograph "Epizootology of rabies in Kazakhstan" (by Abdrakhmanov S.K., Beisembaev K.K, 2018), "Epizootiology and risk assessment of anthrax in Kazakhstan" (authors: S. Abdrakhmanov, E. E. Mukhanbetliyev, 2018).

The SRW results of the agronomic faculty are used in academic disciplines: fodder production - "Cultivation of forage crops in the green conveyor system" (by Stybayev G.Zh., 2017), crop production - "Lentils in the north of Kazakhstan" (author Kipshakbayeva AA, 2017 r.), "Sunflower cultivation using natural zeolites in the conditions of Pavlodar region" (authors: Kulzhanova S.M., Mukhamedkarimov K.M., Popov V. et al., 2017) selection - "Results and development prospects in the north Of Kazakhstan spring triticale breeding in the framework of international Russia-Kazakhstan cooperation "(Kurishbayev A.K, Lukin S.M., Tysenko A.M., Shvidchenko V.K. et al., 2017), "Diagnosis of viral diseases, recovery and reproduction of seed potatoes in Republic of Kazakhstan "(authors Khasanov V.T., Beysembina B., Sidorik A.I., 2017).

At the technical faculty of the department "Agricultural machinery and technology" during bachelor, master and doctoral students of specialties 5B080600, 6M080600, 6D080600, the results of the monographs "Mechanization of seed seeding" were applied for the following classes on the disciplines "Agricultural Machines", "Agrotechnological Machines", "Regulation and Aggregation" grain crops and the application of mineral fertilizers ", author Aduov MA 2009, "Seeders for resource-saving technology of cultivation of agricultural crops", authors Aduov M.A., Nukusheva S.A. 2015, "Seeders with combi-open coulters for direct sowing of grain crops", authors Adouov M.A., Kapov S.N., Nukusheva S.A. 2018. At the department of "Technical Mechanics" when conducting classes in the disciplines "The mechanization of the differentiated application of mineral fertilizers" and "The scientific basis of precision farming" for undergraduates and doctoral students of specialties 6M072400 - "Technological machines and equipment" and 5B080600 - "Agricultural machinery and technology "The monograph" The Scientific Foundations of Intraground Differentiated Mineral Fertilizers in the Precision Farming System "is used; author Nukeshev S.O, 2011," The Mechanical and Technological Foundations of Intrasoil three-layer differentiated application of mineral fertilizers in the system of precision farming ", authors Nukeshev S.O, Eskhozhin K.D, 2017

At the land management faculty, the textbook "Improving the land management of agroformations: the experience of Russia and Kazakhstan" (authors Abeldina RK, Kosinsky VV, Ozeranskaya NL, 2017) is intended for undergraduates studying in the specialty 6M090300 - "Land Management "and 6M090700 -" Cadastre "and is used in the

study of the discipline" Modern methods of organizing the territory. " It contains new theoretical sections "On-Farm Land Management in the Conditions of Modern Economic Transformations", "Organization of the Territorial Formation of Agroformations on the Basis of the Agrolandscape Approach".

At the Faculty of Economics in the disciplines of "Management", "Enterprise Economics", "Economic Analysis", "Business Organization", "Production Organization" undergraduate specialties 5B050700 - "Management", 5B050600 - "Economics", discipline "Cooperative forms of management" undergraduates in the specialty 5M050700 - "Management", the monograph "Assessment of the socio-economic status and development prospects of the organizational forms of the subjects of the agroindustrial complex of Kazakhstan" is used (authors: Ismailova A.S., Sdedetuly J., Nukesheva A.Zh.).

At the faculty of computer systems and vocational training, the textbook "Identification models on graphs" (authors Murzabekova G.E., Tazhibay L.K.) and the textbook for the special course "Modeling on graphs" (by Murzabekova G.E.) are used in educational the process of teaching the discipline "Modeling Systems" for undergraduates of the specialty 6M080600 - "Agricultural Engineering and Technology".

At the Faculty of Humanities on the subject "Modern History of Kazakhstan" as an additional material in conducting classes are used monographs, published as a result of scientific research for 2014-2017 years, teaching staff of the Department of History of Kazakhstan: Akmola, Tselinograd, Astana cultural space: the history of formation and development (Alpyspayeva G .A., Sayakhimova, Sh.N. Tuksaitova, R.U, 2016), Siberian Cossacks and Kazakhs of the Steppe Territory in the XVIII-XIX Centuries. (Aubakirova Kh.A., Abdirov M.Zh., Bizhigitova K.S, Kazhenova G.T, 2016), Social processes in the northern regions of Kazakhstan in virgin years and their impact on the socio-cultural environment in the region (Sayakhimova Sh .N., Alpyspaeva G.A, 2017).

Research carried out under the budget program 212 "Applied scientific research in the field of agriculture", Ministry of Agriculture of the Republic of Kazakhstan, projects: "Development of saving technology of cultivation of drought-resistant oilseeds (for example spring mushrooms) based on reduced and zero tillage in a dry steppe zone of Akmola region" and " System assessment and selection of market-sustainable effective options for diversification of crop production based on a risk model with the automation of calculations (based on materials from Northern Kazakhstan) introduced in the basic farms of LLP "Akmola Phoenix" and agricultural enterprises of Kostanay region.

Also, the implementation of research results is carried out through participation in competitions for grant financing of projects for the commercialization of scientific and (or)



scientific and technical activities, and implementation is carried out by implementing intellectual property rights (licensing agreements, assignment agreements and copyright agreements).

As part of the grant financing of the projects of the Ministry of Education and Science of the Republic of Kazakhstan for 2015-2017 under project 3506 / GF4 “Research and development of optimal parameters of technological processes of surface plastic deformation of hydraulic cylinders of attached equipment for agricultural machines” a license agreement was obtained.

Appendix 18 provides a list of farms where the results of research and development implemented in the framework of funded projects are introduced.

One of the most important indicators of the effectiveness of research and development is patent activity, reflecting the technical and technological achievements of the university, as a result recognition of novelty, inventiveness and industrial applicability of the results of research.

The university provides direct assistance to faculty members in recognizing the results of research work. The university plans an annual expenditure item, from the university’s funds, for legally significant actions in the preparation of security documents (patent fees), both as part of research projects (grant and programmatic funding), and as part of initiative topics. Also, the university annually pays for maintaining the security documents, based on their commercial attractiveness.

Additionally, work is underway to advise university scientists in the field of copyright for the further submission of an application for the issuance of a certificate of state registration of rights to the object of copyright.

Consultations on the preparation of applications for the object of industrial property (inventions, utility models, industrial designs, etc.) are conducted by a specialist in the protection of intellectual property - a patent specialist. Methodical and practical assistance is provided in the preparation of applications, in the conduct of patent information search, the preparation of objections and responses to requests from an expert organization, payment of patent fees and registration of license agreements.

For the period 2015-2018, 126 protective documents were received. The share of security documents received is distributed as follows: for an invention (Eurasian patent, patent for invention, innovative patent) (92.06%), utility models (6.34%), breeding achievements (1.6%), table 18, by as of 07.06.2018

Table 18 - The number of security documents received on industrial property objects

Industrial	Years
------------	-------

Property Objects	2015	2016	2017	2018	TOTAL
Eurasian patent	-	-	7	2	9
Patent for invention	4	3	6	5	18
Patent for utility model	-	-	4	4	8
Innovative patent	39	50			89
Achievement patent	-	2	-	-	2
TOTAL	43	55	17	11	126

The distribution of security documents issued by sections of the International Patent Classification (IPC) indicates the predominance of intellectual property protection under the section “Meeting the vital needs of a person” (45.16%) and “Various technological processes; transportation”(23%), table 19.

Table 19 - Distribution of security documents issued by sections of the International Patent Classification of Units

IPC Section		2015	2016	2017	2018
A	Satisfying human needs	23	17	5	11
B	Various technological processes; transportation	8	18	-	
C	Chemistry; metallurgy	2	3	2	2
D	Textile; paper	-	-	-	
E	Building; mining	-	2	-	
F	Engineering; lighting; heating; engines and pumps	2	2	3	
G	Physics	4	11	7	1
H	Electricity	4	-	-	
Total		43	53	17	11
* as of 07.06.2018					

Based on the dynamics of registration of security documents, the largest peak of patents received is in 2016, followed by a decline in 2017, associated with the abolition of innovative patents from the patenting system of the Republic of Kazakhstan.

Promotion of scientific developments of S. Seifullin KATU through programs and competitions of innovative development institutes and other organizations aimed at

commercialization and promotion of university technologies is conducted by the Office of technology commercialization.

In 2014, 48 were prepared and sent to participate in various competitions of the institutes of innovation development, 81 in 2015, 77 in 2016, as of November 15, 2017 - 70 applications of scientific research and projects of the University, Figure 1 and 2.

**учным разработка и проектам для участия в конкурсах, содействую**

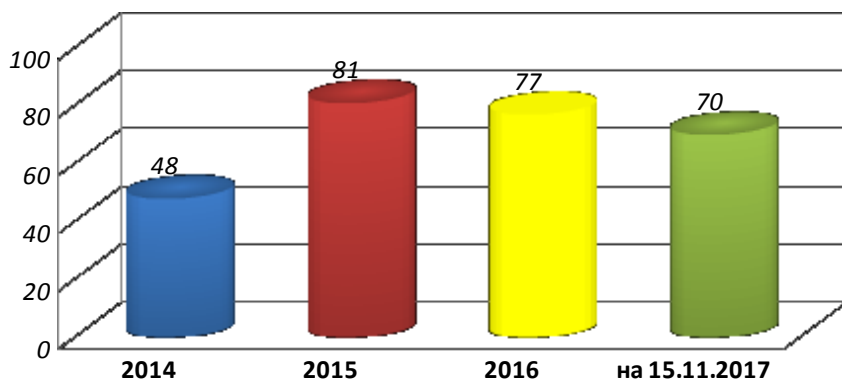


Figure 1. The total number of applications submitted for the promotion and commercialization of scientific research for the period 2014-2017.

The analysis showed that since 2014, the number of applications filed for various competitions promoting commercialization of scientific research and technologies is increasing. The number of applications submitted depends on the number of competitions announced by development institutions and other organizations. In addition, the list of subjects of innovation activity with which interaction in the field of commercialization was carried out was expanded.

**Количество заявок на конкурсы институтов развития и др., на 2017**

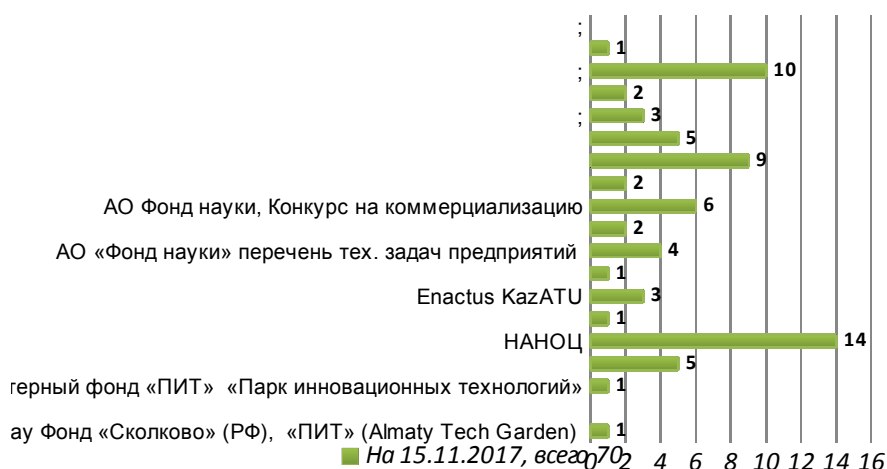


Figure 2- The number of applications in the context of development institutions for 2017

Of the most significant results, the following should be highlighted:

- - In 2014, as part of the Science and Business event, 6 innovative projects were presented to various venture capital funds, 4 of which signed agreements on the joint promotion of technologies for promoting through the international network of innovation transfer INNOGET (2014).

- - In 2017, JSC “NATD” approved a grant for commercialization for financing a project for the creation of test - systems for paratuberculosis of farm animals for a total amount of 25 million tenge, the grant was canceled due to the lack of co-financing.

- JSC National Company EXPO - 2017 in the national pavilion "Kazakhstan" (Sphere) of the international specialized exhibition EXPO-2017 presented a project in the field of energy supply and energy efficiency (Project Manager - B.I. Dikhanbaev), Figure 3.



Figure 3 - Energy-saving installation for processing industrial waste

- - Organization and assistance of faculty members to participate in the 2016 competition for grants from the GNSS and GMNS Project “Stimulation of Productive Innovations”, the results of which won a grant of 280,000 million tenge with a co-financing from the business sector and a small innovative company (start-up) was established with the participation of the university as a co-founder (2016-2017);

- - In the competition for grants from the GNSS and GMNS of the Project “Stimulation of Productive Innovations”, 2017. 5 applications were sent, 2 applications were submitted for the 2nd round, in the 3rd round were rejected by the competition commission.

- - In 2017, as part of the OPEN INNOVATIONS STARTUP TOUR 2017 competition, organized by the Skolkovo Technopark and Almaty Tech Garden, 1 project in the final of the competition was recognized as the best in the Best Idea category. The winners of Tech Garden Startup Day received a certificate for completing the Tech Garden acceleration program.

To participate in the grant program of the Ministry of Education and Science of the Republic of Kazakhstan “Consortia of the manufacturing sector sent 2 projects with the participation of the university.

The content of the research will be based on the combination of our own scientific achievements with the adaptation of the best foreign technologies that are successfully used in similar conditions.

In the formation of scientific programs in priority areas of research, the mechanism of integrated scientific and technical programs was used (hereinafter referred to as INTP).

On the basis of S. Seifullin KATU in partnership with the world's leading University of Adelaide, Flinders University in South Australia, Huaiani Comprehensive University (China), Institute of Cytology and Genetics of the Academy of Sciences of the Russian Federation, as well as A.I.Baraev scientific production center of grain farming, F. Khristenko Karaganda Agricultural Experimental Station and with the North Kazakhstan Experimental Station, within the framework of the program-targeted financing of the MES RK for 2018-2020, the implementation of the integrated scientific and technical program “Application of the achievements of molecular genetics to create new highly productive breeding lines of wheat, barley and chickpea climatic conditions of northern and central Kazakhstan ”. This work received a continuation of the program completed in 2015-2017. within the program-targeted funding under the budget program of 217 MES RK, based on combining our own scientific achievements with the adaptation of the best foreign technologies successfully used in similar conditions drought-resistant varieties for the arid climate of northern Kazakhstan ”(supervisor – S.A. Dzhataev, PhD). in conjunction with the University of Adelaide (Australia) with a total amount of funding 190 million tenge.

According to the results of the research work carried out: two highly productive lines of spring soft wheat and one line of spring barley have been created; a database was created for 116 SNP molecular markers with their further use by breeders and molecular laboratories for practical purposes; for wheat, barley and chickpea, a collection of 116 unique Amplifluor-like SNP molecular markers, closely linked to such important features as resistance to drought and other abiotic stresses, was created and analyzed. for wheat, the most promising SNP markers were identified: KATU48 and KATU-W58, created on the basis of sequences of transcription factor genes, TaDREB5 and TaNFYC-A7, which control plant response to drought and dehydration; for barley, SNP marker KATU-Phy C was identified based on the phytochrome C gene sequence, HvPhy C, which determines the response of plants to a change in the spectrum of light that accelerates plant development to reduce the effect of drought; genotypic analysis of the collection of

samples was carried out: wheat - 208, barley - 199 and chickpea - 284; molecular and phenotypic databases of breeding lines and promising samples of wheat, barley and chickpea for northern and central Kazakhstan have been compiled; perspective varieties of spring wheat, barley and chickpea were selected for a number of economically valuable traits: grain productivity per unit area, mass of 1000 grains, ear grazing, productive bushiness and length of the growing season. 6 articles with impact factors  $IF = 0.550-5,830$  are published. During targeted internships in 2016-2017 at the University of Adelaide (Adelaide, Australia), training and professional development of 6 employees of S. Seifullin KATU were conducted. Employees in the course of training mastered the technology of molecular analysis using SNP markers, gained practical skills in research of Amplifluor-like SNP markers and the expression of plant genes using various instruments and equipment based on the University of Adelaide.

The direction of joint research is molecular biology. In these programs, foreign and domestic partners are involved as performers who perform their part of the work according to schedules.

From 2016 to 2017, an international scientific project "Joint technical research on the creation of environmental protection in developing cities of the "Silk Road Economic Belt" of China and Kazakhstan" with the Institute of Ecology and Geography of the Academy of Sciences of the People's Republic of China (head Sarsekova DN. partner parties.

In 2017, employees of the Institute of Ecology and Geography of the Academy of Sciences of the People's Republic of China brought 15,800 species of drought-bearing and salt-bearing tree and shrub species for planting, which are divided into 3 parts for testing at the RSE Zhasyl Aymak (green zone of Astana), Forest nursery "Akkol" of Akmola region and the campus of the university. All plants were treated with root and planted on the silvicultural area directly with the participation of Chinese scientists.

A forest nursery was created on the campus of S.Seifullin KATU on an area of 2 hectares, and planting on an area of 5 hectares in the Akkola forest nursery of the Akmola region and on an area of 1 hectare of RSE Zhasyl Aymak from introduced species from China.

The survival rate in the RSE "Zhasyl Aimak" was 60% or 1351 plants of 26 species of woody plants imported from the People's Republic of China, as well as on a forest plantation in the Akkol state forestry establishment of 28 species of woody and shrubby salt and drought-resistant species; survival rate was from 80 to 96%. The average height of some species reaches 1.5 m.

The 33 species of tree and shrub species introduced from the People's Republic of

China far exceed the local drought and salt-resistant species in height by almost 3 times and survival rate by 15-20%. In this case, the Chinese side was the customer of the research.

Also in the framework of grant financing of the MES of the RK in 2015-2017, 26 scientists from various foreign organizations were attracted, in Appendix 19

For the future, the research activities of the university are focused on increasing the share of income from research in the total income of organizations.

In order to increase the share of income from research in the teaching staff of S.Seifullin KATU actively participate in competitions of the Science Committee and the Science Foundation of the MES RK, for grant financing through the preparation of research projects to study individual, little-studied areas in preparation of integrated, interdisciplinary scientific and technical programs. Similarly, other sources of research funding for S. Seifullin KATU are projects of international organizations, projects of the World Bank “Stimulating Productive Innovations” for 2016–2020, grants from foreign organizations, agreements with economic entities, the creation of a special fund of funds (hereinafter - the Fund) to finance proactive scientific research.

Funding of the University’s research programs by program and their ratio in shares are given in Appendix 20.

The analysis shows that the highest proportion of R & D funding, in terms of programs, of the total income of a university, is income from grant funding: in 2015, 6.93% of 8.66%, more than 80%; 2016 - 7.35% of 11.07%, this is 66.4% in 2017 - 5.86% of 9.47%, this is 61.88%, table 10.

In addition, in 2017, a grant was received and funding was attracted from the World Bank and the MES RK in the amount of 280,000.0 thousand tenge, including with co-financing of 50,000.0 thousand tenge from the business sector for the commercialization of the project for the processing of livestock waste and use in crop production. A small innovative company (startup) was created with the participation of the university;

A grant was received and funding was raised in the amount of 116,330.0 thousand tenge according to the results of the competition for the selection of offices for the transfer / commercialization of university technologies for capacity building and institutional strengthening of the commercialization office

In 2016-2017 Extension-KATU's knowledge dissemination office implemented 2 UNDP projects to disseminate the practice of applying advanced technologies in the field of greenhouse and fisheries (aquaculture) for a total amount of 13,100.0 thousand tenge.

In order to diversify the sources of funding, R & D will continue to participate in all announced contests, both for R & D and commercialization of the results of scientific and technical products. Since 2017, a special fund has been established at the university (hereinafter referred to as the Fund) to finance the initiative research of the teaching staff of the university. The share of income from research programs to the total income from research university is given in table 20.

**Table 20 - The share of income from research programs to total income from university research**

Name of income	2015	2016	2017
Share of income from research,%	8,66	11,07	9,47
Share from GF in BP 217 MES RK,%	6,93	7,35	5,86
The share of GF in BP 217 compared to the income of research,%	80,02	66,40	61,88

At the university for the purpose of mass participation, both young scientists and teaching staff in competitions and high-quality submission of applications, the vice-rector - the head of the center of science and innovation activity conducts monitoring every 3–4 days to determine scientific directions the requested amounts, the expected results, etc. At the monitoring project managers report a brief presentation, the degree of readiness and voice problems encountered in the preparation of a project or program, and the Vice-Rector, in his turn, analyzes, finds solutions to problems, also, if necessary, finds the missing performers, the basis for implementation, etc.

The projects, necessarily, involve students, as performers, who, in full rights with the faculty, go to scientific conferences, to test the results of research.

Today, the university has more than 250 young scientists, including 24 PhDs, 28 candidates of science and 189 masters.

For the professional growth of young scientists, the University creates favorable conditions. They are involved in solving both scientific and innovative activities. More than 30% of young scientists are involved in almost every university-funded research project, conditions are being created for publishing the results of research papers in international cited scientific journals, international research internships are being organized, and young scientists are participating in national and international scientific competitions and conferences.



The practice of attracting undergraduates and doctoral students to the implementation of scientific programs and projects has become mandatory, with the establishment of a minimum number of doctoral students and undergraduates for one project depending on its scope and amount of funding. This approach, in addition to the training of scientific personnel, allows: (1) at an early stage to identify talents with the potential to engage in science, (2) to train them in truly advanced knowledge and skills, (3) to transfer the experience accumulated by the older generation to young professionals in the process of joint scientific activities.

In order to stimulate and support talented young people, the activities of the Young Scientists Council will be reformed in the direction of strengthening their role in making management decisions and providing a high degree of independence in their own initiatives. By 2018, the issue of allocating separate funding to the Council of Young Scientists to support the most promising projects will be worked out.

In addition, in order to support the scientific initiatives of the faculty, including undergraduates, doctoral students and young scientists at the university provides funds to stimulate the results of publications in journals with high impact factor included in the database of Thomson Reuters, Scopus, Springer, Elsevier, etc.). In 2011, 24 articles were published, in 2012, 11 articles were published, and in 2013, 5 articles.

Since its foundation at the university, certain scientific and scientific-pedagogical schools have been established.

Today, the university has more than 15 scientific schools operating in the following areas: veterinary and animal husbandry, agriculture and crop production, plant protection, soil science and agricultural chemistry, agricultural biotechnology, microbiology, agriculture mechanization and electrification, economic problems of sustainable development of the agricultural sector; land relations and land management, etc.

For the development of scientific potential, young scientists and students in scientific schools, on the basis of laboratories, centers and research institutes are involved in scientific development of budget and contractual topics, with additional pay, where the opportunity to participate in conferences, the use of electronic Internet resources and University library funds are also provided.

When hiring leading scientists and practitioners, preference is given to those with a degree, experience of participation in funded R & D, articles published in indexed journals, the presence of security documents, and other scientific components. If such scientists are accepted as part of the faculty of the university, then they create conditions for work, service housing is provided.

Printed media and Internet resources are used to search for a new employee.

Each project research manager has his own research team and environment, including students, undergraduates and doctoral students, who were initially announced when submitting a project or program to the competition, as well as leading scientists from other organizations. Each project employee is responsible for a specific part of the R & D schedule. Also in the project when performing research on the basis of a farm are involved practitioners of farms, such as agronomists, livestock specialists, veterinarians, mechanical engineers, etc.

## 11 FINANCE

In accordance with the approved Program for the development of the university (strategy) for a long-term period, the structural units of the university determine the main activities for the short-term period (Action Plans for the academic year, financial year). On the basis of the specified Action Plans approved by the Academic Council of the university or the Board, in coordination with the supervising deputy chairmen of the University's Board, appropriate applications are made for consideration by the Budget Commission established at the University.

Each direction embedded in the development strategy of a university within a single structural unit is classified as a separate project.

After approval by the Budget Commission of the applications of structural units, these proposals are formed in the Development Plan for the medium term (5 years) with a detailed breakdown of costs for the next fiscal year (short term).

A development plan for a 5-year medium-term period, with a breakdown of expenditure amounts by year and a detailed description of the upcoming fiscal year (short-term Plan), is approved by the Board of Directors.

The expenditure part of the Development Plan is formed on the basis of applications from departments of the university for funding of relevant activities, including educational programs: the acquisition of certain works, goods and services, as well as carrying out current expenses of a compulsory nature, taking into account the size and timing of funding. Summary information on applications of the university departments is submitted for preliminary consideration and approval of the Budget Commission with the participation of the heads of these departments, applicants, which ensures the transparency of expenditure planning. At meetings of the Budget Commission, the priority of planned expenditures is determined in accordance with the Development Program for the long term.

The financial support of certain projects (educational or scientific) is made in proportion to the income they receive, with the mandatory provision of the minimum funding required for the quality execution of the project.

Based on the results of budget approval for project groups, relevant cost estimates are prepared within the framework provided for by the Development Plan for funding. These cost estimates are formed by project teams independently, and approved by the

supervising deputy head of the executive body. Direct costing of project teams is carried out in strict accordance with the approved estimates.

Assessment of the adequacy of funding is made on the basis of the results of the short-term period on the basis of the data obtained on the amount of income in the context of certain projects.

The criteria for budget allocation efficiency is to achieve maximum results in the implementation of the main activities of the university, provided by its strategy, while obtaining adequate net income for the fiscal year.

After preliminary approval of funding amounts, on the basis of submitted applications, the Development Plan is approved by the Board of Directors, which is also coordinated with the governing body represented by the National Agrarian Research and Education Center.

The approved Development Plan and the Procurement Plan of works, goods and services based on it in order to ensure publicity are posted on the official website of the university. The development plan can be adjusted twice a year following the results of the 1st quarter and 8 months of the reporting fiscal year.

Formalized financial management policy is reflected in Accounting policies developed in accordance with international financial reporting standards.

Accounting policies determine the specific principles, basics, agreements, rules and practices used to prepare and present financial statements.

In accordance with the Accounting Policy, annual financial statements are prepared, including statements of cash flows and changes in equity.

Over the past 3 years, the Company's own capital increased from 2,815,975 thousand tenge in 2015 to 12,836,747 thousand tenge in 2017, i.e. an increase of 10,020,772 thousand tenge.

Similarly, an annual increase in cash inflows and outflows from operating activities is observed:

Receipt: 2015 - 5,811,444 thousand tenge, 2016 - 6,193,447 thousand tenge and 2017 - 6,853,354 thousand tenge;

Retirement: 2015 - 5 436 130 thousand tenge, 2016 - 5 967 132 thousand tenge and 2017 - 5 796 073 thousand tenge.

During this period, the Company also disbursed cash on investment activities, which by year was: 2015 - 3 244 701 thousand tenge, 2016 - 5 236 549 thousand tenge and 2017 - 4 510 090 thousand tenge.

Cash at the end of the periods in 2015 amounted to 174,735 thousand tenge, in 2016 196,678 thousand tenge and in 2017 433,434 thousand tenge.

The financial stability ratio of the Company:

The concentration ratio of own capital at the end of 2017 amounted to 0.78, according to preliminary results in 2018 will be 0.80;

Leverage ratio - 1.29;

The ratio of borrowed and own funds - 0.29.

The presentation of financial statements by the university is provided by order of the Minister of Finance of the Republic of Kazakhstan dated June 28, 2017. No. 404.

Financial statements are tentatively approved by the Board of Directors of the university, and then approved by the governing body of the National Agrarian Research and Education Center. After approval, the results of the financial activities of the university are heard at the Academic Council. The approved financial report is posted on the website of the authorized body and the university.

Thus, transparency and availability of financial statements for all interested parties is ensured.

The financial sustainability of the university primarily depends on the demand for the products it sells - the provision of educational services. The demand for educational services of the university is ensured by the lack of competition in this sector of services by industry sector of the main specialties. The lack of competition is associated with a rich history of the university, rather strong human resources, and its material support.

The main criteria for determining the priority in financing the activities of the university are to ensure the support of human and material well-being.

This is evidenced by the dynamics of spending on these areas over the past 5 years, where, with a small amount of investment spending at the beginning of this period, there is a jump in the context of the last two years.

Analysis of cash flow for 2010-2012 suggests that a significant part of the cash flow comes from operations of the main activity - the provision of the educational process, that is, it is cash received as a payment for tuition. In turn, cash outflows occur to cover the cost of goods sold - teachers' salaries, taxes and other mandatory contributions to the budget, utility costs, and so on.

During this period, the size of equity capital tends to grow: while the share capital is almost constant, there is an increase in equity due to an increase in reserves.

When forming the Development Plan, the break-even point is first of all determined, which implies the determination of the cost of the main expenses. And this is the salary of

the main staff, taxes and other contributions to the budget, utility costs, the cost of maintaining fixed assets in optimal condition and other expenses. They are aimed at ensuring the primary tasks for the implementation of the Company's core activities, with a minimum income, ensuring the profitability of the organization.

In case of occurrence of potential risks through the mechanisms of the Development Plan adjustment, it is possible to optimize expenses by reducing the organization's secondary costs.

The university's strategy attaches great importance to such risks as reducing the demand for graduating from specialized specialties, reducing the number of students, the risk of reducing state support for education (reducing the number of government grants).

In terms of reducing the demand for graduates of specialized (agrotechnical) specialties, the development strategy of the university provides for the development of graduates in specialties with the greatest demand at this stage of the state's development. The university includes such specialties as economic, humanitarian specialties, as well as specialties in the field of architecture and construction, design and land management.

In addition, in the university, much attention is paid to the development of graduate and doctoral programs, research activities, which consequently reduces the risk of reducing the number of undergraduate students.

Reducing the risk of reducing the number of state grants is achieved through a proportional increase in the number of students on a commercial basis, through the use of career guidance activities and a flexible system of payment for education.

In accordance with the Law of the Republic of Kazakhstan "On Joint-Stock Companies", an internal audit service was established at the university, directly subordinate to the Board of Directors. The activities of the internal audit service are regulated in accordance with the Regulations on the Internal Audit Service approved by the Board of Directors, which are annually approved by the Internal Audit Plan with submission of quarterly reports on their performance for consideration by the Board of Directors.

At the same time, given that the State is a shareholder of the Company, the Company's activities are subject to regular monitoring by external bodies - the Committee for Financial Control of the Ministry of Finance of the Republic of Kazakhstan, the Accounts Committee for Control over the execution of the republican budget. In this case, the findings of these bodies in order to avoid duplication are mutually recognized.

In addition, the activities of the university in accordance with the laws of the Republic of Kazakhstan are subject to an annual independent financial audit conducted on the basis of the results of the fiscal year.

At the end of 2015 - 2017 years. external audit was conducted by audit companies: NAC Asia Audit LLP, UHY Sapa Consulting LLP, where the auditors expressed an unqualified positive opinion that the reporting reliably reflects in all material aspects the Company's financial position.

Table 21- SWOT - analysis (strengths and weaknesses of the Finance section)

<b>S (strength) – (potential positive internal factors)</b>	<b>W (weakness) – (potential negative internal factors)</b>
<p>1 The availability of material and technical base to ensure the continuity of the implementation of the main activity of the educational process;</p> <p>2 The existing demand for a significant part of the provided services to obtain a permanent minimum income sufficient to ensure the life of the Company;</p>	<p>1 Weak profitability from the contingent of postgraduate education (magistracy, doctoral studies);</p> <p>2 There are not enough places in the accommodation of company to provide all faculty members in need of housing. It reduces competitiveness of the company to attract highly qualified teachers;</p> <p>3. physical deterioration of fixed assets;</p>
<b>O (opportunity) –opportunities (potential positive external factors)</b>	<b>T (threat) – (potential negative external factors)</b>
<p>1 Availability of educational grants in agricultural and technical specialties;</p>	<p>1 Increased competition in the market of educational services from universities on related specialties;</p>

Action Plan to overcome the identified weaknesses:

№	Weakness	Action plan
1	1 Weak profitability from the contingent of postgraduate education (magistracy, doctoral studies);	Open new specialties of magistracy and doctoral specialties and increase the number of postgraduate education;
2	2 There are not enough places in the accommodation of company to provide all faculty members in need of housing. It reduces competitiveness of the company to attract highly qualified teachers;	The work is needed to mobilize budget investments for the construction of necessary buildings and structures. To attract additional investments, the work on design estimates development and financial and economic studies for a number of University facilities is done . Similarly, it is necessary to organize construction and repair work on educational and residential facilities of the University from its own resources.
3.	3. physical deterioration of fixed assets;	<b>Carrying out of planned replacement of obsolete fixed assets, modernization of existing ones.</b>

Giving an assessment to the university in the “Finance” section, in general, the University’s positions can be considered satisfactory, but individual issues need to be improved.

The University’s strength (3 positions out of 10) is the existence of a financial reporting mechanism developed and brought for execution by the sole founder represented by the state in the form of a relevant decree of the Government of the Republic of Kazakhstan, as well as the existence of a formalized financial management policy. In addition, the positive aspects include the presence of an internal audit system and a regular external, independent audit.

The satisfactory positions of 5 positions out of 10 include the presence of medium-term and long-term Plans, coherence of the strategy for development and management of financial flows, a fairly transparent budget allocation, the ability of structural units and project teams to make decisions independently in budget matters. At the same time, questions need to be improved (2 positions out of 10) of risk assessment and the formation on its basis of alternative scenarios for the Company's development.



## 12 EDUCATIONAL RESOURCES AND STUDENT SUPPORT SYSTEMS

There is a student service center in the university, created on the principle of "one window". The service of curators and advisors is done

The preparation with the use of modern tools for the possibility of teaching in the online mode is carried out in the university. Depending on the direction of training for students and teaching staff, there is an opportunity to use device modeling at the Technical Faculty, a database is used at the Faculty of Land Management, Architecture and Design

Library resources, including the fund of educational, methodical and scientific literature on general educational, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases and data;

The scientific library has a book fund of 1690349 storage units for the first of January 2018, of which 818264 is a collection of literature in the state language, 185923 are electronic publications, of which 2882 are for teaching staff, 29 are electronic resources.

Through the University's electronic library on the university's IP address range, access is provided to remote information resources, advanced electronic libraries of the world, such as Web of Science, Springerlink, CabiAbstract, Scopus. University library online »

The volume of the book fund of educational, methodical and scientific literature is growing every year and is updated, it corresponds to the contingent of students (Table 22). Amount of funds allocated for library library renewal (table 23)

В университете предусмотрена система проверок выпускных работ на их заимствование (плагиат). Так, магистерские диссертации и проекты проверяются на предмет заимствования с помощью программ организаций, выигравших процедуру системы "Государственные закупки". The university has a system of inspections of graduation papers on their borrowing (plagiarism). So, master's theses and projects are checked for borrowing with the help of programs of organizations that have won the procedure of the system "Government procurement".

Table 22 - the General Fund of the library on January 1

<b>Indicators</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Total fund, copies	1577076	1589952	1690349
In Kazakh	806308	812719	818264

<b>Educational literature</b> , copies.	853120	864889	873366
Including Kazakh	718441	724733	725218
In English	2296	2299	3131
Electronic books	95169	95200	185923
<b>Scientific literature</b> , copies	594215	595191	596300
In Kazakh	61230	61235	62540
<b>Fiction literature</b>	34572	34672	34760
In Kazakh	3981	4081	4117

**Table 23 The amount of fund on the updating book collection**

<b>Years</b>	<b>Total , ml.tenge</b>	<b>Books , Million tenge</b>	<b>Periodicals and electronic resources Million tenge</b>
2016	32,39	25	7,390
2017	44,3	25	19,300
2018	45,408	25	20,408

On the recommendation of leading professors and scientists of the University of California at Davis (UC Davis) to the university library in 2016-2017. year, modern textbooks in English were obtained for undergraduates in the specialties 6M072700 - “Technology of food products” and 6M072400 - “Technological machines and equipment”, 6M080200-Technology of livestock production and 6M080100 - Agronomy, enrolled as part of the State program of industrial and innovative development of the Republic of Kazakhstan .

The book collection of the library is considerably replenished with its own editions of the university, in which the works of university scientists are published: textbooks, manuals, workshops, lecture courses, abstracts, monographs, workbooks, syllabus, as well as the journal “Science Herald”

In accordance with the University's mission, the library provides a high level of organization of management and use of information resources that meet the requirements of standards and the need to integrate into the world educational space based on the functioning of the quality management system, implementing the principle of continuous improvement.

On the website of the scientific library, 29 electronic resources are available for users of the university, including 11 licensed access, 19 open access. Since 2017, access to the new Scopus, ScienceDirect and "Scival" databases has been organized, and in 2018, access to the database has been organized EBS "University Library Online" (Appendix 21).

The use of educational Internet resources provides the ability to create a single information and educational space, gives students access to domestic and foreign sources of information, provides different groups of students with the opportunity to choose the form of education and level of education, opens up new perspectives for the individualization of education, choice of profession, can significantly improve the forms open education and the use of distance learning technologies. A huge number of open information resources and social network services have appeared on the Internet, which alter the educational process and research activities at the university.

The university has done a lot of work to create a network infrastructure of the corporate information environment. All educational buildings and student dormitories are connected to a single computer network. Trunk optical cables are laid between the buildings of the university. Inside the training buildings, virtually every workplace of an employee and teacher and all computer classes, in dormitories all living rooms are connected to a single information network. This allows students to access educational online resources from any computer connected to the university's network.

The students are also given the opportunity to use computers in all reading rooms of the university library and in computer classes of student dormitories during the working day, and in computer classes of the departments during off-hours according to established work schedules. The speed of the broadband channel was increased from 4 Mbit / s in 2011 to 535 Mbit / s in 2018 (Table 24).

Table 24 - Broadband Internet Access

<b>Indicator</b>	<b>2015-2016 academic year</b>	<b>2016-2017 academic year</b>	<b>2017-2018 academic year</b>
Internet access speed, Mbps	525	525	535
VPN channel speed (for the veterinary clinic building), Mbps	50	50	60

29 educational Internet resources are available on the website of the university's scientific library (Appendix 22). There are 11 resources on the basis of license agreements,

19 resources in open access. Since 2017, access to the new databases “Scopus”, “ScienceDirect” and “Scival” has been organized, in 2018 access to the EBS database “University Library Online” has been organized.

All students have access to the universal library through the electronic catalog on the scientific library website <http://library.kazatu.kz/jirbis2/index.php/ru/elektronnyj-katalog>.

At the university's library resources, you can search for the desired book in the electronic catalog, order it online on a subscription, take advantage of expert advice or ask a question, find out your rights and duties, get full information about the capabilities and services of the library system.

The educational resources of the university itself is great important, which are concentrated on the website of the university, primarily on the website of the university library, which accumulates electronic library materials, electronic databases, university publications, etc. The university is consistently working on creating electronic resources, publishing them online Internet and systematic use in the learning process.

Currently, the university’s electronic library <http://portal.kazatu.kz/e-books/> has 3,040 e-learning publications. Among them: 1099 editions in the state language, 1786 editions in Russian, 147 editions in English, 8 editions in other languages. To ensure a convenient and fast search for the desired source, all publications are divided by faculties, departments and disciplines (Table 25).

Table 25 - the number of educational publications in the electronic library

Academic year	Made					Number of EUJ in the electronic library				
	Total	Including				Total	Including			
		kazakh.	russian	english	Other		kazakh.	Russian	English	Other
2015 - 16	307	123	166	18	-	2547	930	1513	96	8
2016 - 17	261	94	140	27	-	2808	1024	1653	123	-
2017 - 18	232	75	133	24	-	3040	1099	1786	147	-

Free access to electronic library resources is provided only within the university's corporate network. Remote access is also possible based on authorization using the login information of the automated learning management system "Platonus".

The university attaches great importance to the development of mobile Internet. Wireless WiFi points providing free access to the Internet to employees and students with mobile devices are installed in the reading rooms of the scientific library, in the halls and conference rooms of the main building, in a number of classrooms of the new technical building, in the dormitory 2a. To expand the mobile Internet coverage, we use the technical capabilities of modern computer monoblocks, which allow you to configure a wireless access point based on the integrated Wi-Fi unit.

Within the framework of the joint project with Lux-telekom LLP, 28 wireless access points providing mobile Internet free of charge have been installed in the main and biological buildings. As a result, these two educational buildings are fully covered by the Wi-Fi hotspot coverage area. In the dormitory of the Shchuchinsky branch, a computer network was held in each living room and 22 Wi-Fi points were done.

It should be noted that it is necessary to intensify work on the development of the wireless network and to provide mobile Internet coverage throughout the university.

The graduate chairs annually have the marketing research to identify and compile a list of necessary equipment, instruments, software used in the relevant industry, and also government procurement plan is formed. Safety requirements for operating equipment and software are determined by a safety engineer. Safety requirements are governed by the Rules for Safety and QMS documents. Organization Standard Management of occupational health and safety in "S.Seifullin KATU "JSC.

Educational and scientific laboratories of the University for the development of EP meets the modern requirements of the direction of training and are equipped with similar instruments, equipment, schemes, programs, technological platforms of the respective industries. The university has academic groups formed by language competencies (Kazakh, Russian, English, German, trilingual), forms of education (full-time, distance and mixed,). The needs of students are determined upon admission to the university on the basis of the application, which indicates its needs.

The needs of students and the processes of supporting academic mobility are reflected in the regulation on the organization of internal academic mobility of students at S.Seifullin Kazakh Agrotechnical University and in the position of the organization of external academic mobility of students in S.Seifullin Kazakh Agrotechnical University.

### **13 PUBLIC INFORMATION**

The University pays great attention to the public information about its activities, conditions and features of the educational programs being implemented, goals and learning outcomes. One of the main possibilities of information is the website of the university [kazatu.kz](http://kazatu.kz).

Information about the activities of the university is also reflected in the issued career guidance brochures; Faculty and staff share the achievements of the university in the media and the media. In addition, recent years, the active information platform are social networks, there is a personal university page on Facebook.

Modular educational programs implemented by profile departments with goals and learning outcomes are placed on the University's website in the "Applicants" and "Departments" sections.

Information on the possible qualification for completion of training is reflected in the modular educational programs.

All information about teaching, learning, assessment procedures is published in the Academic Policy and the Guidebook, which is placed in the "Training" section, as well as in each working program.

Information about passing scores and training opportunities are available in the "Applicants" section. Information about available educational grants, information about applicants for released state educational grants and a list of students with vacant educational grants is placed in the section "Education" - "Students"

Employment assistance for graduates in accordance with requests from industry ministries, heads of local public service agencies, employers' enterprises and other business entities is provided by the Center for the Development of Entrepreneurship, Career and Business of the University, departments and deans of faculties.

In order to assist in the effective employment of graduates, interaction with the territorial bodies of the state employment service, education departments, youth policy, as well as requests from sectoral ministries, heads of local public service agencies, employers' enterprises and other economic entities is carried out .

The employees of the Center for the Development of Entrepreneurship, Career and Business organized a series of events to facilitate the employment of graduates and to expand the practice base in order to improve the practical training of students.

The work with enterprises and employers is done. The basis of the employment measures is established. For the systematic and gradual involvement of employers and the recruitment of our graduates, in agreement with the enterprises, students are trained. In this case, the aim is to acquaint students with the processes of production.

As a result of the interaction, akimats of regions, cities of Astana and Almaty collect information on the possibility of students' internship and the needs of the region for specialists. Thus, the data of enterprises wishing to recruit in different specialties were obtained.

Analysis of the received information showed that graduates of the veterinary and animal husbandry faculties, agronomical and technical faculties were most in demand. Employees of the Center for Entrepreneurship, Career and Business held information and business meetings and interviews of graduates with employers, as well as presentations of companies during which graduates had opportunity to personally talk with employers, learn their requirements, get acquainted with the possibilities of practical training in various organizations.

As well, informational and familiarization meetings of students with staff of the center were held with elements of training for the development of leadership skills, tips for proper interviewing and information about the necessary skills for successful employment.

Moreover, job fairs for graduates of all faculties are organized and held annually. More than 300 potential employer companies participated in the Graduate Job Fair. The job fair allowed students to obtain the necessary information about their vacancies, and employers to evaluate the candidates' business skills and attract young professionals to the available vacancies of enterprises and organizations they represent.

The needs of the regions of Kazakhstan for university graduates are monitored, the results of which are filled in the vacancy catalog of the current year. The information about vacant positions is published on the university's website and on the social networking pages of the Center for the Development of Entrepreneurship, Career and Business.

The university's press center sends some of the information to the media in the form of announcements, press releases, another — it publishes on the website <http://kazatu.kz/> and on social networks (Facebook, VKontakte) to familiarize the public and interested parties.

In coordination with external audience we also adjust our actions and differentiate information channels depending on whom we address to the general public, professional participants.

For each category, we highlight the most relevant topics, explain the main points, as well as the overall development strategy of the university. We inform the public about the activities of S.Seifullin KazATU, we prepare and promptly disseminate in the media reports on the most important activities of the university, interact with the press services of the executive and representative authorities of the Republic of Kazakhstan, as well as with other information services and organizations in order to objectively cover the activities of the university; We prepare operational information materials, press releases, provide a quick press review to respond to publications in a timely manner, prepare congratulatory articles and speeches by university management in the press and on the university website, interact with print media to publish scientific and image articles of management and scientists.

At the same time, we collect data on which of the information provided was reflected in a particular media.

The press center carries out, firstly, the daily monitoring of the press and all information relating to the areas of KazATU; planning media related PR events; forms a positive image of the university; responds promptly to emerging crises and incoming negative information that can harm the image of the university; provides technical and informational support of events, seminars, conferences, etc .; collection, analysis of incoming information; advertising and publishing; organization of distribution of congratulatory telegrams, letters, postcards, gifts, etc .; report on the release of materials in the media, etc.

Secondly, working with journalists: organizing and holding press conferences, round tables; distribution through press release news agencies; advising media representatives on issues related to the competence of the university; providing the media with information about the activities of KazATU, events held, important meetings, events; preparation and distribution in the media of official messages, press releases and other information materials on various issues of the university. Thirdly, the support of the KazATU website: timely publication on the website of materials about the events held, press releases, announcements, newsletters, notes, etc .; Presentation on the site of all necessary contact information; placement of photographic materials, articles, etc.

The University's press center assesses the audience's need for information regarding the activities of the university, and prepares the production of various types of printed materials, informational booklets about the activities of the university, the publication of " My University" newspaper for various events. The range of materials being prepared is extremely wide: from small greeting texts to lengthy informative reports. When preparing



a large analytical material, the press center closely cooperates with other structural units of the university.

In Appendix 23, 24 we provide a report on the release of speeches on television and radio, publications in the print and information media of the management and faculty of the university for 2014-2018.

The University conducts continuous explanatory work of the national development programs of the country and the system of higher and postgraduate education in order to support and implement these programs using the media and mass media. So, for example, in 2018, interviews were conducted with the First Vice-Rector of the University at “TV Astana”, in “Panorama of the Week” about the President’s Message “New Development Opportunities in the Fourth Industrial Revolution”. The university pays great attention to the issue of “Digital Kazakhstan” and, in particular, the digitization of the agro-industrial sector, which the university management and faculty members cover both on television and in periodicals. The information on the educational process at the university was covered by the Director of the Department of Academic Affairs on Television “Khabar 24 Arnasy“ Bilim Bádaramasy. ”So, only for the past period of 2018, more than 200 articles and programs with the participation of the administration, scientists and teaching staff of the university were published and covered.

A number of articles devoted to the problems of training personnel for the agroindustrial complex were published by the rector of the university Kurishbayev AK

In accordance with the current legislation of the Republic of Kazakhstan, the University, as a public organization, annually, after approval by the management body of the audited annual financial statements, but no later than August 31 of the year following the reporting year, makes it available on the portal of the state information accounting center. In addition, audited annual financial statements within a specified time frame must be placed on the official website of the University.

The university website in the “Chairs” section reflects the current educational programs of specialties. In addition, EP on GPIID-2 is shown in the “Undergraduates” section.

In order to ensure the availability of information about the teaching staff to the public, there are special sections on the official website of the university.

The website of S. Seifullin KATU contains resumes of the rector, vice-rectors, deans of faculties, heads of departments, heads of departments, which are constantly updated.

The summary also includes email addresses, contact numbers and reception hours for university management.

The site also has personalized faculty pages containing information in the following format: academic degree, title, contact phone, email address, date of birth, education, job experience , certificates, awards, scientific developments, publications, photo gallery. In the section of scientific publications for visitors to the site published works of university scientists. This structure of information allows assessing the qualifications and experience of the faculty, their scientific interests and research results. Catalogs of faculty members and their profiles are given on the electronic address: [www.kazatu.kz](http://www.kazatu.kz)

The Kazakhstani system of higher and postgraduate education has become an important task - integration into the European educational space, which means that we have to take a slightly different approach to the issues of training specialists, review training programs focused on the result of education, graduate specialists who are ready for the labor market.

S.Seifullin Kazakh Agrotechnical University maintains scientific and creative ties with the largest centers of the countries of near and far abroad.

University teachers work and undergo internships in Russia, England, Germany, Bulgaria, Hungary and the Czech Republic. In turn, prominent scientists from the United States, Germany, Turkey, the Czech Republic and other countries read courses and conduct research at the university.

There is an editorial and publishing center with modern printing equipment. “Herald of Science S.Seifullin KATU ”.

S.Seifullin KATU `s library with five reading rooms, has a book fund of more than 1000 thousand copies of books. It has a computer network, e-mail.

The advanced educational technologies are being successfully implemented, connected with the computerization of all university structures. A system of regional educational network has been created. It allows to successfully integrate into the global educational system.

A unified information environment of the university has been created, including more than 42 educational computer classes connected to a local area network with Internet access.

The university administration, the teaching staff of the departments and the management of the faculties systematically conducts work on the conclusion and renewal of contracts with practice bases. As a result of the work , the number of contracts in 2015–

2017 increased from 960 to 1,459, 459 contracts were concluded with new practice bases and 131 contracts were updated.

Out of 1,459 enterprises, 56 belong to subordinate structures of the Ministry of Agriculture of the Republic of Kazakhstan.

The contracts on the internship are concluded with; research institutes - 81 contracts;- with National Laboratories - 8 contracts;- with industry centers - 24 contracts;- with enterprises and organizations - 1320 contracts;- with foreign universities - partners - 26 contracts.

The manufacturing base practice of university students are organizations that correspond to the profile of the student's specialty (or related organizations).

Among them are: State Institution “Republican Methodological Center for Phytosanitary Diagnostics and Forecasts”, LLP “Research Institute for Plant Protection and Quarantine”, LLP “Kazakh Research Institute of Agriculture and Plant Growing”, LLP “Kazakh Research Institute of Livestock and Feed Production”, Astana-Unim JSC, RSE "Republican veterinary laboratory" of the Ministry of Agriculture of the Republic of Kazakhstan, PC "Vetpreparat", RSE "Scientific and Production Center Forestry", LLP "Scientific and Production Center of Grain Economy named. A.I.Baraeva ", Bayserke – Agro LLP, Rodina Agrofirma LLP, Atameken-Agro LLP, TNK LLP, Akmola-Feniks JSC, RSGP NPC Fisheries Ministry of Agriculture, RKGPP "Astana Topography ", RGP KazInMetr, RGP KazInSt, National Center Accreditation LLP Concern Tsesna-Astyk LLP, KazAgroMarketing JSC, KazAgroFinance JSC, Prodcorporation JSC, Astanaanenergoserwis JSC, AO JSC Astana-energy ", etc.

The list of enterprises-bases of practices with the necessary equipment to improve professional skills is increased every year .

All contracts concluded by the University with enterprises identified as bases of practice correspond to the terms of the practices, which define the obligations of the parties.

The number of contracts for practice and employment concluded by the university is observed , there is the Alumni Fairs. Organization of work on the formation of contractual relations with institutions of various legal forms of ownership in order to expand the scope of social partnership:

- the university annually sends letters with information about graduates in the context of specialties and a request to submit applications for vacancies for young specialists to the departments and committees of the Ministry of Agriculture of the Republic of Kazakhstan,

the Ministry of Environmental Protection of the Republic of Kazakhstan, research and production centers;

- advertising leaflets, information about university graduates in the context of specialties and resumes of graduates are displayed in fairs, on the university's website and on social networking pages;

- sending information letters - invitations to employers;

- in order to familiarize potential employers with the data of our university graduates, the electronic database of graduates' resumes was sent for posting on the GOJOB.KZ website;

“Tuleter taktasy” and corners of the fair are on the message board of the university and faculties;- an explanatory work was carried out among graduates about the work of the Internet portal “Work”, which provides free access to vacancies posted on the portal and the publication of specialist resumes. The portal provides the opportunity for self-contained and free placement of resumes with the right of round-the-clock access, sending responses to your favorite jobs, opening a Personal Account and publishing personal data and contact information.

To increase the achieved results, it is necessary to continue work in this direction and attract as many as possible organizations from all regions of Kazakhstan to participate in the “graduate fair”.