MINISTRY OF AGRICULTURE OF REPUBLIC OF KAZAKHSTAN

“S.Seifullin Kazakh Agrotechnical University” JSC

REPORT ON SELF-ASSESSMENT OF EDUCATIONAL PROGRAM FOR BACHELOR – 5B080800 SOIL SCIENCE AND AGROCHEMISTRY, MASTERS – 6M080800 SOIL SCIENCE AND AGROCHEMISTRY DOCTORAL - 6D080800 SOIL SCIENCE AND AGROCHEMISTRY WITHIN THE SPECIALIZED ACCREDITATION OF THE IAAR

SAKEN SEIFULLIN UNIVERSITY

REPORT ON SELF-ASSESSMENT
OF EDUCATIONAL PROGRAM FOR
BACHELOR – 5B080800 SOIL SCIENCE AND AGROCHEMISTRY,
MASTERS – 6M080800 SOIL SCIENCE AND AGROCHEMISTRY
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WITHIN THE SPECIALIZED ACCREDITATION OF THE IAAR

ASTANA, 2019

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DEFINITIONS AND ABBREVIATIONS

Bachelor: Professional higher education curriculum with a normative mastering period of at least 4 years with the award of the academic degree of Bachelor of Agriculture.

Magistracy: Professional post-graduate education curriculum with a standard term of mastering 2 years (scientific and pedagogical direction) with the award of the academic degree of Master of Agricultural Sciences.

Doctoral: Professional postgraduate educational program with a standard term of 3 years (scientific and pedagogical direction) with the award of the degree of doctor PhD.

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

Catalog of elective disciplines: A document containing a list of academic disciplines, their volume, forms of intermediate control (term papers (projects), computational and graphic works, etc.) defined by a higher education 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 the creative development of knowledge on the basis of individualization, selectivity of the educational trajectory and taking into account the amount of mastered educational material in the form of credits.

Component of choice: A list of academic disciplines and the corresponding minimum volumes of credits or academic hours offered by higher educational institutions, chosen by students independently and studied in any academic period.

Work curriculum: A document developed and approved by higher educational institutions on the basis of a standard curriculum and individual curricula for students, taking into account the conditions of a particular professional activity, stages of the educational process: it contains a complete list of training disciplines grouped into DTE cycles, DB and PD as a compulsory component, and the component of choice required for

the development of students with the indication of credits or academic hours: the structure of the working curriculum is determined by higher educational institution independently.

Syllabus: The discipline's curriculum, which includes a description of the discipline under study, its goals and objectives, a thematic plan reflecting the duration of each topic, a brief summary of them, independent work assignments, consultation time, boundary control schedule, bibliography, teacher requirements and evaluation criteria.

Model curriculum: The main curriculum document developed on the basis of the state compulsory standard of education by specialty and establishes the mandatory components in the form of a list of academic disciplines, combined into DTE cycles, DB. PD indicating the minimum credits required for students to master, forms of control, as well as additional types of training and final attestation.

Mandatory component: The list of academic disciplines and the corresponding minimum volumes of credits established by state compulsory education standards and studied by students on a mandatory basis under the program of study.

Department (office) of the Registrar: Service, providing the organization of various types of knowledge control, dealing with the registration of the entire history of students' educational achievements and the calculation of their academic rating.

Department of Academic Issues: A service that provides the organization of various types of knowledge control, registers the entire history of educational achievements of students and the calculation of their academic rating, as well as issuing educational documents.

This self-assessment report uses the following abbreviations:

ECTS – European Credit Transfer System;

ISO - The International Orqanization for Standardization;

SWOT –Strengths Weakness Opportunities Threats;

AIS - automated information system;

AIC - agro-industrial complex;

DB - basic disciplines;

EEEA - external evaluation of educational achievements;

GOSO - state mandatory educational standards;

AAD - Academic Affairs Department;

FSC - final state control;

IS - Information Systems

IT - information technology;

IEP - Individual Curriculum;

KATU – S.Seifullin Kazakh Agrotechnical University;

CCR - Club cheerful and resourceful;

CYA - Committee on Youth Affairs;

CTA - complex testing of applicants;

CED - catalog of elective disciplines;

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

MEP - modular educational program;

MA RK - Ministry of Agriculture of the Republic of Kazakhstan;

IAAR - Independent Accreditation and Rating Agency;

SRI - Scientific Research Institute;

R & D - research work;

MSSR – master student's scientific research;

SSR – students' scientific research;

OE - organization of education

GE - general education;

EP - educational program;

M - majors;

TS – teaching staff;

ME – midterm examination;

WC - working curriculum;

QMS - quality management system;

IWS - independent work of the student;

IWST - independent work of the student under the guidance of a teacher;

CC - current control;

MC - Model Curriculum;

ESS - educational support staff

ECD - educational complex of the discipline;

ECS - educational complex of specialty;

EMD - educational and methodical department

EMC - educational and methodical council;

C - curriculum;

NORMATIVE REFERENCES

The department of "Soil science and agrochemistry" in the implementation of educational programs for the preparation of bachelors, masters and doctors of PhD specialty "Soil science and agrochemistry" operates in accordance with the regulations of the Ministry of Education and Science of the Republic of Kazakhstan:

1 Law of the Republic of Kazakhstan dated July 27, 2007 No. 319-III "On Education" (dated July 15, 2011, as amended and supplemented); Model rules for the ongoing monitoring of progress, midterm and final certification of students in higher educational institutions (No. 125 of March 18, 2008; amended by order of the Ministry of Education and Science of the Republic of Kazakhstan No. 94 of March 16, 2011);

2 Rules for the organization of the educational process on the credit technology of education (No. 152 of April 20, 2011);

3 Law of the Republic of Kazakhstan “On accreditation in the field of conformity assessment” dated July 5, 2008 No. 61-IV.

4 Rules of accreditation of educational organizations of the Republic of Kazakhstan. Resolution of the Government of the Republic of Kazakhstan dated December 29, 2007 No. 1385.

5 GOSO RK 5.04.019-2011 “Higher education. Undergraduate. Basic Provisions ”, approved by the order of the Ministry of Education and Science of the Republic of Kazakhstan dated June 17, 2012. No. 261.

6 GOSO of the Republic of Kazakhstan. Higher education. Undergraduate. Basic provisions. approved Resolution of the Government of the Republic of Kazakhstan on August 23, 2012, No. 1080

7 Model rules for admission to educational institutions that implement professional curricula for higher education (approved by the Government of the Republic of Kazakhstan dated January 19, 2012 No. 111, as amended on April 19, 2012 No. 487, dated June 30, 2012 No. 896).

8 Development Program of JSC " S. Seifullin Kazakh Agrotechnical University" for 2011-2015 and others.

GENERAL INFORMATION

The name of the organization of education	JSC "S.Seifullin Kazakh Agrotechnical University"
Legal Details	The Republic of Kazakhstan, 010000, Astana, Pobedy Avenue 62 Phone number: 8 7172 317547, 8 7172 393918, Fax: 8 7172 316072 E-mail: agun.katu@g.mail.com Web-site: www.kazatu.kz
Founder	The Government of the Republic of Kazakhstan, represented by the Committee for State Property and Privatization of the Ministry of Finance of the Republic, the right of ownership and use of the state shareholding of the Company's shares belong to the Ministry of Education and Science of the Republic of Kazakhstan (the only shareholder)
Head of University	KurishbayevAkylbekKazhigulovich
First Deputy Head	AbdyrovAitzhanMukhamedzhanovich
Contact persons for the preparation of the self-assessment report	Stybayev G.Zh., Ramazanova R.Kh. 8 7172 397807 8 7172 311308 AldabergenovaS.S.Phone number: 8 7172 395907
Date of submission of 1 self-assessment report	17.10.2018
Date of submission of 2 reports on self-assessment	
Information about the self-assessment procedure	The self-assessment procedure was carried out collectively, based on the principles of publicity and transparency. In 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 institutional accreditation was approved at a meeting of the Academic Council of the University .2018 Protocol No. 3 dated 10.10.2018

1 SUMMARY OF ACTIVITIES OF S.SEIFULLIN KATU

1.1 Introduction

“S.Seifullin Kazakh Agrotechnical University” Joint-stock company (further – “S.Seifullin KATU” JSC) is a subject of high professional education in the Republic of Kazakhstan and acts on the basis of the Charter, approved by the order of the Committee of State Property and Privatization of the Ministry of Finance of the Republic of Kazakhstan 27.06.2007 №350, certificate of state re-registration of a legal entity №27738-1901-АК from 10.07.2007.

“S.Seifullin KATU” JSC is one of the largest in Kazakhstan multidisciplinary higher educational institution. This university provides the training of highly qualified specialists for various sectors of the economy of Kazakhstan, the performance of scientific research and the training of highly qualified personnel on their basis.

The faculty of the university unites 800 regular teachers, including 402 doctors and candidates of sciences, professors, associate professors. Training is conducted at 10 faculties, 45 departments in 37 areas of bachelor's degree, 31 magistracy, 11 PhD doctorates.

Higher professional education is provided by full-time and part-time forms of education, and on the reduced educational program and on the basis of higher education. Depending on the form of study, the term of study ranges from 2 to 5 years.

On the base of higher education, graduates of higher education institutions get second professional education in **Ошибка! Недопустимый объект гиперссылки.** and **Ошибка! Недопустимый объект гиперссылки.**: training period is from 2 to 4 years depending on the form of education.

Employees of enterprises have the opportunity to receive higher professional education at the institute of advanced training and distance education under the full and abbreviated program. Duration of training from 2.5 to 5 years.

Our university over the past few years has been actively improving its positions in the world rankings. In 2012 we for the first time took part in the ranking of one of the most authoritative agency QS (QuacguarelliSymonds) at the evaluation of universities and entered the ranking of the best 700 educational institutions among the best 2500 educational institutions of the world, in 2013 entered the top of 800 world universities. In

2010 by the results of the world ranking Webometrics site of our university takes 10510 position, over the past years, our positions have improved by 5025 and today, according to the results of this rating, we occupy 5485th place. According to the Bolashak program for 2012 and 2013, 27 teachers completed research internships, since 2006 the teachers of our university participate in a compettition the best teacher and 50 teachers received the grant “The best teacher”.

Over the years of its existence, about 60 thousand specialists left the university who successfully work in the Presidential Administration, the government, the Senate and the Mazhilis of the Republic of Kazakhstan, akimats, head large enterprises, have become famous scientists and politicians, both in our country and abroad.

1.2 History of S.Seifullin KATU

JSC "Kazakh Agrotechnical University named after S. Seifullin" was founded in 1957, when in the center of a vast virgin region of Akmolinsk by the Resolution of the Council of Ministers of the USSR No. 1176 of October 3, 1957. Akmola Agricultural Institute was organized.

The decision to open the university was associated with the widespread development of virgin and landowning 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 agricultural 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, Government Decree No. 573 of May 7, 1996, the Akmola Agricultural Institute was reorganized into the Akmola Agrarian University, and was named after a prominent public figure and an outstanding personality of the Kazakh people - Saken Seifullin.

Based on the Decree 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 CJSC “Kazakh Agrarian University named after S. Seifullin”.

Based on the Decree 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 CJSC “Kazakh Agrarian University named after S. Seifullin”.

In 2004, on the basis of the Decree of the Government of the Republic of Kazakhstan (No. 829 of August 3, 2004), the S.Seifullin Kazakh Agrarian University OJSC was

liquidated and the RSE on the basis of economic management of the S.Seifullin Kazakh State Agrotechnical University was established on its basis.

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 Agrotechnical 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 JSC "S. Seifullin Kazakh Agrotechnical University".

In May 2013, speaking at a meeting of the Council of Foreign Investors, President of the Republic of Kazakhstan N.A. 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:

1) an 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;

2) own academic programs based on 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;

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

4) 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 agroindustrial complex will be gained. As a result, upon completion of the transformation into the Research Agrarian University, S.Seifullin KATU will be positioned as (1) the main supplier of competitive innovations for the agroindustrial complex in North and Central Kazakhstan, (2) the most desirable place of employment for teachers and the

most desired place for training for students, (3) undergraduates and doctoral students in relevant specialties.

The main 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) organizing and conducting 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, educational and methodological manuals, new technologies and scientific developments;

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

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

1.3 History of the department

The Department of Soil Science and Agrochemistry, is one of the first of the departments established in 1958 at the Tselinograd Agricultural Institute, which was headed until 1971 by I.Ya. Polovitsky, candidate of agricultural sciences. The first members of the department were T.S. Steinberg, G.D. Chernyshenko, G.D. Tarasyuk.

In 1964, the department was divided into two independent structural units: the department of soil science and the department of agrochemistry, the head of which was appointed M.V. Afanasyev from the Voronezh Agricultural Institute, candidate of agricultural sciences. Associate professor V.N. Stebakova, assistants R.M. Savinova, V.M. Kan, A.F. Nikulin were invited from the same university.

In the period from 1958 to 1970 at the Department of Soil Science under the guidance of I.Ya. Polovitsky the first studies were conducted on fundamental and applied soil science: the genesis and melioration of various types of solonetz. At the same time, the solonetz hospital was organized, on the basis of which not only research was conducted, but also all-Union seminars, republican meetings, etc.

The results of research conducted at the department, were laid in the basis of doctoral dissertation of I.I. Polovitsky “Solonetzic soils of Northern Kazakhstan and the ways of their use”, candidate theses of V.M. Volodina “Mineralogical composition and properties of sodic soils of chestnut soil”, L.I. Nagulevich “Biological circulation of substances on solonets”, M.S. Zhandaeva "Gas regime of alkaline soils."

Associate Professor G.P. Penyasov, S.V. Azarov and N.G. Kondratyuk made a significant contribution to the study of the genesis of sodic soils and the development of methods for improving meadow solonetzs on bogar and in conditions of estuary irrigation. In parallel with the problem of land reclamation of solonetzs, associate professor E.P. Voronova conducts studies on the genesis of floodplain soils of the Ishim, Irtysh, Tobol and other rivers.

From 1971 to 1975, the Department of Soil Science was headed by L.V. Noskova, Candidate of agricultural sciences, Associate Professor, whose field of research covered the study of water-physical properties of the soil of the chestnut zone and solonetz.

From 1975 to 1985, the department of soil science was headed by M.S. Zhandaev, Candidate agricultural sciences, associate professor. During this period, the subject of scientific research by scientists of the department was the development of methods for the recultivation of disturbed industrial land dumps of the Ekibastuz Mine, in which N.G. Kondratyuk, Selivanova took an active part.

Since 1964, graduate students of the Department of Agricultural Chemistry under the guidance of M. Afanasyev began researches on fertilizing vegetable crops, studying the agrochemical properties of dark chestnut soils in the dry steppe zone of northern Kazakhstan, in connection with plant nutrition and the use of fertilizers, using straw as an organic fertilizer in soil-protective soil. According to the results of their work, they defended their candidate dissertations (V.M. Kan 1967, V.G. Chernenok 1970, V.I. Rylushkin 1971, V.A.Fomin 1974).

From 1970 to 1977 the department was headed by I.I. Kanivets, doctor of agricultural sciences, professor, previously for many years working in Ukraine, Moldova. During this period, the department continued research initiated by V.Y.Stebakova and graduate student G.I. Uvarov on chemical methods of reclamation of solonetzs (1969-1974), the effectiveness of various forms of fertilizers and the use of laser in agriculture (D.G. Kupriyanov, 1971-1977), the effect of soil treatment methods on the soil nutrition regime (V.N. Fomina, 1972-1975.).

At this time, associate professor V.G. Chernenok laid the first agrochemical stationary on an area of 40 hectares for the study and development of the fertilizer system for grain crops (1970–1972), which was included in the All-Union Geographical Network of Experiments with Fertilizers and was the base for performing research work on tasks approved by the State Committee USSR on science and technology. In 1977 the All-Union Scientific and Practical Conference of the participants of the Geo-Network of Experiments with Fertilizers was held here. The in-patient department of agrochemistry functioned for 19 years.

The results of studies of this period are reflected in the monograph "Soil Fertility of Northern Kazakhstan and the Efficiency of Fertilizers" (1977).

In 1977, the two departments were merged: agrochemistry and soil science and M.S. Zhandaev was elected as the head, having worked in this position until 1985. During this period, under his leadership, research was continued and further developed on the methods for the recultivation of disturbed lands (mining landslides) in Karaganda, and then Ekibastuz coal basins. Based on the results of the conducted research, recommendations on the restoration of disturbed lands were developed and implemented.

From 1985 to 1998, Associate Professor V.G. Chernenok was the head of the Department of Soil Science and Agrochemistry. Thanks to her activity during this period, the department was transferred to the building of the agronomical faculty, a lot of work was carried out on re-equipping unsuitable for soil-agrochemical laboratories of the premises and equipping them with the necessary devices, materials and laboratory equipment. In 1986, a scientific agrochemical laboratory was established in the basement of the building, which is still functioning.

In 1987-1988, the first in Kazakhstan soil museum was created at the university. Associate professor M.S. Zhandaev, research associate N.G. Kondratyuk, associate professor S.V. Azarov, assistant A.F. Nikulin, architects of land management faculty contributed to its organization. During this period, V.G. Chernenok launched extensive inpatient research in the field of agrochemistry and in 1989 a new hospital was established in an educational and experimental farm.

The main focus of scientific research was on the development of the theory and practice of fertilizer application in the dry-steppe zone of northern Kazakhstan. The agrochemical properties of soils, nutritional conditions and the formation of grain crops yields depending on agrotechnical and weather conditions were comprehensively studied. The main factors that determine the effectiveness of fertilizers (predecessors, methods of

tillage, norms, terms, methods of application and the depth of fertilizer fertilization, the influence of various systems and the ratio of nutrients in the soil and fertilizers on the productivity of grain crops) are identified. The main factors determining the productivity of grain crops were identified, their optimal parameters were determined and a fundamentally new approach was proposed to diagnose the nutritional conditions of crops, determine their need for fertilizers, eliminating the pattern in their use with high payback and environmental safety.

The studies were conducted not only at the established in-patient department at the institute's training and experimental farm, but also directly at the farms: the Krasnoyarsky state farms of the Tselinograd district, the Kievsky district of the Nurinsky district of Karaganda region, and the Kiiminsky district of the Kiyminsky district of the former Turgai region. It is noteworthy that the leaders and specialists of these farms were directly involved in these studies, and the students undertook production and scientific and agronomical practice, prepared and defended their theses. During this period, among the scientists of the department who took an active part in research were G.I. Uvarov, R.M. Savinova, M.T. Goncharenko, V.P. Gritsky, production specialists - Y.I. Sadovenko, A.A. Weber, A.A. Gross, O.B. Tarkovsky and etc.

The results of many years of research of agricultural scientists of the department are reflected in the recommendations, are protected by copyright evidence, were repeatedly discussed at conferences, in particular on the problems of diagnosing nitrogen nutrition and the use of nitrogen fertilizers (1988), formed the basis of the zonal course of agro chemistry, used in agrochemical service and in production.

Further studies on the diagnosis of mineral nutrition of grain crops in the conditions of northern Kazakhstan V.G. Chernenok generalized in her dissertation work for the degree of doctor of agricultural sciences "Theoretical Foundations of Optimization and Diagnostics of Mineral Nutrition of Grain Crops in the Dry-Steppe Zone of Northern Kazakhstan" (1994). Also, according to the results of her research, she published more than 100 scientific papers, including monograph “Nitrogen regime of soils and application of nitrogen fertilizers” (1997).

All in all, more than 500 works were published on the materials of scientific research of the department, 15 candidates were defended (V. Kan, V.G. Chernenok, V.I. Rylushkin, V.M. Volodin, M.S. Zhandaev, V.P. Strelchenko, L.I. Nagulevich, V.A. Fomin, G.I. Uvarov, S.V. Azarov, D.T. Kupriyanova, V.N. Fomina) and 7 doctoral (I.Ya. Polovitsky,

E. P. Voronova, V.M. Volodin, V.P. Strelchenko, V.G. Chernenok, G.I. Uvarov, T.I. Volodina) dissertations.

In the period up to 1997, V.G. Chernenok, doctor of agricultural sciences, professor, the head of the depertment, S.V. Azarov, who worked for 13 years as deputy dean of the faculty, T. Volodina, candidate of agricultural sciences, Associate Professor, Senior Lecturers Dolotina A.V. (graduated from Moscow State University), assistant R.Sh. Kuzdanova, V.B. Poplavkova, Sh.I. Akhmetov (graduates of the Kazakh Agricultural Institute of different years) worked at the department of soil science and agro chemistry.

In 1997, the Department of Soil Science, Agrochemistry and Agriculture was organized, which until 2001 was headed by N.V. Shramko, candidate of agricultural sciences, associate professor.

In 2001, in connection with the opening of the new specialty “Agroecology”, a new department of “Agrochemistry and Agroecology” was organized, the management of which was entrusted to Professor V.G. Chernenok. The department of soil science functioned as a part of the department of land management.

From 2002 to 2007, the department was headed by U.Zh. Baidyusen, Candidate of Agricultural Sciences, senior lecturer and, during this period, employees of the department R.Sh. Kuzdanova, E.T. Nurmanov, Zh.K. Serikpayeva, A.B. Kudashev, N.B. Mustafayeva under the guidance of Professor Chernenok V.G. continued research on the development of methods for optimizing the nutrition of crops. At the same time, microbiological research was developed at the department.

In 2008, according to the Order of the University No. 279 (dated June 13, 2008), the Department of Soil Science and Agrochemistry was again restored and the head was appointed Doctor of Biological Sciences, Professor A.P. Nauanova. During this period, studies of the department in the field of microbiology were aimed at creating and testing biological preparations based on antagonists and nitrogen-fixing bacteria in order to increase the yield of agricultural crops and stabilize soil fertility under the conditions of Northern Kazakhstan.

Since September 2012, the department was headed by Candidate of Agricultural Sciences S.Z. Suleimenov, graduate of S.Seifullin KATU (2004), graduate student of the Novosibirsk State Agrarian University, where he defended his thesis on the theme “Nitrogen mobilization of soils of Western Siberia and Northern Kazakhstan.

In September 2013, R.Kh. Ramazanova, candidate of agricultural sciences, associate professor was appointed to the position of head of the department.

From 2015-2017 the department conducted research on promising areas of development of the agro-industrial complex of the republic:

- development of methods for purposeful management of soil fertility, applied to the system of precision farming;

- studying the processes of nitrogen transformation of fertilizers in the soil-plant system;

- development of triticale productivity enhancement techniques by optimizing mineral nutrition;

- study of actinomycetes diversity in the soils of Northern Kazakhstan with the aim of using them in soil bioremediation and plant protection;

- development of technologies for the biological recultivation of disturbed lands;

- study of the effectiveness of non-traditional, bio-mineral and bio-organic fertilizers in the cultivation of sunflower and potatoes.

In 2016, the department started the implementation of the project “Development of poultry manure processing technology in organic bio-fertilizer with the help of domestic biological products and their introduction into crop production” within the framework of the grant of the International Bank for Reconstruction and Development (research leader is professor A. Nauanova).

Since 2018, Professor V. Chernenok. studies are being conducted on the theme “Developing methods for realizing the productivity potential of promising lentil varieties for the dry-steppe zone of Kazakhstan, based on determining the optimal agrochemical properties of the soil for them and how to achieve them, ensuring their competitiveness in diversification of grain production” within the budget program 217 "Development of science".

The department carries out contractual works on agrochemical survey of the soils of the farms of the Akmola region and recommendations for the application of mineral fertilizers for agricultural crops.

Over the past three years, scientists of the department published more than 111 scientific papers, including 6 recommendations, 5 monographs, 9 textbooks, 84 scientific articles, 2 innovative patents and 5 copyright certificates.

2 EDUCATIONAL PROGRAM MANAGEMENT

Higher education system of Kazakhstan is developing along the strategic path defined by the President of the country in the Strategy “Kazakhstan-2050”: a new political course of the established state ”,“ Nurly Zhol - the path to the future ”,“ Kazakhstan in the new global reality: growth, reform and development”, in the State Program for the Development of Education of the Republic of Kazakhstan for 2011-2020. Laws "On Education" and "On Science", in relation to agricultural specialties Program "Agribusiness 2020", as amended and supplemented. They provided a clear legislative basis for the promotion of the higher education system to a new qualitative level.

The policy of quality assurance is reflected in the Development Plan of the EP, which is located on the website of the university, is available at the graduating department. For the implementation of the policy at the university, a quality assurance system has been implemented that meets the requirements of ISO 9001-2015.

In accordance with the policy of quality assurance in the specialty 5B / 6M / 6D 080800 - Soil Science and Agrochemistry, an EP strategic development plan was developed and approved, the main goal of which is to improve the conditions for obtaining high-grade, quality professional education in accordance with the vision, mission and strategy of S.Seifullin KATU aimed at the formation of competitive, highly qualified personnel in the field of agrochemistry and soil science, with modern system knowledge and the necessary competencies for active participation in the industrial and innovative development of the Republic of Kazakhstan, in demand in the economy, both in Kazakhstan and in the world scientific and educational space, as well as for the development of socially oriented, highly cultured and competent personality.

The EP are aimed at the implementation of the above strategic priorities for the development of the economy of the Republic of Kazakhstan, including the modernization of the agro-industrial complex of the Republic of Kazakhstan (Strategy “Kazakhstan-2050”), to increase the efficiency of agricultural land, increase the efficiency of agrochemical services for agriculture (the Program “Agro-business-2020”)

The development of the EP and their development plan is carried out in accordance with the following regulatory acts:

1. Law of the Republic of Kazakhstan dated July 27, 2007 No. 319-III "On Education" (dated July 15, 2011, as amended and supplemented).

2. The Law of the Republic of Kazakhstan “On Technical Regulation” dated November 9, 2004 No. 603-II ZRK (with amendments and additions dated February 16, 2012).

3. The Law of the Republic of Kazakhstan “On Accreditation in the Field of Conformity Assessment” dated July 5, 2008 No. 61-IV.

4. State program of education and science development of RK for 2011-2020. Decree of the President of the Republic of Kazakhstan dated 7.12. 2010 № 1118.

5. Decree of the Government of the Republic of Kazakhstan dated August 23, 2012 No. 1080 “On Approval of State Compulsory Educational Standards for Relevant Levels of Education” with subsequent amendments.

6. Model rules of activity of higher education organizations, approved by the Government of the Republic of Kazakhstan dated May 17, 2013 No. 499.

7. Rules for 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 with amendments and additions).

8. Model rules for the ongoing monitoring of progress, interim and final certification of students in higher educational institutions (Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 125 of March 18, 2008, with amendments and additions).

9. Rules of accreditation of educational organizations of Kazakhstan. Resolution of the Government of the Republic of Kazakhstan dated December 29, 2007 No. 1385.

10. Charter of JSC "S.Seifullin KATU"

11. Regulatory documents of JSC "S.Seifullin KATU" developed by the quality management service of the University.

Management of educational programs of three levels in the specialty 5B / 6M / 6D 080800 - Soil Science and Agrochemistry, is carried out in accordance with the laws “On Education”, “On Science”, “On Languages in the Republic of Kazakhstan”, regulatory documents of the Ministry of Education and science of the Republic of Kazakhstan, documents developed by the quality service of S.Seifullin KATU and in accordance with the Development Plan of the EP (hereinafter - the Plan), which is a prognostic document on its development (Appendix 1).

Management of educational programs of three levels in the specialty 5B / 6M / 6D 080800 - Soil Science and Agrochemistry, is carried out in accordance with the laws “On Education”, “On Science”, “On Languages in the Republic of Kazakhstan”, regulatory documents of the Ministry of Education and science of the Republic of Kazakhstan, documents developed by the quality service of S.Seifullin KATU and in accordance with the Development Plan of the EP (hereinafter - the Plan), which is a prognostic document on its development (Appendix 1).

The development plan for EPs in the specialty 5B / 6M / 6D 080800 - Soil science and agrochemistry was developed with the participation of interested persons: students, trainers, employers - representatives of relevant research institutes, SRI, SRU, agricultural units of various forms of ownership, taking into account the analysis of existing conditions and resources of the university, the specifics of its educational activities, also took into account the key provisions of the implemented educational program, the needs of practitioners. The development plan for EP is drawn up for the future and is discussed at the meetings of the department of soil science and agrochemistry.

The adequacy of the plan to the available resources in S.Seifullin KATU is primarily confirmed by the presence of:

1. Licenses for the right to conduct educational activities in training higher education personnel in the specialty 5B080800 - Soil science and agricultural chemistry (license No. 1010660 dated February 3, 2010), 6M0808 - Soil science and agricultural chemistry (license No. 10,01664 dated February 3, 2010), 6D080800 - Soil science and agrochemistry (license No. 010664 dated February 3, 2010).

Politics of S.Seifullin KATU in the field of quality is aimed at improving the quality of education, defining criteria, standards and quality standards, increasing the level of knowledge and practical skills of students, scientific and educational and methodological support of the learning process, improving the material, social and technical household and information infrastructure of the university, the improvement of mechanisms and management tools of the higher educational institution.

The availability and openness of the quality policy in S.Seifullin KATU of the teaching staff, employees, students, as well as all interested persons is confirmed by publication on the university website and on the university stands, placed on the university's electronic resources.

Quality Assurance Policy of S.Seifullin KATU reflects the link between research, teaching and learning through:

1) monitoring the updating of the EP, by the availability of resources of students (for example, documents of the QMS on educational, scientific activities of faculty and students);

2) communication between the business community, the scientific community, teaching staff and students in the practical training of students, involvement in teaching, academic leadership;

3) surveys of students, faculty, employees of structural units, employers and other interested persons by type of activity of the university through the site;

4) carrying out meetings, workshops, scientific seminars, trainings, scientific conferences, management of theses, master's theses, student forums, department meetings, etc. with the participation of faculty, students, employers, the scientific community, etc.

One of the directions in the development of a quality assurance culture for the EP of the specialty 5B / 6M / 6D 080800 - Soil science and agrochemistry is the annual definition of quality objectives, which are approved by the First Deputy Chairman of the Board of S.Seifullin KATU and compiled a report on their achievement. Another direction is the systematic verification of the implementation of the EP by the quality service, on the basis of which corrective and preventive actions are developed.

Changes in policies and procedures at the university for quality assurance are assessed by criteria:

- approval, monitoring and periodic revision of EP, consistent with the mission of the university and relevant to the needs of potential consumers of this program, participating in their discussion at the meetings of the departments and recording their opinions in the minutes;

- student assessment

- results of current certification, mid-term and final controls, state certification;

- the quality of the provision of teaching staff - an increase in the share of the degree of study of the EP, the staff of the department, which implements the EP, the involvement of specialists from the production of educational activities;

- student learning resources and support;

- public information (website, open days, information boards, etc.).

Evaluation of satisfaction with quality assurance by interested participants is revealed on the basis of systematic collection, analysis and management of information obtained through a survey, questioning, joint workshops, meetings, etc. In 2016, N.I. Vasilchenko, chief specialist of RSE “Scientific and Production Center of Land Cadastre”,

was invited to a meeting with graduate students. In 2017 E.E. Mambetov - Deputy Director of the Department of Land Cadastre and Technical Survey of Real Estate NAA "SC" Government for Citizens "- branch in Astana;, Arsenyi Borislavovich Kudashev - chief specialist of the department of surveys, land monitoring and laboratory research.

Changes in EP, made with consideration of interested parties, contribute to increasing the demand for graduates of the specialty, expanding the bases of practice in accordance with the requests of employers, and fulfilling the recruitment plan for students in the specialty.

Outsourcing is a way to optimize university activities by focusing on core functions - teaching, research, expert and consulting services, and transferring some of the functions to external specialized companies. Outsourcing at a university is expressed in the transfer of a part of services to business structures — catering, business functions, copying services, security, equipment calibration. Ensuring the quality of the services provided is prescribed in the regulations in the terms of the contracts.

In terms of educational services, outsourcing is manifested in the transfer of their part to business structures, to outside organizations - staff training, engaging hourly and part-time workers from other universities, organizations in the implementation of the EP. For example, teachers of the department responsible for the implementation of EP in the specialty 5B / 6M / 6D 080800 - Soil science and agrochemistry were trained in courses on working with the autoclave in 2016 in Akmola Training Factory LLP (Zh.T. Botbaeva, R.S. Aydarkulova, A.P. Nauanova, A.Zh. Nazarova), with precursors in 2017 at «Anobtanium» LLP (E.T. Nurmanov, Zh.T. Botbaeva, A.E. Kasymbekova, etc.). The equipment is checked annually.

During 2013-2017, the director of the RSE “Agrochemical service”, E.K. Bazilzhanov, who has a PhD degree in the specialty - Agrochemistry, the director of KazSRI R.E. Nurgaziyev and the deputy director of this scientific research institute E.T. Nurmanov, who also have a PhD degree in the specialty - Agrochemistry, G.N. Churkina from SNA A.I. Barayev Scientific and Production Center, N.I. Vasilchenko a chief specialist of the Land Cadastre and Technical Survey Department of Real Estate of the"State Corporation "Government for Citizens"were involved in the implementation of the EP.

For the passage of professional practices, students are sent to relevant companies with which the administration of the EP has concluded contracts. The bases of practice are "Agrokhimservice", NPO"State Corporation" Government for Citizens", departments of

soil science or agrochemistry of research institutes of the republic, agricultural units. 16 representatives of employers are appointed heads of practice. Places of students' practice are LLP, CA - 9, NPO “Government for Citizens” - 14, scientific research institutes, EPF - 5, KATU department - 11.

In the magistracy more than 60 individual contracts for internship with further employment were concluded. In the context of the regions of Kazakhstan: Akmola region - 10, North Kazakhstan - 1, Karaganda - 5, Pavlodar - 2, Kostanay - 1, Kyzylorda - 5, South Kazakhstan - 5, Almaty - 3, Astana - 4, Taraz, Oral, Shymkent, Kyzylorda - 9.

Both national and foreign specialists from leading research institutes and universities (Agrokhimservice, V. Dokuchaev Soil Institute, Belarusian State Agricultural Academy, Czech University of Natural Sciences, Belgrade University, University Putra) are involved in the doctoral studies.

When attracting representatives of third-party organizations to the implementation of EP, the qualifications of employees are taken into account - experience in the industry, the presence of an academic degree, rank.

During the development of the plan and in its discussion at the meeting of the department take part employers - specialists of RGA"Agrokhimservice", NPO"State Corporation" Government for Citizens ", U.Uspanov KazSRI, KazSRI of Agriculture and Plant Growing, etc., who represent interests of specialists in the fields of soil science and agrochemistry and express opinions on its structure, content and compliance with the priorities of the development of Kazakhstan in the agricultural sector.

The development plan of the EP in the specialty is also discussed with the students themselves during the course of training, who have the right to express their opinion, disagreement or comments on the development and content of the EP. The main principle of selection of those participants in the discussion of the plan is - the participation of interested parties to achieve a common final result - to ensure the level of education for the training of specialists of the new formation that meets modern requirements and requirements of practice.

In order to ensure the transparency of the process of forming a plan at the first stage, it is discussed directly at the department, then at the methodical council of the faculty and approved at a meeting of the University Academic Council. Information on the formation and implementation of the plan is posted on the S.Seifullin KATU website (www.kazatu.kz). Discussion of the Plan is also carried out during the final state certification, according to the results of feedback from the leaders of students during their

professional practice, through negotiations. Each year, representatives of relevant organizations provide reviews on the content of specialty educational programs in which recommendations are made for their actualization in accordance with the needs of the state, employers.

Monitoring of the implementation of the plan is carried out annually, which is reflected in the protocols of the department with a mandatory discussion of the achievements and shortcomings and, if necessary, adjustments are made (protocols No. 12 of 06/25/2013, No. 14 of 06/06/2014, No. 12 of 06/26/2015, No. 10 of 06/16/2016, No. 10 of 05/16/2017, No. 12 of 06/26/2018)

The positioning of the EP is determined by the criteria: the status of the state (ensuring the level of education, state diploma), fixed tuition fees, the availability of government grants, the presence of traditions, more than half a century of history, good reputation, modernity. Also an important role in the positioning of EP is played by the presence of an intellectual developing environment: modern technologies of developmental education, a system of electives, elective courses, a system of intellectual competitions at various levels (subject and interdisciplinary competitions, competitions, tournaments, intellectual marathons, games, etc.), support system for gifted students. Availability of an electronic library, free access to full-text resources, which occupy a special place in the intellectual development of students.

Analysis of the real positioning of the EP is carried out by interviewing employers, questioning parents and students, applicants.

The objectives of the EP meet the needs of the state, stakeholders, voiced in the Strategic Documents of the Republic of Kazakhstan (Messages of the President of the Republic of Kazakhstan, the State Program for the Development of the Agro-Industrial Complex in the Republic of Kazakhstan for 2012–2020, SPIID of the Republic of Kazakhstan until 2021, etc.) in part of developing a set of measures for the effective consumption of agricultural chemicals the effectiveness of agricultural agrochemical services, ensuring the rational and efficient use of agricultural land and increasing their fertility, etc.

The circle of stakeholders in the development of the plan and in its discussion includes representatives of relevant organizations and institutions that represent the interests of specialists in the field of soil science and agrochemistry and express opinions on its structure, content and compliance with the priorities and prospects for the development of the agroindustrial complex of Kazakhstan.

The implementation of the EP development plan and the effectiveness of its implementation in life is monitored by the dean's office, the Department of Academic Affairs. The results of its implementation are discussed at the meeting of departments, are heard at the meeting of the methodical council of the faculty.

The development plan for the study of specialty 5B / 6M / 6D 080800 - Soil Science and Agrochemistry) has been revised twice over the past 5 years (protocols No. 12 of June 25, 2013, No. 5 of November 16, 2017). Among the problems that development plans are addressing include: the opening of a multilingual group, an increase in the proportion of teaching staff who speak English, international activities, the development of dual education, academic mobility of teaching staff and students.

The development of the plan was carried out taking into account the analysis of the existing conditions and resources of the university, the specifics of its educational activities, also took into account the key provisions of the educational program being implemented, the needs of practitioners.

Responsible services of the university (QMS, DAA), representatives of the dean's office, the department conducts monitoring twice a year of the classroom and material resources, available resources, which is reflected in the conclusion of the relevant commissions, the minutes of the department meeting reflect the need to replenish resources, such as the purchase of computers, laptops, projectors, renovation of educational furniture, purchase of reagents, etc.

The adequacy of correlation of contingent and resources is regulated by the number of allocated state grants for bachelor and master programs, which are determined by the MES of the Republic of Kazakhstan on the basis of applications from employers in the field of soil science and agricultural chemistry.

The processes of strategic, tactical and operational planning, resource allocation, decisions correspond to the program of the plan, since it is aimed at the implementation of EP in the context of strategic development priorities in the field of soil science and agrochemistry.

The representativeness of persons involved in the formation and revision of the development plan for the EP is confirmed by the fact that they are specialists from relevant research and production centers, research institutes of the Ministry of Agriculture of the Republic of Kazakhstan, the Agency for Land Resources, «Agrohimservice".

Management of EP through processes is characterized by:

- analysis of the quality of teaching and satisfaction with the policy in the field of organization of the educational process by interviewing and questioning faculty and students with a discussion of problems at meetings of departments, faculty, administration;

- the involvement of students in the public life of the department, faculty, university, committees for youth and curators of academic groups;

- inclusion in the Scientific Council and the Council of faculty members of the Department of Soil Science and Agricultural Chemistry, the students of specialty;

- the conduct of the rector, heads of reception units on personal matters; analysis of students' remarks on the rector's blog, written and oral addresses to the heads of departments.

The performance of the EP is assessed according to the following criteria:

- the annual number of new (innovative) educational technologies implemented in education (measured on the basis of educational and methodological developments published and posted on the S. Seifullin KATU website);

- the annual number of research projects and the breadth (%) of students' participation in research activities;

- the number of progress in comparison with the previous period (measurement of input and residual knowledge in the disciplines; final qualifying works successfully defended in time; results of tests in the disciplines, etc.).

One of the indicators of the success of EP is information about the contingent of students, which indicates stability, demand among students, especially on a fee basis (Appendix 2).

The uniqueness and individuality of the EP consists of multidisciplinarity, which unites natural science, socio-political, economic, biological, agronomical sciences, aimed at training specialists of the new format in the field of soil science and agricultural chemistry, competitive and in demand in the country's agro-industrial complex.

All EP programs are designed in a way that is consistent with the development priorities of the Republic of Kazakhstan in general and the university in particular. During the implementation of the study program, a guideline in the preparation of students are strategic documents, where the increase in acreage is determined as priorities; introduction of new technologies; an increase in the volume of state support for agriculture at the expense of subsidizing agribusiness entities rational use of agricultural land (Strategy "Kazakhstan-2050"); increasing agricultural productivity, deepening the processing of agricultural products, ensuring the country's food security and increasing export-oriented

environmentally friendly products (the Strategic Development Plan of the Republic of Kazakhstan until 2025); increasing the competitiveness of the agro-industrial sector by increasing labor productivity, exporting processed products (State Program for the Development of the Agro-Industrial Complex for 2017-2021); building the best advanced training system in Kazakhstan for specialists and scientific and pedagogical personnel by providing ample opportunities for choosing the level, content, form and terms of training based on unique curricula and academic mobility (KATU development strategy until 2025)

Competitive advantages of EP:

- implementation of a systematic approach in the training of specialists, integrating classical university education and the experience of leading practitioners in the field of soil science and agrochemistry;

- interdisciplinarity as a principle of the construction of working curriculum;

- EP balance in directions;

- the formation of professional competencies in the framework of the study, research, interaction with employers;

- professional team;

- use of the results of monitoring the needs of the labor market to update the composition and content of academic disciplines that form the EP.

Educational programs are developed taking into account the proposals of representatives of specialized research institutes, agricultural enterprises engaged in improving the efficiency of land use, conducting soil and agrochemical surveys of land, applying fertilizers, chemical ameliorators, developing techniques and methods for reproducing soil fertility, and improving agricultural cultivation technologies.

The basis for practical training of students (field studies, dual training, production and pre-diploma practice) in the specialty 5B080800 - Soil science and agrochemistry are A.I.Baraev Scientific production center, Karaganda Scientific Research Institute of Agriculture, Pavlodar Research Institute of Agriculture, North Kazakhstan Research Institute, Uspanov KazSRI of Soil science and agrochemistry, Kazakh Research Institute of Agriculture and Plant growing, Kazakh Scientific Research Institute of Animal Husbandry and Forage Production, Kazakh Research Institute of potato and vegetable breeding, South Kazakhstan Scientific Research Institute of Agriculture, organizations and divisions subordinate to the Ministry of Agriculture of the Republic of Kazakhstan; NPO"Government for Citizens" and its branches in Kazakhstan, territorial and land

committees, committees for the protection of the environment and natural resources, agricultural enterprises, where graduates are employed after graduation.

Our students study according to the program of academic exchange in foreign (Germany, Hungary, Poland, Czech Republic, Russia, Belarus, Turkey, China, etc.) and Kazakhstani universities (Kazakh National Agrarian University, West Kazakhstan Agrarian Technical University named after Zhangirkhan, South -Kazakhstan State University named after M.Auezov, Kokshetau State University named after Sh.Ualikhanov). Students have the opportunity to undergo professional practice in the international programs "Logo" in German farms.

After receiving a bachelor's degree, graduates have the opportunity to continue their studies at the magistracy, then at PhD doctoral studies at higher educational institutions of our republic, as well as abroad (Russia, China, Canada, etc.) in the following areas:

- magistracy - "Agroecological assessment of land and design of adaptive-landscape farming systems"; "Agrology and nutrition of plants", "Management of soil fertility and plant nutrition", "Agrochemical maintenance of agriculture", "Agrochemistry and agroecology";

- doctoral studies - “Reproduction of soil fertility and rational use of soil resources”, “Scientific bases of plant nutrition and fertilizer use”, “Agrochemistry and agroecology”.

The EP planning mechanism consists in defining the name of the program, shaping its goal and main tasks, drawing up the working curruculum with an indication of the theoretical and practical components, labor input, developing forms and methods of teaching, training materials; determining the level of input knowledge, mobility opportunities; criteria for assessing learning outcomes, requirements for the teaching staff, educational and methodological documentation, criteria for positioning a specialty in the labor market (employment of graduates).

In S.Seifullin KATU introduced a modular structure of the EP, which ensures their flexibility and integrity, eliminates fragmentation.

The EP of the bachelor degree in specialty 5B080800 Soil Science and Agrochemistry is formed in the form of a modular educational program in two directions: Agrochemistry and Agrology.

Undergraduate modules are divided into the following types:

- cycle of general educational disciplines (GED) - providing social and humanitarian education;

- cycle of basic disciplines (BD) - providing basic knowledge of natural and

scientific, general technical and economic nature, as the foundation of vocational education;

- the cycle of the majors - providing novelty and innovation in their study, understanding the basic theories and principles adopted in soil science and agrochemistry, the ability to demonstrate practical skills in solving production problems or situations related to the field of study.

EP of the magistracy specialty 6M080800 Soil Science and Agrochemistry is formed in the form of a modular educational program, which are divided into the following types:

- cycle of basic disciplines (BD) - providing basic knowledge of the natural science, social and humanitarian character, as the foundation of vocational education;

- cycle of specialized disciplines (SD) - providing deep theoretical knowledge in the field of soil science and agrochemistry; the ability to analyze and apply the knowledge gained in this and related fields; solve problems in the field of research; create new knowledge and integrate knowledge from different areas, specialization of knowledge.

Doctoral modules are divided into:

- The cycle of basic disciplines (BD) - providing basic knowledge of a natural science character, as the foundation of vocational education.

- the cycle of specialized disciplines (SD) - providing professional knowledge and practical skills in the field of soil science and agrochemistry.

For the maintenance of the specialty 5B / 6M / 6D080800 - Soil Science and Agrochemistry, faculty members of other departments of S.Seifuliin KATU such as: ecology, agriculture and plant growing, plant protection and quarantine, Kazakh and Russian languages, history of Kazakhstan, philosophy, physical education, information communication technologies, physics and chemistry, land management and geodesy, economics, management are involved.

All types of practice of students, additional types of training, research work of undergraduates, final state certification are separate modules.

During the formation of educational programs, the principle of the logical academic interrelation of disciplines, their sequence and continuity (Annexes 3-5) are observed first of all.

The solution of tasks for the system development of educational programs involves the development and implementation of a set of measures aimed at the development of multi-level (three-level) education. So, until 2008, the Department of Soil Science and Agrochemistry carried out the implementation of the educational program of

undergraduate. Since 2008, the university has received a license to prepare masters in the specialty 6M0808 Soil Science and Agrochemistry. Since 2013, the department began training third-level students - PhD doctoral studies.

Multi-level training, a modular EP design principle, provide an opportunity for students to acquire additional competencies as part of the development of Kazakhstan and international academic mobility.

Important tools for the effective implementation of these educational programs are the development and implementation of new policies in educational activities; monitoring the demand for educational programs and graduates in the Kazakhstan market of educational services in the labor market; specialized and international accreditation of educational programs.

Improving the management processes of EP is ensured by the improvement of the education quality control system; updating existing and developing new educational programs; an increase in the share of foreign students, the formation of multilingual groups of students in educational programs, the share of disciplines in a foreign language in which will be at least 20%; attraction of students by target grants, attraction of leading scientists of Kazakhstan, countries of near and far abroad in the field of soil science and agrochemistry.

At the department level, in accordance with the established schedule, monitoring is carried out for all types of activities (classroom, teaching and methodical, research, educational, independent work of students, etc.) with discussion at weekly operational meetings. At the end of the 1st and 2nd semesters, an analysis of the teaching staff's activities for the semester is carried out with a discussion at the department meeting and a decision. If necessary, corrective actions are taken.

The dean's office of the faculty weekly discusses the results of monitoring the progress of the educational process, analyzes the attendance of classes and the results of current and mid-term monitoring. According to the approved plan, it considers the quality of the educational process and research, the activity of the department and individual teachers. On the issues under consideration decisions are made by the faculty council with the development, if necessary, of corrective actions.

At the university level, an analysis of the state of the educational process is carried out weekly at an administration meeting with the participation of vice-rectors, educational management, research and development, and student departments with the adoption of specific decisions. Questions of the quality of educational services at meetings of the

university administration and the Academic Council of the University are systematically considered.

Monitoring the status of the issues addressed is carried out by the competent commissions created by the order of the university, faculty. Execution of decisions is controlled by the commission and discussed at the meetings of the University Academic Council and the Faculty Council.

If inconsistencies are identified, corrective actions imply amending educational documentation: working curriculum of the specialty; working discipline programs; lecture courses, practical training plans, practice programs; teaching materials for students and teaching staff; content and procedure of intermediate and final certification. The annual adjustment of documentation, its updating, unification is carried out in order to create optimal study groups and lecture flows in the faculties.

The need to adjust the existing disciplines in the specialty at the suggestion of employers, the elimination of the lost relevance or the introduction of new elective disciplines are discussed at the meeting of the department and the meeting of the methodical council of the faculty.

All processes associated with the implementation of the EP in S.Seifullin KATU is documented and checked by the quality management service. The documents regulating the activities of all structural divisions of the university, the main activities and the business processes of the EP are set out in standards, regulations, methodological instructions, documented procedures that are available on electronic and paper media in all divisions .

The database of legal documents is available to all participants involved in the implementation of the EP, they have access to it and have the opportunity to study them, which is recorded in the familiarization sheets.

In the legal documents of S.Seifullin KATU identified the basic requirements for student learning. So, students of the specialty 5B080800 - Soil Science and Agrochemistry, full-time students attend classroom classes (lectures, practical, laboratory, IWST, IWS), part-time training is conducted remotely, while the technology involves online video lectures, test tasks, etc.

The list of requirements for levels of study (BA - MA - PhD) was developed in accordance with the Dublin descriptors, which is reflected in the EP cards, which were discussed at the meeting of the department, EMC of the faculty and approved at the meeting of the University Academic Council.

The processes associated with the implementation of the EP, clearly demarcated between specific officials, rights and duties, the responsibility of which is specified in the job description of the faculty (from an assistant to the head of the department), each of them are familiar with them.

Service instructions of the quality management system (SI QMS) of S.Seifullin KATUdefine the duties and rights of the teaching staff implementing the EP. They provide a list of regulatory documents on which the activities of the EP are based, qualification requirements, rights and obligations. Service instructions do not contradict the current legislation of the Republic of Kazakhstan and are developed in accordance with the requirements of ISO QMS 01.10.15-2017 (Dean of the Faculty - SI QMS 10010.100 - 2017; SI Head of the Department 10010.110. - 2017; professors - SI QMS 10010.111 - 2017; SI Assistant Professor QMS 10010.582 - 2017; senior lecturer - SI QMS 10010.113 - 2017; assistant - SI QMS 10010.114 - 2017).

In order to inform the educational program of the university, a lot of work is being done to create a unified corporate information environment, the introduction of electronic document management. A program for transmitting text messages and file data between departments has been introduced, which significantly speeds up the process of paperwork and significantly reduces paper flow. The program “PLATONUS” is used, which has a common network base, as well as a portal for viewing current points by students. For proper operation of the corporate network of the university, the routing and forwarding of electronic data packets were configured. Units have unlimited internet access.

The information system allows you to process information from all departments related to the educational process and covers the entire contingent of faculty and full-time students, as well as all the components of the educational process (disciplines, specialties, curricula of departments). It allows you to keep a full record of performance: rating by weeks, grades for exams, term papers / projects, students' professional practice.

For authorized representation S.Seifullin KATU on the Internet has an official website (www.kazatu.kz), an educational portal www.platonus.agun.kz, www.sdo.agun.kz, www.portal.agun.kz.

The activity of the website www.kazatu.kz is aimed at implementing authorized representation on the Internet and includes the following sections: About the university (administration, history of development, public foundation, structure, development program, vacancies), faculties, education, for entrants, international cooperation, Youth work, Distance education, Educational portal, Platonus, Electronic library.

Information on the EP specialty posted on the website S.Seifullin KATU (www.kazatu.kz). It includes information on the content of the EP, the department engaged in the training of specialists, data on teaching staff. The department has a database of electronic addresses of graduate students, undergraduates, students through which simplifies the process of communication with students.

Students can be informedabout the activities of the head of the university, and structural units on the official website of S.Seifullin KATU (www.kazatu.kz). Students receive all answers to the questions related to the implementation of educational programs through the dean's office of the agronomical faculty or the department of soil science and agro-chemistry through operational meetings, meetings with students, through electronic communication. Representatives of students who have the opportunity to participate in the work of the higher bodies of the university and learn the information that is communicated to the team are included in the composition of the faculty council, the university. The transparency of the EP management is ensured by announcing the agenda of the department, faculty council, university, with the date, time and place. At the same time, the work of these bodies is open.

The effective and phased operation of the internal quality system of the EP is ensured by its compliance with the requirements of the ISO 9001-2015 series standards, regulatory and methodological documents governing the internal quality assurance system at S.Seifullin KATU: a system of criterion evaluation of the activity of administrative and management personnel, teachers, point-rating assessment of knowledge, basic data information base, regulations for the internal processes of the university. A special place in the framework of the effective functioning of the internal quality assurance system is the introduction of a mechanism for regularly conducting a self-assessment procedure for a university, individual departments, various categories of staff (management, faculty) and students.

Risk management is carried out in accordance with the Regulations on the procedure for determining and managing risks in “S.Seifullin KATU” JSC.

The university has identified 10 main types of risks by processes, which are ranked by significance and for management, codes have been assigned to the development of a risk management card (Table 1).

Table 1 - 10 main types of risks by processes

Risk code	Risk type

01.11.12.21.22.24.32.33.41.43 – 2016	Strategical
02.11.22.31.32.41.43 – 2016	Educational
03.11.12.21.31.32.41.43 – 2016	On scientific activities
04.11.22.31.41.42 – 2016	For educational work
05.11.12.21.24.31.41.42 – 2016	On international relations
06.11.12.23.31.32.33.41.43 – 2016	Financial
07.11.12.22.33.41.42 – 2016	staffing
08.11.22.23.24.31.41 – 2016	Legal
09.11.12.24.33.41.42 – 2016	Informational
10.11.23.31.41 – 2016	Life support

For further management, risk categories have been developed:

1) the nature of the interaction - internal, due to the activities of the subject of the educational services market; external, not directly related to the activities of the subject of the educational services market, but due to the external environment;

2) in terms of scale of activity, international, inherent in the education system in an international scale; national, inherent in the education system at the country level; local, inherent in the education system at the level of a separate university; image, affecting the image of the university;

3) by the totality of internal factors - operational, related to the imperfection of internal activity; functional related to the use of electronic technology; organizational and managerial, associated with weak educational management;

4) as belonging to the subject of the educational services market, the risks of S.Seifullin KATU JSC associated with the quality of educational services, recruitment of applicants, financing, low standard of living of the population; public risks associated with obtaining highly qualified personnel who are unable to effectively solve the problems of society; the possibility of social tension in connection with the impossibility of finding a job for university graduates; state risks arising from both the fault of the higher education system and those depending on the efficiency of the state's activities. According to the above categories, the risks were classified (Annex 6).

The following risks may affect the successful implementation of the EP:

Social - dismissal of leading teachers, industrial conflicts, discrepancy between the proposed set of educational services and market requirements. Over the past five years, there have been no such cases among teaching staff implementing the specialty specialty 5B / 6M / 6D 080800 - Soil Science and Agrochemistry. Their preventive measures include creating a system of employee motivation; setting premiums based on rating; the inclusion of faculty in the work program of the institution; creating a favorable moral and psychological climate; social support; improvement of living conditions; strengthening of material and technical base.

Financial and economic risks - reducing the budget component of financing, the economic crisis, the competition of universities, the high price of educational services, reducing the number of applicants, changing labor market conditions, reducing the volume of funded state-sponsored research and state budgetary research, etc. Preventive measures include improving the image activity of the university and PR - services; improvement of career guidance; participation in various competitions for grant and budget financing, the system of international grants, implementation of research results in farms, etc .; manual selection activities.

Production and technological risks - equipment depreciation, new technologies. Preventive measures include updating the material and technical base; control by the fire service, SES, etc .; improvement of pedagogical skills, language and professional qualifications of teaching staff the introduction of modern learning technologies; informatization of the educational process.

Force majeure - threats of terrorist acts, natural and man-made disasters, which can be prevented by highlighting a block of activities whose cancellation will not significantly affect the receipt of new educational results.

The management of the EP in the specialty 5B / 6M / 6D080800 - Soil science and agrochemistry is carried out in accordance with the organizational structure of the university: Chairman of the Board; vice-rectors for directions; department directors; Dean of the Faculty of Agronomy; Head of the Department of Soil Science and Agrochemistry.

All departments of the university are involved in the management of EP: from the Department of Soil Science and Agrochemistry, which provides planning, development, monitoring, updating, testing of EPs to university departments - the dean's office, the Department of Academic Affairs, the educational and methodical council, the department

of postgraduate education, quality service and others. Representatives of the board of trustees of the university are also involved in the management of the EP, the faculty council includes scientists - representatives of industry research institutes. Experts in the field of agrochemistry and soil science, who have sufficiently large scientific and industrial experience, are also invited to the meetings of the department.

When choosing employers who are included in the structural units for managing the educational program, the principle of representativeness is primarily taken into account. Teachers who implement educational programs have a basic education in soil science and agrochemistry.

In the implementation of the EP in all specialties, a mandatory condition is the representation of students not only in the development and implementation of the EP, but also in the collegial governing bodies of the EP. To this end, the university has created a system of student self-government, which includes: the Committee on Youth Affairs, which participates in organizing and improving the educational process at the university; Student Parliament, created to consolidate and coordinate the work of all public associations of the university; Alliance of Students of Kazakhstan; Student Trade Union Committee, is involved in the provision of material assistance, stationery, issuing tickets for orphan students, students from low-income, large families, single-parent families; Student councils hostels.

In order to ensure the representation of students in the higher management bodies of S.Seifullin KATU students were introduced to the Academic Council who take part in the work of the council and make proposals on improving the quality of educational programs, career guidance, introducing psychological service to the university staff, developing the state language, student science, etc. that naturally has a positive effect on the development of students' corporate culture. It is a decisive factor determining the efficiency of a university, and its condition is determined by a set of common spiritual values, which are shared by all participants in the educational process and find their support in history, traditions and their corresponding behavioral attitudes. The spirit of corporate culture reflects the mission, vision and strategy of S.Seifullin KATU.

The university conducts purposeful work on the formation of students' corporate spirit, ability to work in a team, not only in the department, faculty, but also in the faculty of social professions. It provides an opportunity for the disclosure of the talents of university students. The faculty has the National-instrumental ensemble “Shabyt”, the Student Theater “Aқzhelken”, the Vocal Trio “Z”, the Dance Ensembles “Shattyk” and

“Kyzkaldak”, the Studio “Guitar”, the KVN Team “Agrarka Sarbazdary”. Students in the FOP take an active part in all events held in the capital of Kazakhstan, raise the image of the university, promote spirituality and culture. There are also clubs of interest at the university - Historical circles “Atameken” “Miras”; Club "Dostyk"; Club of young akyns "Zhas tүlek"; Philosophical Club "Tanym"; “Til sakshysy” informal society; The club of fans of the French language, sports clubs, in which students can spend their extracurricular time.

Students of the EP take an active part in the work of circles and sections: 7 students are members of the Youth Commitee, 1 student is the chairman of the Students Alliance, two 3rd year students are heads of Zhas Otan at the faculty and university levels, and so on. Students can realize the possibility of exchange and expression of opinions on the pages of the student newspaper “My University”. The publication highlights the headings about student achievements in science, study, sports.

In Youth Committee of S.Seifullin KATU students can exchange views on the learning environment, in particular the Media sector; Debate Club "Amanat", Sector "Domestic Policy". Also, students are members of the forums in Vkontakte, "Facebook", Twitter, Instagram.

The degree of students' satisfaction with the management system is carried out by the Department of Academic Affairs through a regular sociological survey (questioning). These activities are carried out in order to determine the quality of services provided in the EP, improve educational activities, in order to determine the rating of faculty among students.

The criteria for selecting representatives of employers, students, teachers, employees in collegial bodies are governed by the Regulations on the University Academic Council, the Regulations on the Board of Trustees, the Regulations on the Council of the Faculty. Representatives of employees are elected at the General Meeting of employees of an educational organization by open voting by simple majority. All participants have the right to vote.

The councils include leading university scientists, heads of departments, students, representatives of employers. The goal of attracting them to the work of a collegial body is the development and improvement of the educational process, the definition of a university development strategy.

Monitoring the status of the issues addressed is carried out by the competent commissions created by the order of the university, faculty. Execution of decisions is

controlled by the commission and discussed at the meetings of the University Academic Council and the Faculty Council.

If any inconsistencies of corrective actions are identified, it is necessary to introduce changes in the training documentation: the working curriculum of the specialty; working discipline programs; lecture courses, practical training plans, practice programs; teaching materials for students and teaching staff; content and procedure of intermediate and final certification.

The annual adjustment of documentation, its updating, unification is carried out in order to create optimal study groups and lecture flows in the faculties.

The need to adjust existing disciplines in the specialty, the abolition of lost relevance or the introduction of new elective disciplines are discussed at the meeting of the methodical seminar and the meeting of the department.

In the implementation of EP, the prerequisite is the introduction and use of innovative teaching technologies. To this end, in 2016, a program was developed to introduce innovative technologies in the educational process across 3 levels of education. This program was discussed at a meeting of the Department of Soil Science and Agrochemistry, Methodical Council of the Faculty of Agronomy, approved at a meeting of the University Academic Council. Every year, a report on the implementation of this program is heard at the faculty council, on the basis of which it is concluded that it is being carried out. The reasons for the failure of certain activities are noted. Over the past five years, proposals have been made to the EP to improve the practical training of students by introducing field practices in soil science and geology, conducting dual training in the laboratories of the Department of Land Resources; on the inclusion of new teaching methods in the learning process. Proposals for the introduction of innovative technologies come directly from teachers, students, give their proposals and employers.

All processes related to the implementation of the EP are documented and verified by the quality service.

According to the model rules for the organization of universities, approved by the Government of the Republic of Kazakhstan No. 195 dated 03.03.2005, implementing educational programs of higher professional education, they are managed on the principles of combining unity of command, collegiality, election and openness. The rector has his blog on the official website of the university, where students, faculty members, parents, and employers address issues of interest to them, reception hours are also held by the heads of departments, the dean and the head of the department of soil science and agrochemistry.

Also interested in the successful implementation of the EP persons have the opportunity to communicate by e-mail. In order to obtain information on the improvement of the activities of the EP, direct requests can be sent to its head - electronic communications, telecommunications, etc.

The dean of the agronomical faculty was trained under the management program "Professional Development Program for Higher Education Leaders of Kazakhstan" at Nazarbayev University (Annex 7).

Monitoring of the activities and implementation of the development plan of the EP is carried out at the level of the department, dean's office and university administration with a mandatory analysis and consideration of reporting on the dynamics of the program at meetings and the adoption of appropriate decisions for their implementation. In 2014, the EP of the specialty 5B / 6M / 6D 080800 - Soil Science and Agrochemistry passed state certification and specialized accreditation. Every year an audit of all activities is carried out by the Quality Service, which detects inconsistencies and recommends preventive and corrective actions.

Thus, the management of the EP is carried out in accordance with the legislation of the Republic of Kazakhstan and the Charter of S.Seifullin KATU on the principles of combining unity of command and collegiality. Guiding documents for all activities are formed in accordance with the requirements of the standards of the university. An analysis of the overall structure of the university suggests that today the university has an effective EP management system that complies with the mission, goals and strategy.

Conclusion: The management of the EP in S. Seifullin KATU is built on the principles of combining unity of command and collegiality. In accordance with the Charter, the university and the EP are managed by scientific-pedagogical and other categories of university employees, the academic council and the university rector. To coordinate the work of the departments of the university in the main areas of activity, the university administration, academic council, scientific and methodological council, scientific and technical council, departments, council for educational work, scientific and methodical council, etc. are created and function.

Table 2 - SWOT-analysis of the standard “Educational Program Management”

S (strength) – strengths (potentially positive internal factors)	W (weakness) – weaknesses (potentially negative internal factors)
- published quality policy and quality	- lack of a joint / double

culture development; - collegiality, unity of command and transparency of the development of EP; - an established mechanism for the formation, regular review and monitoring of the implementation of the EP development plan; - a clear distribution of responsibility for business processes and the distribution of duties	diploma education system; - insufficient participation of EP leadership in educational management programs
O (opportunity) – opportunities (potentially positive external factors)	T (threat) – threats (potentially negative external factors)
- participation of stakeholder groups in the formulation of the development plan for the EP; - consistency of EP with national development priorities and education strategy.	- impact of external risks

The specialized profile “Management of the educational program” contains the following self-assessment of compliance: according to the criteria, the EP has a strong position - 5, satisfactory - 11, suggests improvement - 1.

3 INFORMATION MANAGEMENT AND REPORTING

Information management processes are carried out in accordance with regulatory documents of S.Seifullin KATU. (http://kazatu.kz/assets/i/deps/smk-basis-151217.pdf; http://kazatu.kz/assets/i/deps/klassifikator%2007.09.2017pdf.pdf)

The main information flows: operating systems and office applications: Microsoft Windows XP Pro, Microsoft Windows 7 Pro, Microsoft Windows Office 2007, 2010 ProPlus; Software for EP: Academic Edition ESD Single License Products, Academic ESD Single Edition Products C ++ Builder 2010 Professional Named ESD, Academic Edition ESD Single License Products RAPHP XE ESD, Photoshop Extended CS5 12.0 WIN AOO License RU, CorelDRAW Graphics Suite X5 Education License ML.

Assessment of students' knowledge is recorded in electronic journals in the "PLATONUS" system (http://platonus.kazatu.kz).

When conducting consultations on the educational process, theses, master's and dissertations, e-mail is used; contact hours with faculty - in the departments in accordance with the approved schedule of classes. The official website of the university is available at www. http://www.kazatu.kz. The university has an educational portal (http: // http://portal.kazatu.kz) / The site contains the blog of the Chairman of the Board, Deputy Chairmen of the Board, providing communication with all stakeholders (students and their parents, employers, teaching staff). There is information on all departments of the university. Parents can get information about the educational achievements of students. Subsystems of intersessional testing and questioning of students, a distance learning system, e-mail between university departments, a message board, etc. are functioning. On the site you can get information about EP: scientific activities, international cooperation, information about faculty, development plan of EP, CED, etc.

The analysis is carried out through a survey of students, faculty members, employers on the educational portal and is presented to the management of the university for making decisions on the restructuring.

The management of educational programs collects and analyzes data obtained from a survey and questionnaire to assess the quality assurance system for education in terms of indicators:

- the level of student achievement;

- satisfaction of students with the quality of implemented EP;

- educational resources and efficiency of KATU activities;

- satisfaction of employing organizations and the demand for graduates in the labor market;

- compliance with the requirements of the results and objectives of the educational program;

– AIS-report card, government procurement, hostel, etc.

Based on data analysis, mechanisms are being improved to ensure access to educational resources for all stakeholders and the effectiveness of organizing feedback, and adjustments are made during the implementation of the EP.

Technical support is provided through the provision of computer equipment, equipping classrooms with multimedia equipment, TCO; providing technical assistance in the design of electronic textbooks, test items, a package of documents for distance learning, publication of methodological, scientific literature, work in the PLATONUS system, an educational portal.

Information support is also provided by the presence of an electronic library. The library user has the opportunity to use the database of the electronic catalogs of the scientific library, which reflects the entire library fund, as well as full-text databases of electronic resources: to the resources of the Republican Interuniversity Electronic Library, Kazakhstan National Electronic Library, to the world electronic resources Webofknowledge, Webofscience Elzevir, Springer ScienceDirect, Sciverse Scopus. Informing the participants in the implementation of the EP about the changes is carried out by announcing on the university website, in the electronic document management system, in the PLATONUS system.

Internal audits of structural subdivisions of the University's faculties are carried out on the basis of an order from the Chairman of the Board, which determines the purpose, terms, objects of inspection, the composition of the commission. The object of the audit is compliance with the requirements of regulatory documents for the implementation of EP and the quality of management activities: maintaining documentation provided by internal regulatory legal acts, execution of orders, instructions from management, progress in the disciplines of the department and in general in the educational program, organization and quality of practical training, planning, implementation and accounting of educational and methodical work, etc.

Prior to the beginning of the inspection in the structural unit, the quality service conducts an internal audit, as a result of which non-compliances with the approved requirements are identified and corrective actions are recommended.

In the course of an internal audit, the commission examines the documents of the structural unit of the faculty: ECD, ECS, protocols of the department, the work plan of the department and reports on its implementation, documents on professional practice, acts of writing off reports, diplomas and so on. When conducting an internal audit, the Commission is guided by the principles of ethics, impartiality, professional diligence, independence, a fact-based approach is used.

Based on the results of the commission's work, a statement of non-compliance is compiled and the time frame for elimination of the non-compliance is determined. For example, in the course of inspections, inconsistencies are identified due to the late preparation of the act of writing off production practice reports, improper filling of the Sillabus, untimely setting of marks on the performance of the type in individual curriculum, etc. (18.02.2014, 17.02.2015, 10.03.2017, 13.02.2018, February 23, 2018). The results of internal audits are considered at the meetings of the departments.

Assessment by type of activity is carried out by an election commission on the basis of an order of the Chairman of the Board. Employees of the university, faculty and students are involved in the process. The verification of the activity of the structural unit is distributed among the members of the commission who prepare information on the direction of the audit, on the basis of which a certificate is prepared by the chairman of the commission and presented to the University management. The decision on the results of the provision of information is taken collectively at meetings of the University Academic Council.

For all processes at the university, including the evaluation of the EP management, a quality management system, an internal audit service have been introduced that assess the EP management, the activities of collegial bodies and structural divisions, senior management, and the implementation of research projects.

Evaluation of EP management is carried out on the basis of regulatory documents on the main educational programs of undergraduate, graduate and doctoral studies: Management of the processes of educational activities; Planning and evaluation of university activities; The procedure for conducting a comprehensive audit, etc. The monitoring is carried out by the staff of the Department of Academic Affairs, the Department of Scientific and Innovative Activities, the Department of Educational Work,

etc. Also, independent expert commissions established for specific purposes of assessing the quality of education by order of the Chairman of the Board. The instruments for ensuring the quality of education are: State mandatory education standards; regulatory documents S.Seifullin KATU; the commission of quality control of the educational process of educational and scientific units; University-wide regular survey of students about the quality of teaching in educational programs; educational and methodical council, etc.

Properties and characteristics of the information collected is determined in the order:

-analysis of activities (annual reports of heads of departments, deans of faculties), the results of intermediate, state final certification;

- sociological polls (questioning, online survey of students);
- testing (verification of basic knowledge) of students;
- analysis of employer's feedback on students and graduates;
- analysis of record keeping;
- analysis of the activities of teaching staff (rating), etc.

Processing, accumulation and analysis of information obtained in the course of monitoring is carried out by employees in accordance with their official duties. Based on the results of the analysis of the received data, designated persons prepare relevant documents (reports, certificates, reports), which are submitted to the management of the University within the time limits established by the order.

All information and data provided is fully consistent with the mission and strategy of S.Seifullin KATU in terms of generation, implementation, dissemination and application of advanced knowledge based on building the best advanced training system in Kazakhstan for specialists and scientific and pedagogical personnel with the provision of wide possibilities for choosing the level, content, form and terms of training for unique educational programs.

Information is collected by engaging students, employees and teaching staff in this process. In this case, the object of monitoring is determined; collection of primary data used for monitoring; processing, analysis and interpretation of data obtained during the monitoring; preparation of information and analytical materials on the basis of monitoring; distribution of monitoring results among participants in the educational process.

In order to determine the degree of customer satisfaction with the educational process (content, organization and quality of the educational process), as well as the quality of teaching academic disciplines (the work of individual teachers), a survey is conducted. Questionnaire questions can be changed in accordance with the tasks set by the

University management. The survey is conducted during the year. Questioning of students in relation to individual teachers is carried out by decision of the heads of the structural units concerned. The results can be taken into account by the Department of Personnel Management and workflow in the certification of teaching staff. According to the results of surveys, a report is being prepared that is submitted to the leadership of the University.

Communication with the subjects of the educational process and other stakeholders includes interpersonal communication: “student-teacher”, “student-student”, “student-group”, “teacher-teacher” in the educational process in the classrooms. Communications are also carried out through exhibitions, presentations, seminars, conferences, meetings and so on.

The university is actively involved the largest channel of communication technologies - the Internet. It gives the opportunity to continuously fill and update existing information on the website S.Seifullin KATU, electronic document management, PLATONUS, educational portal, etc.

The system of information provision of students, feedback is implemented through a system of social and control activities, starting from the first day of his studies and completing the defense of a thesis (master's thesis). The system allows you to determine the degree of satisfaction of students with the learning process and provides feedback to students through the information database PLATONUS, "Educational Portal", where all the achievements of the student, who has his login and password, are noted.

In order to obtain information on the improvement of the activities of the EP, direct requests can be sent to its head - electronic communications, telecommunications, etc.

The university provides free access to teachers and students to the Internet, there is Wi-Fi. In general, the resources of the scientific library and information and communication technologies used at the university, create the necessary conditions for independent educational and research work of students and teachers.

The degree of satisfaction of faculty, staff and students of the university management system is carried out by the Department of Personnel Management and the Center for Sociological Research through a regular sociological survey of faculty and students.

The surveys covered the problems of studying the assessment by teachers and students of organizing the educational process and working conditions by teachers of S. Seifullin KATU; study of the assessment of the conditions of the organization and the conditions of work of employees; students' assessment of the professional level of teachers; the problem of relations between teachers and students, etc.

In the course of a sociological survey, respondents indicated an inadequate level of material and technical support for the scientific process. To solve this problem, the university conducted computer support for the Center for Sociological Research of the university, in terms of public procurement, it is planned to purchase software from the Center SRC.

Respondents considered insufficiently thought-out directions and forms of advanced training for teaching staff. With this aim, the plan for improving the qualifications of teaching staff was adjusted.

Comments were made to the administration on the development of the university's social program (problems of solving the housing problem, protecting and supporting the health of the teaching staff. During this period, social housing was built for teachers and staff and a new student dormitory (№8).

To improve the efficiency of the educational process, the university constantly monitors the corruption situation in the relations between students and teachers through constant student sociological surveys. Analysis of the results obtained in this area allows for ongoing monitoring of corruption issues. Each particular negative case is carefully studied and certain measures are taken.

Every year, 250 to 350 respondents take part in the survey.

The results of the conducted sociological research allow to determine the following problem areas in the organization and conditions of the work of teachers of S. Seifullin KATU:

1 Increasing the basic part of teachers' salaries.

2 Material and technical support of the educational process and scientific activities of teachers.

3. Payment of scientific missions of teachers at the expense of the university funds, transparency of the advanced training program.

4. Development of a social program to support the health of the teaching staff of the university.

5. Expansion of the social package of teaching staff taking into accountthe changed economic and social situation in society.

The performance of the educational program is evaluated according to the following criteria:

- the annual number of new (innovative) educational technologies implemented in training (measured on the basis of educational and methodological developments published

and posted on the S.Seifullin KATU) - video lectures for distance learning, electronic textbooks were introduced;

- on educational and methodological activities - the annual plan for the publication of educational and methodical literature is carried out at 100% (Appendix 8);

- the annual number of research works and the share of faculty members involved in scientific activities - over the past three years, OP 5B / 6M / 6D080800 - Soil Science and Agrochemistry implemented 7 projects for grant funding from the MES RK for more than 50 million tenge, since 2018, 2 projects have been implemented for an amount of about 300 million tenge, contracts have been concluded with economic entities in the amount of about 600 thousand tenge;

- the share of employed graduates is more than 70%;

The main tasks solved by using indicators of the rating system are assessments of the achievement of the strategic goals of S. Seifullin KATU; monitoring and control of the implementation of the development strategy; creating a system of employee motivation and teaching staff; orientation of university staff to achieve priority goals.

The university rating system is based on the principles of transparency and measurability of indicators of the university rating system; minimum sufficiency of the aggregate rating indicators; complex characteristics of the university; availability of performance indicators characterizing the university's short-term and long-term goals; consistency of university ranking indicators; focus on the growth of the university's results in the educational, scientific and financial spheres, taking into account the requirements of the Ministry of Education and Science of the Republic of Kazakhstan, Ministry of Agriculture of the Republic of Kazakhstan to the performance indicators of educational institutions of higher education.

The dynamics of the contingent of students is presented in Appendix 2.

According to the results of the EASD, the average score in 2013-2014 was 118.8, in 2014-2015 - 131.5, in 2015-2016 - 92.5, 2016-2017 - 96.3%, 2017 -2018 - 88%. The performance of students in the undergraduate and doctoral studies is 100%, the average score from 3.33 to 3.77. The results of the performance are shown in table 3.

Table 3 - The results of the examination sessions of students of OP 5B080800 - Soil Science and Agrochemistry (2015-2017 academic years)

№	Specialty	Average score			Performance,%		
		2015-	2016-	2017-	2015-	2016-	2017-

		2016	2017	2018	2016	2017	2018
1	5B080800-Soil Science and Agrochemistry	3,1	3,1	2,9	93	88,3	80,1
2	6M080800-Soil Science and Agrochemistry	3,48	3,36	2,9	87,1	84	73
3	6D080800-Soil Science and Agrochemistry	3,67	3,83	3,67	92	96	92

In order to improve the educational process, it is important to know the opinion of students about the organization of the exam session at the university. The survey is conducted during the examination session and for students of the correspondence department according to the approved schedule.

The main policy of the educational process is determined by the quality of the educational process and the interests of students. The educational process is regulated by the academic calendar, the schedule of the educational process, the catalogs of elective disciplines, the position on the control of knowledge, developed on the basis of regulatory documents of the MES RK and the rules of the credit system of education and based on academic integrity students. Every year, based on the analysis of changes in the SES of specialties, standard programs, the UMCD is processed to improve them in order to optimize the training process. Created an electronic database of EMCD in high school. At the beginning of each semester, students on three levels have the opportunity to purchase EMCD on paper and on electronic media.

At the disposal of students is a catalog of elective disciplines, constituting 40% of the number of all academic disciplines in the specialty. Students can get presentation material from teachers who teach.

For readers in the electronic reading rooms of the library, places for working with an electronic catalog, the Internet, and digital media are organized. Students have the opportunity, free of charge, through the university's website to use the database of electronic catalogs of the scientific library, where the entire library collection is reflected, as well as full-text databases of electronic resources: to resources of the Republican inter-university electronic library, Kazakhstan national electronic library, to the world electronic resources Thomson Reuters, Elzevir, Springer Science Direct, Sciverse Scopus.

Educational materials, electronic lecture courses and textbooks, test questions are presented in the library, they are freely accessible.

Information about teachers involved in the implementation of the EP is posted on the website of KATU. S.Seifullin, in which the contact information, the area of scientific interests, the main merits, the availability of developments, information on advanced training. This information is available to all.

Information about the employment of graduates is given in table 4.

Of the unemployed, the main share falls on those who went on maternity leave and parental leave, serving in the armed forces of the Republic of Kazakhstan, who entered the magistracy and left the Republic of Kazakhstan. Undergraduates and doctoral students work 100%. The best graduates continue their education in master's and doctoral studies at Kazakhstani universities or universities of far and near abroad. For example, graduates Grigulevich I. graduated from RGAU - Moscow Agricultural Academy. K.Timiryazeva, I. Plyusnin is studying at the magistracy at Tomsk University, Kaliaskar D. postgraduate at the Bolashak program at the University of Alberta (Canada), Nurzhan A., Nuralykyzy B. at the doctoral studies at Siyan University (China), Orazgul A., Dulatova A. and others finished the magistracy in KazNAU.

Places of employment in addition to specialized enterprises: plant for the production of pesticides (Stepnogorsk), akimats, departments of the Ministry of Agriculture of the Republic of Kazakhstan, Agro-Sector LLP, SWISSGROW LLP, Uralteploprofil LLP, Vichunay-Kazakhstan LLP, LLP Agrofirm Gers 888 ", universities, colleges, etc. All docto-rands are employed in the department, in the NAO" Government for Citizens".

Confidential is information relating individually to each participant in the EP, which is located in the Platonus database, which only the user has access to. This procedure is governed by the Privacy Policy Statement of JSC “KATU them. S.Seifullin "; Methodical instruction on password protection. The rest of the information is open.

Table 4 - Information about the employment of graduates of OP 5B080800 - Soil Science and Agrochemistry

Years	Employment	Number of graduates / share
2013	By specialty	7/28%
	Not by specialty	7/28%
	Unemployed	11/44%
2014	By specialty	9/36%
	Не по специальности	6/24%

	Unemployed	10/40%
2015	By specialty	15/37%
	Not by specialty	18/43%
	Unemployed	8/20%
2016	By specialty	18/35%
	Not by specialty	20/38%
	Unemployed	14/27%

Information management processes are carried out in accordance with regulatory documents (see links (http://kazatu.kz/assets/i/deps/smk-basis-151217.pdf; http://kazatu.kz/assets/i/ deps / 2007.09.2017pdf.pdf). The official website of the University is available on the Internet at http://kazatu.kz. An internal information and educational portal has also been created (http: // portal.kazatu.kz) The site contains a blog of the rector, providing communication with all interested parties on the EP, posted contact information to provide feedback to the vice-rectors, department directors, deans of the faculty s, heads of departments with the students, parents, employers and other private-The interested parties.

There is a catalog of UMM and electronic documents. Provided complete information about the educational achievements of each student. Functioning subsystems of intersesional testing and questioning of students, distance learning system, bulletin board, etc.

The educational portal of the university contains the following functional elements: IPKDO, e-learning center, Multilingual Education, Teacher, Student, School Olympiad, Applicant, FOP, Sports Club, Video, Thesis Defense, Timetable, InfoTech. The University's website contains information about the university's activities on the basis of "About Us", "Training", "Science", the Applicant, "University Life", "Biblio-tech", and "Farmer".

Thus, information management processes have been introduced at the university; the volume and structure of periodically updated information corresponds to the development strategy; ensured modernity, accuracy, completeness of information and its preservation; collection, analysis and management of information ensures the quality of implementation of the EP; information is analyzed to identify and predict risks.

Table 5 - SWOT analysis of the Information Management Reporting standard

S (strength) – strengths (potentially positive internal	W (weakness) – weaknesses

factors)	(potentially negative internal factors)
- the possibility of strategic planning; - information management processes were implemented (collection, processing, analysis, use, evaluation) - involvement of all participants of the EP in the process of collecting and analyzing information - ensuring the process of effective delegation of powers to the heads of EP on the adoption of operational management decisions;	- concentration of efforts in the directions of the OP; - dilution of responsibility for the EP for several managers; - poor training of EP managers in the field of management
-O (opportunity) – opportunities (potentially positive external factors)	T (threat) – threats (potentially negative external factors)
- the ability to assess the performance of a particular unit (the degree of achievement of goals), - the possibility of attracting the attention of top management to the implementation of EP; - the possibility of improving the system of motivation of teaching staff through the implementation of their planned indicators;	- the system is not accepted by functionaries due to various reasons; - the threat of duplicate services and functions in various departments;

The specialized information management reporting profile contains the following self-assessment of compliance: according to the criteria the EP has a strong position - 7, satisfactory - 9, suggests improvement - 1.

4 DEVELOPMENT AND APPROVAL OF THE EDUCATIONAL PROGRAM

The content of educational programs is developed taking into account the Dublin descriptors and the European Qualifications Framework and is implemented through curricula (typical, individual and work) and programs (standard and syllabus).

The basis of all EP is the Model curriculum of the specialty in three levels of education with a list of disciplines OK, approved by the MES RK. The list of elective disciplines is formed taking into account the pre-and post requisites and the opinion of the employers.

Curricula are developed in the forms:

- working curricula (RC);
- individual training plans of students (ITP).

The development system of the EP consists of the following procedures:

- the appointment of the commission on curricula and programs by the order of the dean's office and the order of the university;
- drawing up a working curriculum at the department and its discussion with the participation of employers;
- preparation of a set of documents OP (RUP, MOP, CED),
- Peer review by external reviewers;
- Consideration of the OP at the meeting of the Faculty of the UMS;
- approval at the faculty council, at the meeting of the KATU Academic Council;
- update (development) UMKD;
- formation of individual curriculum.

In order to successfully implement the OP 5B / 6M / 6D 080800 - Soil science and agro chemistry and ensure the successful positioning of a specialty in the labor market, programs are updated annually.

This takes into account the interests of employers who are invited to the meetings of departments and express their opinion on the compliance of the EP with the profile of the specialty and the requirements of the labor market, the inclusion of new disciplines or the exclusion of disciplines that have lost relevance.

To this end, the department together with the faculty also holds a fair of vacancies, where the heads of agricultural units of various forms of ownership, enterprises, seminars, round tables with participation of graduate students are invited.

One of the forms of joint cooperation with employers in the development, management and implementation of educational programs is to conduct classes (lectures, practical exercises) by leading scientists, specialists - representatives of scientific research institute, NRU, AO, LLP, Agricultural firms in profile in accordance with the schedule compiled annually occupations.

In assessing the positioning of a specialty in the labor market in terms of qualified soil scientists and agro chemists, employers give a high rating to young specialists who demand high enough (from 70% or more undergraduate jobs and 90% of magistracy for three years on average, 100% doctoral).

The positioning of the OP specialty 5B / 6M / 6D080800 - Soil science and agro-chemistry on the educational market is estimated by the position of S.Seifullin KATU among universities of Kazakhstan in the National ranking.

Verification of the graduate model is carried out constantly by the method of checking students' competencies in the period of current, mid-term, final certification.

The procedure of validation of a graduate is carried out during the student's undergraduate practice, when the head of internship from the enterprise evaluates the level of the graduate's readiness for independent professional activity; in the process of reviewing graduation qualification works, which confirms the quality level of graduate training and his willingness to work in the enterprise. during the preparation and defense of the thesis, master's thesis, passing a comprehensive exam in the specialty, defense of a doctoral dissertation at the dissertational council of S.Seifullin KATU .. At that, the assessment of compliance with the competences received by the graduate is exhibited collectively, created by the commission on the State final certification, The chairman of which is usually elected leading scientists, leaders, specialists in the field of soil science and agro chemistry, who have a large research and production an experience. For doctoral theses, the confirmation of the variation is a positive decision of the dissertation council and confirmation in the KKSON MES RK. The result of validation is the issuance of diplomas of the established sample.

These procedures are defined in the methodological instruction general requirements for the organization, conduct and registration of the thesis (project); Methodical instruction the order of registration and writing of the master's thesis; Methodical instruction

procedure for the organization and conduct of practical training of undergraduates / doctoral students; Methodical instruction the order of registration of reports of the faculty; methodical instruction procedure for the design and writing of a doctoral dissertation.

The procedure for the development of OP 5B, 6M, 6D080800 - Soil science and agro chemistry consists in carrying out activities in accordance with the internal university regulations: Regulations on the procedure for developing an educational program development plan and monitoring its implementation; Design and development of educational services. The university assesses the quality of EP using employer questioning procedures for graduates of EP 5B, 6M, 6D080800 - Soil science and agricultural chemistry of students, parents' reports, reports of chairmen of the State Antimonopoly Committee, external reviews and expertise, official reviewers, etc.

Evaluation of the quality of EP is carried out on the basis of an analysis of the implementation of curricula, a catalog of elective disciplines, a timetable, individual curricula of students, student ratings, internal regulatory documents governing the implementation of EP, questioning students and employers.

The development of work plans for the new school year with their revision and updating begins early in the middle of the school year, which makes it possible to better and thoroughly discuss their content, the complexity of the theoretical and practical components of training, the module of final certification.

The students with the help of advisors form the IEP, in accordance with the TUP and the QED, on the basis of which RUPs are compiled annually for one academic year.

The basis for an unscheduled revision of the OP can be: changes in the SES, specialty TUP; changing labor market requirements. For example, on the basis of the 2013 TUP, the IGA module included passing the state exam for specialty and the defense of the thesis (project), and in 2016 at the TUP, the IGA module made changes to pass the state exam in the specialty and the defense of the thesis (project) (or passing the second state specialty exam).

The uniqueness of the OP 5B / 6M / 6D080800 - Soil Science and Agro chemistry, is to develop students' knowledge and skills in agrochemical survey of agricultural land using elements of digitalization, the development of activities related to the use of chemicals in the system of traditional and precise agriculture, the development of a nutrition system for crops in organic farming, the compilation of electronic soil maps using GIS technologies, the assessment of soil quality, the agro-industrial grouping of land for farms, soil-reclamation measures, and others.

The OP is reviewed by employers and stakeholders to identify real production requests formulated by employers and other stakeholders. During the reporting period, reviews were received on the OP from the Head of the Department of Monitoring, Dynamics and Forecast of Soil Fertility of the State Institution "RNMTSAS" of the Ministry of Agriculture of the Republic of Kazakhstan A.S. Karakalchev, Manager for Development and Registration of Schelkovo-Agrokhimm LLP Suleimenova S.Z. Nutrition and Agro ecology of Soils KazNIIZiR E. Suleimenova, Deputy General Director of Uspanov B. KazNIIPAA U. Suleimenov, Secretary of Pavlodar Agricultural Research Institute Mustafayeva K.M., Deputy Director of the Complex and Research Branch of RSE Konakbaeva A.T.

The decision on the approval of the study program at the first stage is taken by the department, which is reflected in the protocols (No. 12 dated June 25, 2013, No. 5 dated November 16, 2017)

In accordance with the strategy and mission of S.Seifullin KATU educational bachelor program has goals:

- educational - the formation of theoretical knowledge and practical skills necessary for understanding and mastering professional disciplines in the context of specialization of curricula;

- professional - ensuring a high level of training of an agro chemist-soil scientist who is able to creatively address the problems of restoring and reproducing soil fertility, the rational use of soil resources and means of chemicalization, and increasing the productivity of agricultural crops;

- scientific - creation of conditions for the integration of education and science, by attracting students to research work in the field of soil science and agro-chemistry in the educational process; actualization of the scientific component in the preparation of soil scientists, agro chemists.

The graduate education program has specific objectives:

- scientific - deepening of theoretical and practical individual training in the field of soil science and agricultural chemistry according to specialized training programs, taking into account the needs of the state and the market, the requirements of employers; obtaining the necessary groundwork for the continuation of research work in doctoral;

- professional - training of specialists capable of formulating and solving modern scientific and practical problems, successfully carrying out various types of activities in agricultural enterprises and organizations;

- management - the acquisition of skills in the organization and conduct of soil and agrochemical works, management in various agricultural enterprises and organizations;

- educational - development of the ability to self-improvement and self-development, the needs and skills of self-mastering new knowledge in the course of professional activity.

The main objectives of the educational program of doctoral studies:

- obtaining fundamental knowledge in the field of soil science and agro chemistry and related sciences in accordance with the curriculum, due to the needs of the state and the market, specialized research institutions, universities, agricultural enterprises;

- training specialists with a high level of professional culture, including a culture of professional communication, capable of formulating and solving modern problems of agricultural science and agricultural production, teaching in higher and secondary educational institutions, carrying out research, management and project-expert work activities in domestic and foreign research institutes, research and production centers, to introduce the results of scientific research.

Educational programs are consistent with the Dublin descriptors, in accordance with the European Qualifications Framework, and take into account:

1) study: SOSO OP, etc. (requirement: to the results, to the structure, to the conditions of implementation), etc .; needs (state and social order, individual needs of the individual);

2) the algorithm for the formation of the EP: the preparatory stage (the organization of the working group, the study of regulatory documentation, etc.); the main stage (analysis of the results of educational activities, resources and conditions of the university, the development of a model of graduate 5B, 6M, 6D080800 - Soil science and agrochemistry; the structure of EP (target - goal, objectives, planned results, evaluation system; informative - development program EP, programs of disciplines, etc .; organizational - PM and conditions for the implementation of the EP); the final stage (self-examination, adjustment of the EP, discussion, approval of the EP, etc.).

As a result of the formation of EP, models of graduate bachelor-master-doctoral studies were developed (Appendix 9). The graduate model is the expected result of the activities of all the subjects involved in the implementation of the educational program and it serves as the basis for designing the educational policy of the university.

The verification procedure of the graduate as an internal process is carried out at the department during the preparation and defense of the thesis, master's thesis, passing a comprehensive exam in the specialty. At the same time, the assessment of compliance with the competences obtained by the graduate is put forward collectively by the commission

for the State final attestation, whose chair usually selects leading scientists, managers, specialists in the field of soil science and agricultural chemistry, who have extensive research and production experience.

As far as the young specialist who comes to work in an organization by the profile of the acquired specialty, corresponds to the developed model of the graduate student, the conclusion is given by employers (the validation procedure).

The AP Soil Science and Agro chemistry is undergoing an external examination procedure in ratings and ranking of national agencies (Table 6).

Table 6 - OP positions in the rankings of specialties for the Republic of Kazakhstan (data from rating agencies

Years	Agency	bachelor	magistracy	doctorate
2014	Independent accreditation and rating agency	3	-	-
2015	Independent accreditation and rating agency	1	1	2
2016	Independent accreditation and rating agency	2	2	2
2017	Independent accreditation and rating agency	3	1	2

In 2014, an external examination of the OP by the NAAR was carried out, following which accreditation certificates were obtained. NAAR OP 5B (6M) 080800 - Pedagogy and Agro chemistry (No. AV0076, No. AV0077 dated 21.05.2014, valid until 03.05.2019.) and OP 6D080800 - Soil Science and Agro chemistry (No. AV0467 of December 22, 2014, valid until December 18, 2019).

In 2015, the OP of the specialty 5B / 6M / 6D080800 - Soil Science and Agro chemistry passed state certification.

Specialists (partners and employers) are involved in external examination in accordance with the presence of higher and postgraduate education; experience in the relevant field for at least 10-15 years; knowledge of agricultural production, soil science, agro chemistry and related industries; interest in the introduction of modern technology and innovation.

Interested persons have the right to vote in approving the development plan of the EP on the basis of the treaties and memoranda with the enterprises in the department. There are no votes against the approval of the OP development plan.

Upon completion of training at the undergraduate level (higher education), a bachelor of agriculture degree in the specialty 5B080800 - Soil Science and Agro chemistry; Masters (postgraduate education) profile - Master of Agriculture, scientific and pedagogical - Master of Agricultural Sciences in the specialty 6M080800 - Soil Science and Agro chemistry; doctoral studies (postgraduate education) profile - doctor in profile, scientific and pedagogical - doctor PhD in the specialty 6D080800 - Soil science and agro-chemistry. Qualification levels correspond to the levels described by the NQF.

The graduate of a bachelor degree has a wide range of theoretical and practical knowledge in the professional field, is able to independently develop and put forward various options for solving professional problems using theoretical and practical knowledge, has the competencies of independent management and control of labor and educational processes in the framework of the strategy , policies and objectives of the organization, discussing the problem, arguing the conclusions and competently operating the information.

A graduate of master's degree acquires conceptual and new applied knowledge in the field of science and professional activity, is able to independently determine the purpose of professional activity and choose adequate methods and means of achieving them, to carry out scientific and innovative activity on acquiring new knowledge, acquires competences sufficient for defining a strategy, unit or organization, decision-making and understanding of responsibility at the unit level.

A graduate of doctoral studies acquires methodological knowledge in the field of innovation and professional activity, the skills and abilities to generate ideas, predict the results of innovation activities, implement large-scale changes in the professional and social sphere, manage complex industrial and scientific processes; Define strategies, manage processes and activities, decision making and responsibility at the level of institutional structures that forms competencies related to the ability th to leadership, autonomy, analysis, evaluation and implementation of complex innovative ideas in the science and practice area.

Participants in the development of the graduate model: representatives of the EP of the department, having experience in the core field, employers, partners in the field of education. The basis for the development of a graduate model is: SES RK No. 292 of

05/13/2016 (competence); goals, principles of training; opinions of production representatives and employers; requirements of the state and the region.

Participation of faculty, employers and students in the development of 5B / 6M / 6D080800 - Soil science and agricultural chemistry is governed by the following activities:

1) invitation to the department meetings;

2) feedback from employers on the basis of internships, reviews on graduates;

3) reviews of the PLO from representatives of organizations - potential employers.

Typical employers 5B / 6M / 6D080800 - Soil Science and Agro chemistry: Department of Land Resources and Real Estate of the NAO "Government for Citizens" in Kazakhstan; LLP "U.U. U.S. Kazakh Scientific Research Institute of Soil Science and Agro chemistry"; LLP "Kazakh Research Institute of Agriculture and Plant Growing; State Enterprise “Republican Scientific and Methodological Center of the NMC of the Agrochemical Service” of the Ministry of Agriculture of the Republic of Kazakhstan; LLP Research and Production Center of the Grain Economy named after A.Barayev; LLP Karaganda Research and Development Institute of Breeding and Plant Growing; LLP "Pavlodar Sky Research Institute of Agriculture "; LLP "KazNII rice growing "; agricultural units of various forms of ownership.

For the formation of professional competencies of the graduate in the content of the curriculum, along with the general education and basic disciplines, a cycle of majors is included.

Training of students according to professional standards is not provided due to their absence.

The load of teaching staff is planned in accordance with the approved curriculum and “Standards of time” in the PLATONUS system. On average, the annual load on one teacher is 28 credits or 630 hours.

Accounting laborious study is carried out in terms of teaching material and is measured in loans (1 loan - 45 hours, of which 15 classroom hours, 15 hours of IWS, 15 hours IWST). In all forms of UE, a unified system of coded disciplines is used, providing for assigning to each discipline of UE a corresponding code in alphabetic and numeric characters.

The academic year consists of two academic periods, 30 weeks - theoretical training (2 semesters to 15 weeks) of the intermediate certification / final control period, 2 sessions of 3 weeks, practice and holidays. For all types of classroom academic hour is set for 50 minutes. Vacations are provided to students after each academic period with a total

duration of at least 6 weeks per year. The main criterion of completeness of the educational process in the undergraduate degree is the student's mastering of at least 129 credits of theoretical studies, and at least 10 credits of professional practice. In this case, the student must master at least 46 credits of academic hours for the compulsory component and at least 83 credits for the component of choice.

Educational programs determine the list of disciplines combined in cycles (modules): OOD; BD, PD and other types of students' educational work (practice). Each cycle consists of disciplines OK and KV. According to the cycles of the database and the list of disciplines, the list of discipline OK is determined by the TUP, and the list of disciplines of the CV is determined by the university independently. Pre- and post-requisites for OOD, BD, PD cycles are presented in TPUs, logical-structural analysis is carried out for QED disciplines. Participants are: faculty, employers, students, etc. Discussions are held according to established rules.

Conformity of the name and content of QED disciplines with relevant areas of the EP is reflected in the EP development plan, in terms of EP development activities, which take into account the needs of the state, society and the region. The analysis is carried out regularly at the department meetings, at a meeting with representatives of employers (workshops, lectures, at the meeting of the State Antimonopoly Committee, etc.), in the opinion of students and graduates (when questioning).

The content of the disciplines of the database and PD cycles corresponds to the profile of the trained agricultural specialists. Theoretical cycle disciplines are further consolidated in the modules of professional practice.

The logic of the academic interrelation of disciplines is determined by the system of pre- and post requisites. For example: to study the discipline "Basics of Soil Science", you need knowledge of such disciplines as: "General Geology", "Microbiology", "Bo-Tanik". To study the discipline "Agro chemistry" requires knowledge of "Chemistry", "Plant Physiology", "Fundamentals of Soil Science"; "Agro soil" - "Fundamentals of Soil Science", "Agriculture", "Biology". In the magistracy mastering the discipline "System of Optimization of Mineral Nutrition" is preceded by the study of the disciplines "System of application of fertilizers", "Agrology" in undergraduate. In doctoral studies, the discipline "Theoretical issues of raising and reproducing soil fertility" is based on the study of the disciplines "Physics and Chemistry of Soils", "Genesis and Classification of Soils".

The EP management annually analyzes external changes in the labor market, the needs of employers, etc. in order to revise the EP, which is then discussed at the

department and the corresponding adjustments are made in the RUPs. In recent years, the following changes have been made to the OP specialty: on the undergraduate undergraduate programs - “Degradation of Soils and Landscapes”, Selecicia and seed farming of agricultural crops, “Plant Biotechnology”, “Geoinformation Systems”, “Cultivation tour"; "Enterprise Economics and Entrepreneurship"; on magistracy: "Agro-biological basis of resource-saving technologies of cultivation of field crops", "Assessment and rationing of the quality of crop production", "Organic farming", "Phytosanitary monitoring of field crops", "Managing the productivity of field crops", "Theoretical foundations adaptive landscape farming "," Agro ecological assessment of land "," Production Management "; on doctoral studies: "Bioremidation and bioindication of soils", "Agro chemistry of fertilizers", etc.

Educational and methodological documentation, which reflects the various types of activities envisaged in the UE are contained in the EMCD: MR for the teaching staff to conduct various types of activities in the UE; MU for students on the implementation of LR; SRO, SROP, all types of practices, NIR, NIRS, NIRM, NIRD.

To determine the personal qualities of students, including the peculiarities of perception of information, teaching staff use a differentiated approach: they reveal the features of students in the classroom, when issuing SRO tasks, conducting assessment work, etc.

Passing by students of professional practices are governed by the QMS of the MI of the QMS "Procedure for organizing and conducting practical training of students". The practices of students envisaged by the state compulsory standard of higher education are established in accordance with the profile of the undergraduate degree:

Educational practice - acquaintance of students with soil types, methods of laying and description of a soil section, with rocks in the places of their occurrence, with vegetation in connection with the influence on soil formation. The practice is carried out on natural objects, characteristic of various climatic zones.

Technological practice - to familiarize students with the main methods of fertilizer use in connection with the physiological need of agricultural crops; development of methods of field soil survey and soil diagnostics based on morphological features, selection of plant and soil samples. Technological practices are conducted in experimental farms, in the departments and in the laboratories of the university, with the necessary human and scientific and technical potential and material and technical base.

Work practice - deepening and consolidation of the knowledge gained by students in

the study of basic and major disciplines of the specialty; the study of the organization of labor, the use of technology, machinery, various tools in enterprises; the acquisition of skills in professional activities. Production practices are conducted in industrial, research, design organizations, whose main activity predetermines the availability of facilities and types of professional activity of graduates with this specialty; in teaching and experimental farms, in the departments and in the laboratories of the university, conducting research in priority areas of agricultural science.

The types of practices of students envisaged by the state general obligatory standard of higher education are established in accordance with the profile of the specialty of magistracy and doctoral studies:

The pedagogical practice of undergraduates and doctoral students is carried out with the aim of developing practical skills and methods of teaching in higher education. Pedagogical practice is conducted in the period of theoretical training without interruption from the educational process at the graduating department, with a series of lectures and practical exercises.

The research practice of the undergraduate and doctoral students is carried out in order to familiarize with the latest theoretical, methodological and technological achievements of domestic and foreign science in the field of soil science and agro-chemistry, with modern methods of scientific research, processing and interpretation of experimental data.

Planning, monitoring of professional practice is assigned to a specific teacher. Graphs of educational practice are compiled in accordance with the Republican Unitary Enterprise in the disciplines "General Geology", "Botany", technological practice in the disciplines - "Agriculture", "Plant Growing", "Agro chemistry", "Soil Science", "Agricultural Machines" and are coordinated with the relevant departments. Given the increased emphasis on practice-oriented training, the labor intensity of the practices from the 2014-2015 school year was increased from 2 credits (30 hours) for the academic year and from 4 credits (60 hours) in the technological practice to 6 credits (90 hours) and 12 credits (180 hours) respectively. Students are assigned to work experience based on their wishes and availability of cooperation agreements. Contracts are negotiated by the head of the department with the management of enterprises. Responsible for the practice of the department in advance checks and, if necessary, updates the register of department contracts with enterprises employers who take students to practice. Work practice increased from 12 to 19 weeks to 7 credits.

Monitoring of the internship and the quality of its organization is monitored by the students' leaders, as well as the head of the EP, the head of the department. "Soil science and agro chemistry" Ramazanova R.Kh. Evaluation of students on the results of the internship and the conclusion given by the head of the practice of production, which reflects the comments, suggestions, opinions. This is voiced by the protection of reports on the passage of industrial practice.

An analysis of the passage of professional practices of graduates in 2016 is presented in Appendix 10.

University at the suggestion of the department - the head of OP 5B / 6M / 6D 080800 - Soil Science and Agrochemistry signed an agreement on internship: NAO "Government for Citizens" Department of Land Resources and Real Estate in G. Astana, Almaty and branches in Kazakhstan; LLP "Kazakh Research Institute of Soil Science and Agro chemistry" U.U.Panovova "; LLP "Kazakh Research Institute of Agriculture and Plant"; LLP "Kazakh Scientific Research Institute of Potato and Vegetable"; LLP "Karagan-Dinsk Scientific Research Institute of Crop Production and Breeding"; State Institution "Republican Scientific and Methodological Center of Agrochemical Service"; LLP "Research and Production Center of grain farming named after A.Baraev"; LLP "Karaganda Institute of Plant Breeding and Plant"; LLP "Pavlodar Research Institute of Agriculture"; LLP "Kazakh Research Institute of Forestry and Agro forestry"; LLP "Kazakh Research Institute of Rice Y.Zhahaeva"; LLP "Kazakh Research Institute of Water Management"; LLP North-Kazakhstan Research Institute of Animal Husbandry and Plant Production; LLP "South Kazakhstan Research Institute of Livestock and Plant Growing"; LLP "Kazakh Research Institute of Livestock and Feed Production."

In recent years, there has been an increase in the number of individual contracts: Oilseed Culture LLP (VKO) Agrofirma Astyk-STEM (SKO), etc. This is explained by the students' desire to undergo practical training at the enterprise, which is associated with the place of residence, which allows to solve the problems of the student's residence and in the future to provide a graduate with a workplace

In 2016, an agreement was concluded with the Afghan company Daikundi DALL (Afghanistan, Daikundi), where students from Afghanistan did internships.

In the 2014-2015 academic year, the university entered into an agreement with Bayserke-Agro LLP, where two students had practical training, starting from the moment of the pre-sowing field work until harvesting, capturing the full agricultural cycle. In the

2016-2017 academic year, TNK LLP entered into a similar contract for the practice of 5 students on agrochemical soil surveys.

There are no professional standards for the specialty EP, and therefore the development of appropriate programs and the implementation of their professional certification is not provided.

Individual learning paths are a prerequisite for credit technology of learning. When implementing EP, the principle of an individual approach to each student is implemented. Firstly, a student has the right to choose his own educational trajectory of study with the help of advisors who familiarize students from the 1st course with a list of elective disciplines with conducting presentations. As an elective course, the curriculum provides disciplines of a methodological nature aimed at the application of innovative technologies in the educational process, developed jointly with representatives of specialists in the field of soil science and agrochemistry. After that, the student draws up an individual curriculum for each academic year. The IEP is approved by the dean of the faculty in three copies, one copy of the IEP is kept in the dean's office, the second is kept at the Registrar's Office, the third copy is given to the student. ITM is the basis for monitoring the implementation and mastering of students in the vocational curriculum.

The mechanism of formation of the individual trajectory of the undergraduate's training is similar to the undergraduate educational program. The masters individual plan is compiled according to the curriculum of the specialty and contains: a list of basic and core cycle disciplines indicating semester, amount of credits for each discipline, substantiation of the research topic, plan for carrying out the master's thesis, publications and internships, terms and places of research practice and research work. All types of educational activities are implemented in the terms defined by the academic calendar and the individual work plan of the undergraduate.

When implementing EP, the principle of an individual approach to each student is implemented. The doctoral student is trained on the basis of an individual work plan, which is compiled with the help of scientific consultants. An individual work plan for a doctoral candidate is drawn up for the entire period of study (if necessary, may be updated annually).

IPRD is approved by the dean of the faculty and the head of the department of postgraduate education in three copies, one copy is kept in the department, the second is in the department of postgraduate education, the third is by the doctoral student. IPRD is the

basis for monitoring the implementation and development of students of OP. Theoretical training is carried out in accordance with the working curriculum of the specialty.

The laboriousness of a Kazakhstani theoretical training loan with an account of classroom and student's independent work in a bachelor's program is 45 hours of work, and 75 hours in a scientific-pedagogical magistracy.

An ECTS academic loan is a measure of the complexity of studying a discipline, both in class and during independent work. 1 ECTS equals 25-30 academic hours.

ECTS estimates the total workload of a school year at 60 credits (a student gains 30 credits per semester). The duration of the school year is 30 weeks and 6 weeks are given for exams (final control).

The recalculation of loans of the Republic of Kazakhstan to ECTS loans and back is carried out on the basis of conversion factors approved by the MES RK.

Types of activity in the structure of EP, the content of which contributes to the formation of professional competencies: conducting active types of training (lectures, practical and laboratory classes, seminars, colloquiums, practices: training, production, teaching and pre-diploma); IWSTS and IWS (referees, reports, projects, etc.); additional or individual classes (advisory assistance to students); knowledge control (input, current, boundary and final); evaluation (points,%, traditional score); analysis (students' achievements in training for the development of professional competencies; identification of problem areas in the content of EP or in the training of students); adjustment (in the content of the OP).

Compliance with the content of academic disciplines and learning outcomes is carried out on the basis of TUP, RUE, MOP and QED. The access channel of students to the content of disciplines - syllabus. The correspondence of the content of academic disciplines with the results of training on the example of the discipline "Agrochemistry" in the bachelor degree is presented in Appendix 11.

Types of activity in the structure of EP, the content of which contributes to the formation of professional competencies: conducting active types of training (lectures, practical and laboratory classes, seminars, colloquiums, practices: training, production, teaching and pre-diploma, research); IWSTS and IWS (abstracts, reports, projects, etc.); additional or individual lessons (advisory assistance to students); knowledge control (input, current, boundary and final); evaluation (points,%, traditional score); analysis (students' achievements in training for the development of professional skills; identification of

problem areas in the content of the EP or in the training of students); adjustment (in the content of the OP).

Compliance with the content of academic disciplines and learning outcomes is carried out on the basis of the PMT and QED. The access channel of students to the content of disciplines - syllabus.

Educational and methodological documentation, which reflects the various types of activities envisaged in the UE are contained in the EMCD: MR for the teaching staff to conduct various types of activities in the UE; MU for students on the implementation of LR; SRS, SRSP, all types of practices, research, SRWS, etc.

Personal qualities of students, including features of perception of information, are taken into account in the form of a differentiated approach.

During the development of EPs in the specialty Soil Science and Agro chemistry, modules and the list of disciplines were discussed with the university, determined by the base in this specialty - the Kazakh National Agrarian University. Equal value of educational programs of two universities is at least 50%, which made it possible to implement the program of internal academic mobility of students. In terms of harmonization of the content of the study program, a comparative analysis of the elective disciplines of the BD and PD cycle with KazNAU, ZKATU named after Zhangirkhan was conducted (Appendix 12).

Of the 27 disciplines in OP 5B080800 in the S. Seifullin KATU with KazNAU (basic university) is 63%, with the Zhangirkhan Moscow State Pedagogical University the correspondence is 74%.

Conclusion: 5B / 6M / 6D080800 - Soil science and agro chemistry has a developed model of a graduate. Participation of the teaching staff and employers in the development and management of the EP ensures its quality. The content, scope, logic of building an individual educational trajectory of students, the influence of disciplines and professional practices on the formation of the professional competence of graduates meets all the requirements for the implementation of EP.

There is a clear definition of the logical sequence of courses of disciplines, which are reflected in the working curricula and basic requirements for learning outcomes. The logic of the UE and training programs, meet all the requirements of the EP. OP renewal is systematic, taking into account the interests of employers. The conditions for the effective promotion of the learner along the individual educational trajectory, in order to develop

individual characteristics, needs and cultural experience of the students meet all the requirements for the implementation of EP.

EPs are developed on the basis of an analysis of the labor market and satisfy the needs of potential consumers, they are implemented within the framework of the loan technology of education. Content 5B / 6M / 6D080800 - Soil science and agrochemistry corresponds to SES and provides training of highly qualified personnel with an innovative and creative type of thinking, who have an adequate level of knowledge and skills in their professional activities.

There are no joint EPs with foreign educational organizations.

Table 7 - SWOT-analysis of the standard "Development and approval of the educational program"

S (strength) – strengths (potentially positive internal factors)	W (weakness) – weaknesses (potentially negative internal factors)
- participation of faculty and employers in the development and management of EP; - The presence in the OP disciplines of professional context, the results of scientific research, the achievements of modern science; - periodic update of the OP; - accessibility of OP to students; - availability of a monitoring system for achievements in the educational trajectory; - strengthening the practical training of students.	- self-control and the process of self-recognition in educational and professional activities, both students and teachers; - the need to improve the skills of teaching staff in the field of innovative learning technologies at the republican and international levels.
O (opportunity) – opportunities (potentially positive external factors)	T (threat) – threats (potentially negative external factors)
a change in the ratio of the obligatory component of the SES and the component of choice towards the increase in the latter in connection with the adoption of the State program for the development of education for 2011–2020; - consistency of EP with republican	- lack of interest of employers in improving partnerships with the university; - insufficient level of school knowledge. - lack of joint EP with international organizations;

universities - - the demand for graduates of the specialty.	- the inability to prepare students for professional certification

The specialized profile “Development and Approval of the Educational Program” contains the following self-assessment of compliance: according to the criteria the EP has a strong position - 4, satisfactory - 6, suggests improvement - 2.

5 CONSTANT MONITORING AND PERIODIC EVALUATION OF OP

OP quality monitoring includes:

- internal assessment of EP (rating of the department responsible for the implementation of EP in a higher education institution, rating of academic staff of a higher education institution, self-assessment of EP in the framework of specialized accreditation, assessment of teaching quality, verification of EP implementation activities);

- internal assessment of the university: self-assessment and compliance with regulatory documents (standards, guidelines for self-assessment) of accrediting independent agencies;

- external assessment: EEPA, specialized (software) accreditation, EP rating, Final state certification of students;

- external evaluation of the educational activities of the university: verification of compliance with the law, institutional accreditation, rating.

The monitoring and evaluation of EPs is carried out at the level of the department, dean's office and clerk with the obligatory analysis and review of reporting on the dynamics of the program's activities at meetings and the adoption of appropriate decisions for their implementation.

At the department level, in accordance with the established schedule, monitoring is carried out for all types of activities (classroom, teaching, research, educational, independent work of students, etc.) with discussion at weekly operational meetings. At the end of the 1st and 2nd semesters, an analysis of the teaching staff's activities for the semester is carried out with a discussion at the department meeting and a decision. If necessary, corrective actions are taken.

The dean's office of the faculty weekly discusses the results of monitoring the progress of the educational process, analyzes the attendance of classes and the results of current and mid-term monitoring. According to the approved plan, it considers the quality of the educational process and research in the specialty, the activities of the department and individual teachers. On the issues under consideration decisions of the faculty council are made with the development of corrective actions if necessary. Implementation of planned work is controlled by the dean of the faculty.

At the university level, an analysis of the state of the educational process is conducted weekly at a administration meeting with the participation of vice-rectors, educational management, departments with the adoption of specific decisions. The quality of educational services at the meetings of the administration and the Academic Council of the University are considered systematically.

Monitoring of the status of the issues addressed is carried out by the competent commissions created by the order of the university, faculty. The implementation of the decisions is controlled by the commission and discussed at the meetings of the Academic Council of the University and the Council of the Faculty.

If any inconsistencies of corrective actions are identified, changes in the training documentation will be made: the working curriculum of the specialty; working discipline programs; lecture courses, practical training plans, practice programs; teaching materials for students and teaching staff; content and procedure of intermediate and final certification. The annual adjustment of documentation, its updating, unification is carried out in order to create optimal study groups and lecture flows at the faculties.

The need to adjust the existing disciplines in the specialty, the abolition of lost relevance or the introduction of new elective disciplines are discussed at the meeting of the department and the methodical seminar.

The effectiveness of the changes implemented by the EP, is assessed by the results of academic performance and the quality of training of students. All processes associated with the implementation of the OP undergraduate, graduate and doctoral programs in KATU them. S.Seifullin documented and verified by the quality service.

When planning the EP for each particular discipline provides a link to the basic strategic documents of the Republic of Kazakhstan. For example, in the disciplines of the block "Agro chemistry" on three levels, it is obligatory to include the study of such documents as the annual Messages of the President of the Republic of Kazakhstan N.Nazarbayev to the people of Kazakhstan; The state program of industrial-innovative development of the Republic of Kazakhstan for 2015 - 2019; The state program for the development of agriculture in the Republic of Kazakhstan for 2012-2020. (Agrobusiness 2020). Also included is a study of the Subsidy Rules for Fertilizers, the Rules for the conduct of an agrochemical survey. When studying the disciplines of the "Soil Science" block, it is obligatory to study the Land Code of the Republic of Kazakhstan, the Environmental Code of the Republic of Kazakhstan.

Taking into account changes in the needs of society and the professional environment in the EP, changes are made in terms of the content of the disciplines studied, the revision of the work-force, the format of the classes. For example, classes in the discipline of the method of agrochemical research in undergraduates and "Modern methods of soil and agrochemical research" are conducted directly at the enterprise - RNMTs "Agrokhimluzhba", from the 2017-2018 academic year, laboratory classes on the subject "Land mapping" were transferred to the department of land relations NAO "Government for Citizens", for it was signed an agreement on cooperation. twice a year, outdoor classes are practiced with undergraduate students at the RNMTs "Agrokhimsluzhba" and the AIT Barayev Scientific and Technical Center for Agricultural Workers' Center.

In the OP on the accredited specialty on the PD cycle, there are disciplines aimed at the development of professional competencies:

- Bachelor - Agricultural soil science, Soils of Kazakhstan, Soil valuation, Soil mapping, Agrochemistry, Basics of agrochemical research, Agrochemical monitoring and mapping, Fertilizer application system, Landscape science, Soil and landscape degradation techniques, Soil and landscape degradation, Geoinformation systems, etc .;

- Magistracy - Desertification Processes and Restoration of Degraded Lands, Soil Physics and Chemistry, Soil Genesis and Classification, Optimization of Nutrition of Crop Crops, Soil and Plant Diagnostics, Crop Rotation Fertilizer System, Landscape Planning and Design of Agricultural Landscapes, Theoretical Foundations of Adaptive-Landscape Farming, Pro - vectoring of high technologies, Agroecological assessment of lands, etc .;

- doctoral studies - Management of the production process of agricultural crops, Scientific bases of plant nutrition and fertilizer use, Theoretical fundamentals and ways of controlling soil fertility, Bioremidation and soil bioindication, etc .;

In the event of changes in the regulatory documents governing the activities of relevant organizations, appropriate adjustments are made to the content of the disciplines (syllabuses).

The graduation of students annually, the form of final certification - passing the state exam in the specialty, the defense of the final qualifying work (thesis project or work) or the second state exam in the specialty. Indicators of final state certification are presented in table 8.

Funds of assessment tools (questions, assignments, situations, etc.) used in the ongoing monitoring of progress, conducting intermediate and final certification, contain

materials developed on the basis of real practical situations and allow to evaluate the formation of professional competencies.

Laboratory work allows you to build skills and in some cases, the skills of the studied discipline. Thus, the discipline "Agro chemistry" provides laboratory work (determination of the content of nitrate nitrogen in the soil, determination of the chemical composition of plants, qualitative reactions of fertilizers, etc.), which give knowledge of the principles of determining the above indicators and allow you to master the skills of agrochemical analysis of classical methods that are used in laboratories.

Table 8 - Results of final certification for OP 5B / 6M / 6D080800 - Soil science and agrochemistry

Years	Number of students	State Exam	Thesis, dissertation	Average score	academic performance	diploma with honors
Bachelor						
2014-2015	41	80,0	96,0	88,0	100	5
2015-2016	52	81,3	96,0	88,6	100	2
2016-2017	44	84,5	91,0	87,7	100	3
2017-2018	39	73,3	80,5	76,9	97,5	
Magistracy						
2014-2015	11	86	94	90	100	
2015-2016	17	85	88	87	100	
2016-2017	4	94	95	95	100	
2017-2018	1	86	84	85	100	
Doctorate						
2015-2016	2	93	93	93	100	

2016-2017	2	94	95	95	100	
2017-2018	1	92	-			

Studying the course “Crop Fertilizer System in Crop Circulation” provides the master students with knowledge of the features of constructing the crop fertilizer system in crop rotations of various specializations, determining the nutrient balance, the humus balance in the crop rotation, and gives skills in calculating the rates of fertilizers, determining the terms and methods for their application, economic efficiency.

At the doctoral level, knowledge of the principles for developing measures for the conservation and reproduction of soil fertility provides practical training in the discipline "Theoretical Foundations of Soil Fertility Management and Reproduction".

Acceptance of the results of laboratory and practical work allows us to assess the formation of skills and abilities, the most important elements of professional competencies.

The assessment procedure for students consists of the technology of the ongoing monitoring of progress and intermediate certification. As a means of current control, point-rating assessment of performances and activities of students at seminars and practical classes is used; hometasks; preparation of reports on a given topic; presentation of the work performed; written report on the work performed; writing essay. Intermediate controls for each discipline and evaluation criteria are specified in the work programs of the academic discipline (Appendix 13). Examples of examination tickets for a number of disciplines are given in Appendix 14.

So in the course "Fundamentals of Soil Science" given the task of determining the granulometric composition of the soil, the content of humus, the physical properties of the soil, etc., on the basis of which the student must give an opinion on the type of soil, its properties.

The course “Fundamentals of Agrochemical Research” carries out work on the design of experimental schemes with fertilizers, the calculation of fertilizer doses per plot, the breakdown of the experimental plot.

In the course “Soil Physics and Chemistry”, work is carried out to study the genesis of the soil structure, methods and techniques of structuring, determining the composition of the organic matter of the soil, etc.

In the working curricula of disciplines (syllabuses) there are practically no professional courses that have no practical orientation; therefore, laboratory and

independent work gives tasks developed on the basis of real practical situations, and questions of intermediate certification are based on the analysis of such situations.

The final certification is held in the form of the State exam in the specialty and defense of final qualifying work. Criteria for its assessment: the level and correctness of the use in the work of research methods, calculations, etc .; originality and novelty of the results, research or applied solutions; application of modern software.

When conducting a final attestation, a representative of scientific research institutes, enterprises - bases of practice on a profile (see the teaching staff standard) is mandatory invited as the chairman.

All interested persons take part in the review of the EP, which allows to reveal the real production requirements formulated by employers and other stakeholders. The participation of employers in the revision of the EP is carried out through: mandatory inclusion in the academic council of the faculty of the chief specialist of Agrokhim-Schelkovo LLP Kairzhanova Zh .; the participation of employers in the activities of the Board of Trustees; the formation of state examination commissions (HES) with the participation of representatives of employers (bachelor, master), dissertation councils (doctoral studies); participation of representatives of employers in the examination of the EP; the participation of representatives of employers and the professional community in shaping the content of practice-oriented disciplines, practices and research work, in the formation of research topics, topics of coursework and final qualification works of students, as well as in their expertise on the requirements of the labor market; involvement of representatives of the professional community in the teaching of the educational program, leadership. Students can give their suggestions on teaching subjects, including topics, changing the format of classes.

The list of interested parties in EP includes students, employers, teaching staff. Representatives of employers - branches of the NAO "GK Government for citizens" of the survey management, monitoring and laboratory research in Astana, Almaty, regional centers of the Republic of Kazakhstan, State institution RNMTSAS and branches in the Republic of Kazakhstan (Southeast, North-West), scientific research institutes of the Ministry of Agriculture of the Republic of Kazakhstan, agricultural units of various forms of ownership. When discussing the EP at a meeting of the department, representatives of employers are invited who express their opinion on the content of the OP. This information is sent to remote users from among interested persons by e-mail. When carrying out any events within the framework of the EP, the interested persons are informed via telephone,

e-mail, and personal contacts. Students receive information from advisors, curators, leading faculty members

The revision of the content and structure of the EP is carried out in accordance with the normative documents of the S. Seifullin KATU Standard of the organization. Design and development of educational services "; Regulations on the procedure for developing a plan for the development of an educational program and monitoring its implementation; Standard of organization.Structure, content, procedure for developing and approving an educational complex of a specialty and educational complex of a discipline credit system, etc.

Monitoring the quality of the EP is carried out: on the timing of the implementation of the development plan of the EP; on the quality of students' knowledge; according to employers; in the opinion of students and graduates of EP, etc. Assessment of the quality of education received at a partner institution of higher education: on the basis of external and internal regulatory documents of a partner institution's higher education institution, regarding the quality of education of this institution.

Monitoring of satisfaction is ensured through regular questionnaires, testing and personal conversations between the head of the study program and the teaching staff with stakeholders. The review and, if necessary, updating of EP programs is carried out by the department at least once a year. As required, the "Catalog of elective disciplines" is updated to reflect the interests of employers and the proposals of the chairmen of the SJC. At the suggestion of employers, the elective disciplines are updated every year in the working curricula of specialties.

The focus of EP disciplines on the development of professional skills, the study and determination of the needs of employers in the development of professional skills is determined by the results of the professional practice of students on the basis of practices - in research institutes. SPC, KH, FH, LLP and so on. In the recall of the head of the internship, the skills acquired by the students for the period of the internship are noted, the level of theoretical training, the social and communicative competences of students are noted. In the future, these reviews are discussed at the meeting of the department and corrective measures are taken.

The department carries out an annual update, improving the content of educational programs and strengthening the fundamental nature of the training of specialists, as well as further harmonizing the educational process and research in accordance with the principles of the Bologna Declaration, the strategic priorities of the country's development, the needs

of practitioners.

The decision to make changes in the EP is taken collectively at a meeting of the department, where each teacher, invited practitioners have the right to vote. Students also have their own wishes in the matter of improving the EP, through questionnaires, interviews by teachers, on curator hours, etc.

For example, taking into account the revision of the format of the work of soil scientists in the reorganized (now the NK Government for Citizens Public Corporation), adjustments were made to the RUE and the disciplines on Land Management with the Basics of Geodesy and Geoinformation Systems were included.

According to the specialization of "Agrochemistry" students should receive a deeper knowledge of the biological characteristics of agricultural crops, and therefore, on the recommendation of the Department of Mineral Nutrition of the Kazakh Research Institute of Agriculture and Crop Production, the disciplines "Breeding and Seed Production of Agricultural Crops" and "Plant Biotechnology" were included. At the level of the magistracy in the Republican unitary enterprise specialization "Agro chemistry and agroecology" included the discipline "Organic farming", "Basics of rationing the quality of crop production."

Table 9 - SWOT-analysis of the standard “Continuous monitoring and periodic evaluation of educational programs”

S (strength) – strengths (potentially positive internal factors)	W (weakness) – weaknesses (potentially negative internal factors)
- monitoring the EP to achieve the goal in accordance with the needs of the company; - effective assessment procedures for students; - educational environment, reflecting the specificity of EP, including interactive resources, educational materials, knowledge assessment system, etc .; - orientation of content on practice-oriented learning; - questionnaire system of participants in the educational process	- insufficient participation of students in software development; - - subjective opinions of students about the level of knowledge assessment;

O (opportunity) – opportunities (potentially positive external factors)	T (threat) – threats (potentially negative external factors)
- public discussion with representatives of all interested parties; - representativeness of stakeholder groups	- changing needs of the professional environment and society; - insufficient participation of representatives of farms in software development;

The specialized profile “Continuous Monitoring and Periodic Evaluation of Educational Programs” contains the following self-assessment of compliance: by the criteria of the EP, it has strong positions - 2, satisfactory –8.

6 STUDENT-CENTERED LEARNING, TEACHING AND EVALUATING EFFICIENCY

Student-centered learning plays an important role in enhancing motivation, self-reflection and student involvement in the learning process. For S.Seifullin KATU introduction of student-centered education requires a balanced approach to the development and teaching of the educational program and the assessment of learning outcomes.

Implementing the principle of student-centered learning, in S.Seifullin KATU formed academic groups according to levels of study, language of instruction. For the undergraduate level, the number of students in a group is set to not more than 25 people. During 2013-2018, two groups of Kazakh and Russian languages are formed annually for the course. In the master's and doctoral studies, depending on the recruitment, groups with multilingual education are formed in accordance with the contingent.

Identification of the needs of students is carried out in accordance with the Law of the Republic of Kazakhstan on education and is satisfied through their choice of subjects, training and elective courses, classes in the framework of extracurricular activities and associations in the system of additional education

EPs imply flexible learning paths - the choice of students for an individualized educational pathway, which makes it possible to gain knowledge in precisely those areas that are important and interesting for the student.

The organization of the educational process of students on educational trajectories is based on the implementation of the principle of orientation of the EP to the personal needs of the student, the disclosure of his potential and the preparation of a socially active person. Freedom of choice of disciplines is realized through the provision of a QED student which contains a list of all disciplines with an indication of the objectives of the study of the summary and the expected results of the study of the standard curriculum of EP. When consulting an adviser, students determine the trajectory of training with entering the selected disciplines into their individual curriculum. The distribution of disciplines by semester is carried out in a logical sequence, taking into account compliance with prerequisites and post requisites. The student's individual curriculum is approved annually by the dean of the faculty, contains a list of disciplines and the number of credits.

Ensuring equal opportunities for students is achieved by the completeness of educational and methodological, organizational, methodological and informational support of the educational process in the three languages of instruction: Kazakh, Russian and English. For all students, the principle of gender equality. Equal accessibility to educational, research, educational activities functions. Possibilities of choice and a combination of disciplines are regulated by the introduction of prerequisites in the main characteristics of the EP, requiring the mandatory inclusion in the individual curriculum of the previous discipline.
The students, with the help of advisors, form the IEP, in accordance with the PMU, the RUP and the QED, on the basis of which the RUPs are compiled annually. This at the university is one of the important conditions of modern learning technologies - curriculum mobility, with the participation of the students themselves. Also, the participation of students in the management of the university (regardless of the language of instruction) is carried out in such areas as: the work of students as members of student self-government committees; the participation of representatives of students in the work of faculty councils, committees on PM and programs, in the work of the Council of SRWs; functioning of student organizations, associations and associations.

Already in the first year, the appointed advisers and curators of academic groups identify students with different levels of knowledge (holders of the Altyn Belgi sign, winners or participants of International or Republican subject school olympiads, creative development of students, activists, members of various school clubs, etc. .). In the future, these students are involved in the activities of the university, department. To ensure the harmonious development of students with regard to intellectual development and individual characteristics, the university has student associations and associations, the participants of which are students of EP 5B / 6M / 6D080800 - Soil Science and Agrochemistry: Debate Club "Elita" - 2, "Amanat "- 2; Scientific circle - 15; Dance circle - 3, KVN - 4, circle Ақ zhelken - 1, opposite sections - 14, members of the council of young scientists of the faculty - 2.

The characteristics of students are determined by questioning, as well as personal statements of students and their parents. Responsible for the implementation of the requirements for the use of various forms and methods of teaching and learning is the head of EP and faculty.

In the implementation of EP the following forms of education are used:

1) Information technology provided by the services of the university: developed faculty e-books; availability of free access to the electronic library and the electronic

catalog of full-text resources integrated into the republican inter-university electronic library, the base of which includes the works of the RSEB scientists; training programs: Photoshop Extended CS-5, CorelDrawX5, AutoCAD 2011, 3DMax 2011, Delphi 7 Pro, C ++ Builder, RadPHPXE.; PLATONUS program; Internet service;

2) Innovative teaching methods of academic disciplines: The use of the program "Prezi.com" in the lecture and practical classes; assessment of knowledge of students in the program "Kahoot it"; video lectures on the disciplines "General geology" (senior teachers Khamzina B.N., Kekilbaeva G.R.), "Microbiology" (senior teacher Botbaeva Zh.T.), "Agrochemistry" (senior teacher Kuzdanova R.Sh., Associate Professor Nuranov E.T.), "Soil Science" (senior lecturer Khamzin BN), and others; mini-conference lectures; conducting a blitz survey at the end of the lecture (open classes in "Agrochemistry", associate professor Ramazanova R.Kh; technology Shogyrlandryryp from the discipline "Soil protection" (senior teacher Kekilbaeva G.R.); technology role-playing games, problem-based learning (assistants Serikpayev Zh.K., Al-Manova ZS, Matina AE, Zhetibaykyzy N.); case study, work in small groups (senior lecturer Khamzina B.N.); survey on the chain method (senior teacher Ishmuhanbetova G.N.).

One of the innovative teaching methods is the involvement of trainees in R & D (Appendix 15). Foreign students enrolled in the framework of the OP are also involved in research.

The need to use innovative teaching methods in the educational process is governed by the developed and approved programs for introducing innovative teaching methods in the departments involved in the implementation of EP. Obstacles to the introduction of new teaching methods in the educational process are absent.

Monitoring the effectiveness and efficiency of the application of innovations and the use of active teaching methods is carried out by discussing at the meetings of departments, analyzing student performance.

Studies related to the development of teaching methods for teaching disciplines include conducting surveys, studying the experience of leading universities, studying methodological and scientific literature on teaching methods, attending courses of pedagogical skills at S. Seifullin KATU, "School of lecturers", " Schools of pedagogical excellence ", where teaching staff receive new knowledge on teaching methods: Botbaeva Zh.T., Matina A.E., Kuzdanova R.Sh., Algozhina A.Sh., Kekilbaeva G.R., Kenzhegulova S.O., Tursinbaeva A.E., Aidarkulova R.S. and others. It gives faculty the opportunity to develop their own and adapt existing innovative teaching methods.

Currently, didactic teaching aids, including all the elements of the learning environment, are used by teachers of the department for a purposeful educational process, for more fruitful interaction with students. Thus, at the department, practically all teachers practice lectures using multimedia technical means and presentations in the Power Point format, short videos, conducting laboratory and practical classes using an interactive whiteboard. Video lectures are practiced for students of distance learning specialty 5B090700 - Inventory.

Teachers of the department introduced lectures in such modes as lecture-visualization in the form of presentations with the inclusion of drawings, schemes, plans, videos on the disciplines "History of Soil Science and Agrochemistry", "Soils of Kazakhstan", "General Geology" and others ; lecture-provocation (Appendix 16). In the disciplines "Fundamentals of Soil Science", "Soils of Kazakhstan" with the issuance of a task to students about drawing up a lecture plan during the presentation of the material, identifying erroneous information, contradictory statements, inaccuracies. At the end of the lecture, the students name the errors and inaccuracies with the discussion made by the teacher; lecture-dialogue with the presentation of the content through questions with the obligatory response of students during the lecture; lecture - press conference - in the format of the teacher's response to students' questions. This technique requires prior preparation and knowledge of the material. Therefore, more often used in the classroom with undergraduates.

Practical classes and seminars are conducted using interactive teaching methods: brainstorming; case study analysis (“case study”); circles of knowledge; tick box (tick-box); discussion; field studies, etc. As examples, one can cite topics about the scheme of the soil-forming process, factors of soil formation, visual diagnostics of plant nutrition, the calculation of fertilizer rates for crop rotations and the assessment of the effectiveness of their fertilizer application system; on drawing up a program of field experiments to study the effect of fertilizers in relation to specific types of soil and natural area. The method of analysis of specific situations or the method of "case study" on the subject "System of fertilizer of crops in crop rotation" with the issuance of a task for groups of undergraduates to calculate the rates of fertilizers for crop rotation, the balance of humus in the soil and assess the effectiveness (justify) of the fertilizer application system.

roups of “buzzing” in the discipline “Organization of conducting field experience and drawing up cartograms” are given with the assignment of a topic on drawing up a program of conducting field experiments on studying the effect of fertilizers in relation to

specific types of soil and natural area. Students discuss how to set a goal correctly and identify research objectives, how to draw up an experiment with further discussion and justification of the program developed by students.

The tick-box strategy (Tick-box) is used to survey students and includes a list of questions with answers, from which it is necessary to exclude incorrect answers and tick one option from the suggested ones.

Group discussion is practiced in seminars, when the teacher controls the situation, leads a discussion on a specific problem posed on the necessary “channel” at the same time asking leading questions.

Teachers of the department developed and introduced into the educational process a workbook for laboratory classes in microbiology, which reflects the elements of programmed instruction.

One of the new elements of teaching is the use of the Prezi.com program in conducting lectures and practical classes in microbiology, soil science. To improve objectivity in assessing knowledge, teachers of the department use the capabilities of the system Kahoot.i, Learning Apps. Business games to solve production problems related to the acquisition of experience in the development of a scientifically based system of fertilizers with the issuance of tasks. For training that requires the acquisition of skills, demonstration and practice (field work) in specialized institutes and centers are important.

Students and undergraduates can not only see how certain types of agrochemical analyzes are performed, but also perform some of them, for example, determining the particle size distribution of soil by the pipetting method, determining the total nitrogen content in plants, determining the chemical composition of plants on an IR analyzer, analyzing water extract, etc. This allows you to consolidate skills in the agrochemical laboratory, the rules for working with chemical glassware, reagents and so on.

One of the main indicators of the effectiveness of introducing modern educational technologies in the educational process is to conduct open classes at the faculty and university levels and monitor the quality of their implementation. The result is determined by an increase in the volume of the material being studied and an increase in the efficiency of its assimilation, the development of various forms of thinking, attentiveness, activity, a creative approach to solving problems, the ability to find contacts with interlocutors. The result of the introduction and effective application of innovations in EP is the presence of its own research and development of electronic textbooks. The effectiveness and efficiency of innovation implementation is determined by the annual report on the implementation

plan for the implementation of innovative technologies. The performance of faculty members with presentations about the technologies being introduced at the methodological seminars of the departments is also practiced. For example, the teaching staff conducted seminars (Appendix 17). Tracking the performance and effectiveness of innovation in the UE at the department is presented in Table 10.

The feedback system and the assessment of learning outcomes is carried out by quoting students and teaching staff with the help of AIS “Platonus”. Systematic work for feedback is provided at the meetings of the department, faculty. The university has an effective information system and feedback: the website of KATU. S.Seifullin, the page for the applicant, history sites and events KATU them.S.Seifullin, electronic library, student forum, educational portal, etc. Based on the analysis of feedback results on the implementation of student-centered education, the EP provides for a change in the teaching methods of disciplines, i.e. a shift in focus on self-reliance and reflection, increased personal responsibility for learning outcomes.

The autonomy of learners means their desire and ability to take control of their learning activities, their decisions, what and how they want to learn, and takes responsibility for their decisions, for their implementation. In this context, student autonomy in specialty 5B / 6M / 6D080800 specialty - Soil science and agrochemistry is a form of organization of independent educational activities in which conditions are created for the formation of the necessary abilities and qualities of a personality autonomously studying relevant disciplines. For this, the faculty prepares the schedule of the CDS and SRSP and determines the deadlines for their delivery, conducts consultations, issues assignments for practical exercises on topics. According to the approved specialty RUPs, the volume of independent work of students is 2921 hours out of a total of 5850 hours. At that, the student performs 25% of the total CPC under the guidance of a teacher. The volume of independent work of undergraduates - 941 hours from a total of 3,600 hours, doctoral students - 705 hours from a total of 7,530 hours.

Table 10 - Tracking the effectiveness and efficiency of the introduction of innovations of the teaching staff of the EP for the 2013-2017 academic year.

Full name of teaching staff	Modular technolo	Substantial innovation	Methods used by teaching staff of department

			critical thinking	game	communicative learning	innovation control technology
Ramazanova R.Kh.	+	+	+		+	
Algozhina A.Sh.	+	+		+	+	
Almanova Z.S.	+	+	+	+		+
Botbaeva Zh.T.	+	+	+	+		+
Zhumabek B.	+	+		+	+	
Zvyagin G.A.	+	+		+	+	
Kekilbaeva G.R.	+	+	+	+		
Kenzhegulova S.O.	+	+	+		+	+
Kulzhanova S.OM.	+	+		+	+	
Mukhametkarimov K.	+	+	+		+	
Nauanova A.P.	+	+	+		+	
Nurmanov E.T.	+	+	+		+	
Ramazanova R.Kh.	+	+	+		+	
Tursinbaeva A.E.	+	+	+		+	+
Khamzina B.N.	+	+		+	+	
Chernenok V.G.	+	+	+		+	

Monitoring of independent work of students is carried out by accepting assignments of teaching staff at the time indicated by them with grading in an electronic journal. Tasks for independent work are defined in the syllabus, EMCD.

The complexity of an SRO is determined by the number of credits allocated to this discipline and the requirements of SES according to the ratio of the student's auditorium and independent work - 1: 2.

The mechanism for an adequate assessment of the results of an SRO (written work; presentation; essay; project, etc.) is discussed at the department meetings according to the following criteria: 1. execution of work; 2. volume of work performed; the accuracy of the formulation of answers to the tasks; specific examples; writing style, etc. The decision on the adequacy of the tasks of self-regulatory organizations for the content of the subjects being read and the learning outcomes is made by the teacher who leads the discipline.

Complaints of students related to the educational process, are practically absent. The cases that are present mainly concern first and second year students who have difficulty in adapting to a new team, new educational environment conditions and, accordingly, requirements.

Questions related to the complaints of students are governed by the Regulations on the procedure for handling complaints from students by the university management.

Complaints are mainly related to the fact that students receive low scores when passing current or foreign control. If it is possible to get a consultation from a teacher on a subject, they often miss it, which is the reason for applying first to the head of the department. Each case is dealt with on an individual basis, is discussed with the teacher and, if possible, the student may try to correct the assessment. When passing the final control, there may be controversial questions on satisfaction with the assessment, on the incorrect conduct of the exam, etc. In this case, at the university, an order of the university, a decree on the dean's office form a working and appeal commission, which aims to exclude a biased assessment of student knowledge.

Current performance monitoring and intermediate certification is carried out in accordance with the academic calendar, working curriculum, developed on the basis of GOSO in the form of exams - orally, in writing, hypertests, testing in the PLATONUS system. The accuracy and adequacy of the assessment of knowledge is guaranteed by the competence of the teacher, his qualifications.

The mechanism for assessing knowledge of the EP is carried out in accordance with the “Model rules for the ongoing monitoring of progress, intermediate and final certification of students”, approved by the order of the MES RK of March 18, 2008 No. 125, the requirements of the QMS S.Seifullin: Monitoring and evaluation of students' knowledge; Control of knowledge and carrying out final certification of students of postgraduate education.

The student has the right to appeal to the received assessment assessment. For this purpose, for the period of the examination session, an order of the Dean of Faculty is created by an appeal commission from among experienced teachers, whose qualifications correspond to the profile of the disciplines submitted to the examination session. Qualification of teachers of the department is governed by the qualification requirements for employing employees (basic education corresponds to the profile of the EP, the degree, rank, experience of scientific and educational activities, etc.).

The appeal is held on the day after the exam.

Teachers of the department, carrying out the implementation of EP developed a system for assessing the knowledge of students at the beginning of training in the disciplines of prerequisites, which are passed to doctoral studies from related specialties. The list of prerequisites is published on the website of the university.

The university has developed documentation forms - rating statements, examination, summary and summary statements. The preparation of students for the examination session, the development of control materials, examination questions and test assignments becomes the subject of discussion at meetings of the department, educational and methodological councils of faculties. The results of examinations are on the day they are held. Methods and forms of conducting current and mid-term control, intermediate certification of doctoral students, a system for analyzing and monitoring the results of examinations are defined and carried out in accordance with the requirements of the credit system of education.

The organization of the monitoring system of students ’educational achievements is carried out by the registrar's office, which reports to N.A. Serekpayev, Director of the Department for Academic Affairs. This work is governed by the internal documents of the University Regulations on the department of knowledge assessment and certification office-registrar.

Didactic teaching aids, including all elements of the learning environment, are used by the teachers of the department for a purposeful educational process, for more fruitful interaction with the students. So, on the OP, lectures are practiced using multimedia technical means and Power Point presentations, short videos. Practical classes and seminars are conducted using interactive teaching methods: brainstorming; case study analysis (“case study”); circles of knowledge; tick box (tick-box); discussion; field studies, classes in the branches of the department on the basis of "Agrokhimsluzhba", etc.

The most effective for the development of professional competencies are the following types of methods and training: consultations; research seminars on problematic issues of science; practical courses or classes; creative workshops (workshops); demonstration classes; internships; manufacturing practice / enterprise, etc.

The office of the Registrar keeps a history of the educational achievements of students during the entire period of study, which is reflected in the transcript. The transcript is issued at the request of the student for any period of his training.

To transfer from one course to another, a higher educational institution sets its own transfer point in the context of courses - the value of the minimum average grade mark that allows the transfer of a student to the next course.

A student who has completed the course program in full, but has not received a conversion point, in order to improve his GPA, is given the opportunity to re-examine separate disciplines on a paid basis in the summer semester (with the exception of the History of Kazakhstan discipline , on which the state exam is taken) and re-pass exams on them.

A student who did not receive a transfer point based on the results of the school year, taking into account the results of the summer semester, remains for the second course.

The student, left on a recurrent course, is trained according to the previously adopted individual curriculum or forms a new individual curriculum.

Criteria and assessment methods are brought to the attention of students through advisors, teachers, they are described in the syllabus.

Students will learn about the scores received in the PLATONUS system.

The verification procedure of the graduate as an internal process is carried out at the department during the preparation and defense of the thesis, master's thesis, passing a comprehensive exam in the specialty. At the same time, the assessment of compliance with the competences obtained by the graduate is put forward collectively by the commission for the State final attestation, whose chair usually selects leading scientists, managers, specialists in the field of soil science and agricultural chemistry, who have extensive research and production experience.

As far as the young specialist who comes to work in an organization by the profile of the acquired specialty, corresponds to the developed model of the graduation, the opinion is given by employers.

The final certification of students in the educational program of bachelor-5B080800 - Soil science and agrochemistry ends with the performance of independent thesis and passing the state exam in the specialty, graduate 6M080800 - Soil science and agrochemistry - passing an integrated exam, and defending a master's thesis (project), and a master's thesis (project), a motivational studies program and a master's thesis (project), and a master's thesis (project), and a master’s - Soil science and agrochemistry - by passing a comprehensive exam in the last semester of study and defense of a doctoral dissertation at the Dissertation Council of the University before July 31 For the next year after completing doctoral studies.

A comprehensive exam in special disciplines is conducted in accordance with the curriculum - orally on exam papers, including questions on the main disciplines, for undergraduates and doctoral students - one of the disciplines is in English

The defense of the diploma project (work), master's thesis is held at an open meeting of the state certification commission with the participation of at least 2/3 of its members. The duration of the defense of one thesis project (work), master's thesis should not exceed 30 minutes per student. To protect the thesis project and the master's thesis, the student delivers a report in Power Point format of no more than 10 minutes. The results of the diploma project (work) defense are announced on the day they are held. The duration of the oral final exam should not exceed 15 minutes per student.

Students who have not mastered the results of training have the right to apply for re-passing the final certification for the next year on a fee basis.

The satisfaction of employers with the level of training of students is assessed by questioning when they receive the Final State Attestation in front of the Chairman of the SJC from among the representative representatives of the industry.

Analysis of the responses of the survey showed that employers were satisfied with the quality of training of graduates from the EP. In general, employers estimated that university graduates possess good theoretical knowledge and professional qualities. Attention should be paid to the ability of graduates to develop new ideas, generate them, successfully implement them in practice.

Monitoring of students' progress along the educational trajectory is monitored at the following levels: graduating department, dean's office, Student Service Center, which provide statistical data on the 3HT form, in the PLATONUS system (student card file, academic flows).

Within the framework of EP, the methods of assessing the results of learning are used in the form of oral questioning, written control, dictation, credit, independent work, control work, practical work, laboratory work, and a test. In recent years, knowledge assessment methods have been used: short test work on classes, assessment of the Kahooit.com program; projects, portfolio, katanotests, contextual problems.

Training is carried out on the basis of attending courses of pedagogical skills held at S. Seifullin KATU, whose qualifications are assessed by passing exams and issuing a certificate.

Further training is carried out on a planned basis in accordance with the Plan for Advanced Studies.

Conclusion: Guide OP: provides equal opportunities for students; takes into account their individual characteristics; introduces and applies active and innovative teaching methods; monitors the CDS and its results; monitors student and employer satisfaction; makes decisions based on feedback; monitors the progress of students in the educational trajectory and achievements; provides a mechanism for an objective assessment of learning outcomes, etc.

Table 11 - SWOT-analysis of the standard "Student-centered learning, teaching and assessment of progress"

S (strength) – strengths (potentially positive internal factors)	W (weakness) – weaknesses (potentially negative internal factors)
- monitoring the satisfaction of students and employers - equal opportunities for all groups of students, taking into account their individual characteristics; - the introduction and application of innovative teaching methods;	- dissatisfaction of students with the results of the assessment of knowledge; - insufficient level of mastering by each graduate of OP of learning outcomes
O (opportunity) – opportunities (potentially positive external factors)	T (threat) – threats (potentially negative external factors)
- growing interest in professional education from international foundations - Continuing education system implemented - the program of vocational guidance of applicants is being implemented	- Reducing the number of budget places in bachelor, master, doctoral - The unpopularity of work in the agricultural sector and life in rural areas (unworthy conditions, insufficient funding)

Specialized profile "Student-centered learning, teaching and assessment of progress" contains the following self-assessment of compliance: according to the criteria the EP has a strong position - 3, satisfactory –6, suggests improvement - 1.

7 LEARNERS

The number of students majoring 5B080800 – "soil science and agrochemistry", on educational programmes "soil science" and "chemistry" are formed as a result of the annual competition on the state educational grant, on a contractual basis. The University provides admission in excess of the plan of reception for training on the basis of contracts with tuition fees of legal and physical persons. Each year the University approves a price list for paid educational services coordinated by the Department of Higher education Ministry of education and science of the Republic of Kazakhstan.

Bachelor-level programme is conducted on the basis of the General secondary (secondary General), technical and vocational, higher (higher professional) education. For the persons arriving for training on educational programs of bachelor 5B080800 - soil science and agricultural chemistry, KATU named after S. Seifullin imposes requirements established by the Ministry of education and science of the Republic of Kazakhstan. - certificate of unified national testing with passing grade (60) or complex testing (for graduates). 2017 applicants are evaluated on the new system. This system includes not only the exams, but questions of admission to institutions of higher education. This gives the University the opportunity to partially determine the level at which they will receive applicants. Specialty 5B080800 – "soil science and agrochemistry" candidates to receive state education grants and grants on a fee-contract basis as disciplines for pass biology and chemistry. A passing grade is defined as 60.

The admission of persons to the magistracy is carried out on a competitive basis by results of entrance examinations. On the educational program of the magistracy in the specialty 6M0808-soil science and Agrochemistry training of specialists is carried out in scientific, pedagogical and specialized areas, with a training period of 2 and 1.5 years, respectively. Prior level of education for postgraduates majoring 6M0808 - Soil science and agricultural chemistry - higher basic education (bachelor's degree) in the field of: 5B080800 - soil science and agricultural chemistry, 5B080100 – agronomy, 5V 060800 - Ecology, 5b081100 – plant protection and plant quarantine, 5b080700 - forests and forestry.

The educational program of doctoral studies is in demand among the masters, graduates of the specialty 6M080800 – soil science and agrochemistry and related specialty

in KATU named after S. Seifullin, other agricultural universities. In two years, the competition of applicants for state grants doctoral studies was 6-8 people in the place. This educational program is aimed at graduates of master's programs have shown a high level of knowledge during training, the propensity to scientific-pedagogical and research activities and have the recommendation of the state attestation Commission.

One of the problems of admission to doctoral studies is the poor knowledge of foreign languages. Admission to the doctoral program of higher education institutions on a competitive basis by results of entrance examinations. Prior level of education of persons wishing to apply for educational programs of doctoral studies, – postgraduate education (master's degree). For the educational program of doctoral studies in the specialty 6D0808 – soil science and agricultural chemistry the training of specialists is conducted on scientific and pedagogical direction. In this educational program necessarily involves scientific and methodological orientation of training and in-depth specialized training in the field of Soil science and agrochemistry. The period of doctoral study is 36 months (3 years) full-time.

In the list of related specialties that can come for training on educational programs of doctoral studies in the specialty 6D080800 – Soil science and agrochemistry included: 6M060800 – Ecology; 6M080100 – Agronomy; 6M 081100 – Plant protection and quarantine; 6M 080700 - Forest resources and forestry.

For training under the state educational order, persons who have scored at least 150 points in the amount of entrance examinations are enrolled.

During the academic year, the teaching staff of the Department, as well as students, conduct career-oriented work on the formation of a student group in the specialty “Soil science and agrochemistry”.

They go to rural schools of Akmola (Sandyktau district), North Kazakhstan (Yessil, Zhambyl, Timiryazev districts) and Kostanay region (Amangeldi district). As part of the" open Day " at the University students are introduced (city schools № 16, 35) with the activities of the University and, in particular, with the specialty. Besides all this, information about the profession placed in social networks: facebook, vk.com etc.

In the formation of the contingent in the S. Seifullin Kazakh Agro Technical Univesity guided by the basic regulations of the Ministry of education and science of the Republic of Kazakhstan regulating this procedure.

Information about educational programs "soil science", "agricultural chemistry" and their specificity entrants can obtain on the website of the University. Information on the

formation of the contingent can be obtained on the websites of the University or send requests to e-mail: kazatu.kz, rausha05@mail.ru

For violation of internal regulations, students may be subject to other disciplinary measures: remark, reprimand, severe reprimand. Monthly is provided the information for the analysis of the contingent of students of all forms of training, the summary reference on the contingent prepares for the management of University. On the basis of these data, the faculty conducted outreach and career guidance work, both with the current contingent of students and with applicants.

Students and visitors of the official website of the University may want to review the rules of admission, transfer to the of other universities, o the procedure of credit transfer, studied at other universities, deductions etc.

Transfer of students from course to course is based on the established by the Academic Council of the University transfer average score (GPA). For failure to comply with the curriculum in the direction of training (specialty) within the prescribed time for disrespectful reasons, violation of obligations under the rules of internal order, the rules of residence in the hostel to students may be subject to disciplinary action up to expulsion from the University. The methodical instruction establishes requirements to the order of deduction, transfer, restoration and granting of academic holidays to students of JSC "**Kazakh Agro Technical University named after S. Seifullin**". It is used by the departments of S. Seifullin KATU responsible for the educational process (Registrar's office, deans of faculties, departments) and is part of the documentation of the quality management system. For acquaintance of students enrolled in the educational program of the specialty 5V/6M / 6D 080800 – soil science and agrochemistry, a presentation week is provided, the purpose of which is to study the credit technology, which includes knowledge of the standards and provisions of the quality management system of the University. This is-monitoring and evaluation of students ' knowledge, educational work, research work of students etc.

Dean of the faculty, head of the Department, leading teachers conduct introductory classes, where students get acquainted with the feature of the specialty, the Department. They study the Charter of the University, the rules of residence in the dormitory, the system of self-government of students, visit the library and reading rooms and subscriptions, where there is a system of extensive electronic information search.

The introductory course is conducted with the purpose of acquaintance and formation of an individual curriculum, build educational trajectories, using the opportunity to choose both the teacher and the discipline, taking into account their needs in obtaining appropriate

competencies within the chosen specialty. Guidebook for each academic year is available for each student both on paper and in electronic form. Each student is provided with a guide-book, which provides step by step information about the educational process for the entire first year of study: the schedule of the educational process, schedule, certification, session, vacation, summer additional training activities; plan of social, scientific activities of the University. It includes the layout of educational and administrative buildings, libraries, sports grounds and stadiums, dormitories, canteens.

Assistance in nostrification of documents on education is expressed in the issuance of conclusions by experts of the University on the equivalence and equivalence of transcripts of the educational program. Academic mobility in S. Seifullin KATU is determined primarily by the presence of agreements on mutually beneficial cooperation with many foreign universities and universities of Kazakhstan, countries of near and far abroad in the field of science and education. The activities of the University on academic mobility is regulated primarily by the Rules of the educational process on credit technology training (Order of the MES of November 22, 2007 № 566 with amendments and additions from 30.07.2010 № 404), action plan for the organization of internal and external academic mobility of students, Regulations on the organization of external academic mobility of students.

The main criterion for the selection of students for academic mobility abroad is the presence of an international certificate (for example, IELTS, TOEFL) or a successful test at the University (advanced level) and a GPA score of not less than 3.33. S. Seifullin Kazakh Agro Technical University of external academic mobility programs began its countdown from 2012-2013 academic year, when the Ministry of education and science of Kazakhstan allocated funds for the implementation of this program. At the expense of these funds, the first 3 students and 4 postgraduates received theoretical training at the Czech technical University in Prague (Czech Republic), Kastamonu University (Turkey), Krakow agricultural University (Poland) and Slovak agricultural University Nitra (Slovakia). In the future, 25 students will able to study abroad at the expense of funds allocated by the Ministry of education and science of Kazakhstan (more than 35 million tenge).

As part of the academic mobility programs, our students also have the opportunity to gain and consolidate practical skills in professional practice programs: DAAD, LOGO, PRAXX, DEULA, programs of the University of applied Sciences, the center for advanced training of Nuremberg, the Higher Agricultural School of Angers (France).

At the present time, the exchange of Erasmus+ and Tempus programs, which have already become traditional for European students and they are aimed at supporting projects, cooperation, academic mobility in the field of education, training, sports and youth policy, is being increasingly developed in S. Seifullin Kazakh Agro Technical University and projects are already being implemented:

- Tempus:" development and implementation of master's programs in food safety, production and marketing of Traditional food products in Russia and Kazakhstan " (2013-2017), project coordinator from EU Montpellier Sup Agro (France).

"Capacity-building in the implementation of quality assurance and typology systems using the principles of the Bologna process" (2015-2017), coordinator from the EU Czech University of natural Sciences (Czech Republic); "Sustainable development of agriculture and rural areas" (2015-2018), coordinator from the EU Hohenheim university (Germany); "lifelong Learning for sustainable development" (2016-2019), coordinator from the EU Warsaw University of natural Sciences (Poland); "Paving the way for inter-regional mobility to ensure compliance, quality and equity of access" (2016-2019), EU coordinator University of L'aquila (Italy); "development of TRANS-regional information literacy for lifelong learning and knowledge economy" (2016-2019), coordinator Limerick Institute of Technology (Ireland). Analysis of the implementation of the European Union programs in Kazakhstan, in particular in S. Seifullin Kazakh Agrotechnical University showed that these projects contribute to the deepening of the Bologna process in higher education through:

- exchange between students;

- development of educational programs taking into account the demand for specialized professionals;

- inclusion of universities in national "green strategies" and promotion of "green culture" through lifelong learning;

- strengthening interregional integration and cooperation through the development of reliable joint tools to strengthen the international dimension of higher education systems and their compatibility;

- support for modernization, accessibility and internationalization of universities from partner countries;

- development of information literacy programmes for use in training programmes.

The main part of the activities is devoted to the academic mobility of students. As a result of the increasing internationalization of higher education, there are new opportunities

for academic mobility programs – a mutual exchange of students, or on the basis of signed memoranda between higher education institutions. So, in the 2016-2017 academic year S. Seifullin Kazakh Agro Technical University first received students of the Yakut State Agricultural Academy**.** Thus, international academic mobility of students is not only intercontinental, but also a regional phenomenon. The process of integration of regional economies stimulates the mobility of students, and in this regard , various programs, including Erasmus+, play a big role.

The European credit transfer and transfer system (ECTS) is a key position in achieving transparency in education and the recognition of qualifications and learning outcomes, which are fundamental principles of the Bologna process. The ECTS system is based on the overall complexity of the student's work required for the development of the educational program. The purpose of ECTS introduction is to facilitate the procedure of academic recognition of diplomas and qualifications, ensuring transparency of educational programs and curricula. ECTS system contributes to the attractiveness of higher education for students from different countries.

Functions of the credit system (credits):

- planning of training load during the whole period of training;
- formation of curricula indicating the complexity of each discipline in credit units;
- implementation of mobility of students between Kazakhstan and foreign universities.

The agreement on training programs of academic mobility is the main document regulating the process of student training under the program of academic mobility and is filled in the state, Russian, and English (for students traveling abroad).

Academic mobility of students of the S. Seifullin Kazakh Agro Technical University is carried out in accordance with the regulations on the organization of academic mobility of students (Pochama QMS 11010.98 - 2014). The agreement is signed by three parties: for the student, the sending official, and the official of the receiving institution. This document provides a guarantee that arriving at another University for the student has the opportunity to study the planned courses/modules of the educational program and receives credits for the courses successfully passed for the students. For those going to study abroad, the learning agreement describes the study program for the student abroad and is signed personally for the student and the rector before the student goes abroad.

The agreement contains a list of courses or modules of the educational program that the student plans to study. For each course/module is indicated the name, code number and number of transferable credits. Upon return to the University for the student Registrar's

office carries out the procedure of recognition of the results of training. The agreement and the officially certified results of training guarantee full recognition of the courses attended for students in another University. In case of changes in the terms of training, the agreement is immediately updated.

Information package-the catalog of courses is developed by the Registrar's office in accordance with the rules of the educational process on the credit technology of training. Information package is formed in the state, Russian and English languages (for students traveling abroad). The information package is updated annually and contains descriptions of all courses. It contains general information about the University, its location, accommodation for students, administrative procedures required for registration, and the academic calendar. The information package also includes the order of admission, types of courses, methods and technologies of teaching, the amount of credits and their structure, the names of the faculties that provide reading courses, as well as the conditions for examinations and assessment of knowledge, degrees and titles awarded at the end of the University. The final document confirming the training of the student under the mobility program is a transcript of the training, which is filled in the state, Russian and English. In the transcript of the training made information about the training program (discipline code), the name of the discipline, the duration of the discipline (year, semester, trimester), assessment for training (in the national scale and ECTS scale), the number of ECTS credits awarded. The transcript of the training specified reference (additional) information about the specifics of the training program: description of the University grading system; ECTS grading system; the number of ECTS credits for the academic year, semester, trimester. Subject to successful training in the full program of study is a mark of the award.

The European diploma Supplement is a document developed by the European Commission, the Council of Europe and UNESCO to ensure international transparency, comparability, academic and professional recognition of qualifications (diplomas, scientific degrees, certificates). This document serves only for academic recognition and is not an official confirmation of the document on education; without a diploma of higher education is not valid.

A prerequisite for participation in academic mobility programs for students is high academic performance. Coordinator of academic mobility organizes the work of the Commission for the competition among students. The main criteria for the competitive selection of applicants are: completion of one academic period for the assessment of "B-", "B",

"b+", "A-", "A" (GPA not less than 3.0) and fluency in a foreign language in the case of travel to a foreign University.

The list of disciplines (modules) for additional development of students during the summer semester forms the Department of knowledge assessment Registrar's office on the presentation of departments.

In order to attract students from other universities to participate in the summer semester, the coordinator of academic mobility office of the Registrar and Postgraduate education department, Personal Computer send information letters to other universities and posts information about the courses read in the summer semester on the University website.

The number of credits, additionally mastered in the summer semester for each educational program, should not exceed.

To study individual disciplines or modules of the educational program in other educational institutions of the Republic, as well as abroad in a specific academic period (trimester, semester, year), heads of departments responsible for this specialty, produce synchronization of working curricula for the educational program. The student, leaving the program of academic mobility, under the guidance of the coordinator of academic mobility of the faculty is an individual curriculum for the period of study at the host University. The upper limit of the number of credits for study in other educational institutions should not exceed 18 credits per semester, 36 credits per year.

The organization of academic mobility is regulated by the law of the Republic of Kazakhstan "on education", normative documents of the Ministry of education and science of the Republic of Kazakhstan, the rules of the educational process on credit technology. Academic exchanges are implemented in accordance with agreements between PSPU and partner universities. For students participating in the academic mobility program, an individual curriculum is formed by agreement of the parties. The individual curriculum is the basis for the pre-academic recognition procedure, which in turn ensures that this training will be counted towards future qualifications.

Academic mobility is the movement of students and research teachers to study or conduct research for a certain academic period (semester or academic year) to another higher education institution (within the country or abroad) with the obligatory transfer of the mastered educational programs in the form of credits in the University or to continue studying in another University.

Academic mobility of students at the University is carried out through the implementation of the following mechanisms:

- organization of the summer semester for the development of modules of educational programs with the invitation of teachers and students from other universities;

- the study of individual disciplines or modules of educational programs in other educational institutions of the Republic, as well as abroad;

- departure of students abroad for practical training in their educational programs;

- development of additional educational programs and courses through distance learning technologies.

To promote academic mobility of students at the University by the order of the Chairman of the Board appointed coordinator of academic mobility and responsible for academic mobility at the faculties. The University has a student support service that systematically meets the educational, personal and social needs of students;

- the mechanism of financing and stimulation of extracurricular activities works - news of students, providing financial assistance to socially vulnerable categories of students;

- implemented a system of information security of students, feedback through the system of social and control activities;

- educational process of students is provided by educational and methodical complexes of disciplines of the basic and profiling cycle on paper and electron carriers developed on the basis of credit system of training;

- the quality of students ' learning of educational programs is systematically assessed by the relevant services in accordance with the established criteria;

- a system for the formation of patriotic, spiritual, and moral qualities of students has been created; there are conditions for personal development and education of students; student government bodies are actively working;

operates a service to meet the career needs of students through a system of training, production, research and teaching practices and employment.

Direction to study abroad in the framework of external academic mobility programs of higher and postgraduate education is carried out on the basis of:

- international agreements (international programs, memoranda and cooperation agreements, exchange and scholarship programs);

- agreements between educational organizations of the Republic of Kazakhstan and foreign States.

Within the framework of external academic mobility, the center for the development of international cooperation and multilingual education determines the list of foreign higher education institutions-partners with whom the contract is concluded.

Detailed information about studying abroad in the programs of higher and postgraduate education is placed on the website of the University center for the development of international cooperation and multilingual education. Within the framework of internal and external academic mobility of bachelor's and master's degrees is carried the following work out: Kazakh agrarian University:

- 2 second-year master students – 2013-2014 1st semester – Apendina G, Tulembaeva E

- 6 second-year students - 2013-2014. 2 semester - Bazarbai Z .; Bekkalieva L .; Kali N .; Zharylkap N .; Baybol A .; Duisenova G.

University Of Eastern Finland:

- 1 student of third-year – 2 semester – Bakhytzhanov N.

On academic mobility of teaching staff, lectures were given to doctoral students by PhD students Christopher Te Boon Sung (Putra University, Malaysia) and academician V. I. Kiryushin (Agricultural Academy named after K. Timiryazev). 2014-2015, the Kazakh Agrarian University: 1 semester, 6 students student of third-year - Zhabyrshy E., Dulatova A., Makhanbetova G., Mutalip U., Sultanmuratova A., Sultankyzy N., Kabylbayeva M., Nurlan M., 2 term - Kudaykul A., Sharipbaeva T., Shakirbekova T., Tensiz M., Nurseitova DIn the same year on their own funds to the Department were invited doctor of biological Sciences B. M. Kogut, head of the Soil Institute named after V. Dokuchaev, who read a course of lectures on the topic: "New paradigms of organic matter of soils". In the framework of academic mobility of the teaching staff of the faculty of the Department read lectures to postgraduates PhD Temel Sariyildiz (Kastamonu University, Turkey). In the 2016-2017 academic year, two third-year students of the South Kazakhstan State University named after M. Auezov M. Botbai and Aitzhan F. studied under the internal mobility of students. Under the external mobility of undergraduates, postgraduates of the first year at A.A. Elievsky Irkutsk State University - Lugovets L., Khakhalova M., Davydova G. (Appendix 18). An important factor is the monitoring of employment and professional activity of the graduates. The monitoring is carried out through direct activities: the student - the department - employment practices- the organization and the enterprise where the graduate works. There is a journal of monitoring the employment of graduates over the past three years. Analyzing the data on the employment of graduates, it

can be stated that graduates are mostly in demand, while we see a positive trend in the growth of the number of graduates who find work in the city and in the countryside.

To assess the satisfaction of students with the educational process and the activities of the faculty annually conducted a survey of students. All types of practices are planned and carried out in accordance with the academic calendar of the University and working curricula, which are drawn up and approved (on the basis of the state compulsory standard and model curriculum) working programs and guidelines containing a detailed list of tasks for students, the requirements for the practice, the content of the practice, types of reporting documentation, samples of registration of reporting documents, etc. The direction of students for all types of practices is issued by the order of the rector of PGPU with indication of terms of practice, base of practice and the head (s) of practice. As supervisors appointed professors, associate professors, experienced teachers of the Department who are familiar with the specifics of the profession and practice of database activity. The organization of all types of practices begins with the Department of installation conferences, where students are instructed about the rules of safety, rules of conduct, acquainted with the requirements for internship programs, reporting documentation. Each student-trainee is given a package of documents, including a diary on practice, internship program, manuals and report form of the student-trainee. The work of students-trainees is controlled by the heads of the practice from the Department and the base of practice.

Industrial practice is conducted for 3rd year students in specialized enterprises and institutions, farms. Its duration is more than 15 weeks. Planning of places of practice is based on the contingent, the number of existing contracts and the ability of enterprises-bases to accept a particular number of students. Employment of graduates is carried out by searching for vacancies on the labor exchange, official letters of employers are sent indicating the number of necessary specialists on the staffing of organizations in the profile. The University holds a "graduate Fair". Within the framework of the implementation of the graduates' employment program for the specialty "Soil science and agrochemistry", representatives who are objects of professional activity are invited: agricultural institutions, institutions of the agrochemical service, plant protection institutions, secondary institutions.

For employers, a “resume” of graduates with whom they have previously entered into a verbal agreement. Graduates showed interest in employment assistance. Out of 42 students, 14 students were interested in the participation of "Youth practice". All students want to find a job either in Astana or in their native land. In the specialty there are statistics

on the employment of graduates.

Graduates continue their education in magistracy. Masters and PhD doctors of soil science and agrochemistry employed by 80-100%. Information on the employment of specialists is collected through a survey of graduates themselves, data on the contingent of students are provided by the Dean's office. Effective management of the educational program is provided by the results of systematic study of changes in the external and internal environment: Internal environment: - potentially-positive changes: high qualification, significant work experience and potential of top management; high qualification level of the teaching staff; building an effective organizational structure of management educational program; availability and accessibility of all necessary internal organizational and legal documents of the University; good level of satisfaction of students with the quality of the educational process; study and implementation of experience to determine the role of teaching in international educational systems; system implementation and improvement of progressive educational, information, computer competencies of teachers and students; high level of information support of educational and scientific work; social stability of the team, its participation in the management of the University; maintaining the position of one of the best agricultural universities in the country;

Internal environment: - potentially-positive changes: high qualification, significant work experience and potential of top management; high qualification level of the teaching staff; building an effective organizational structure of management educational program; availability and accessibility of all necessary internal organizational and legal documents of the University; a good level of satisfaction of students with the quality of the educational process; study and implementation of experience in determining the role of teaching in international educational systems; systematic implementation and improvement of progressive educational, information, computer competencies of teachers and students; high level of information support of educational and scientific work; social stability of the team, its participation in the management of the University; maintaining the position of one of the best agricultural universities in the country;

- potentially negative changes: low level of satisfaction of employees with the conditions for professional development.

External environment: - potentially positive changes: current quality management system; trust of potential and real consumers of educational services;

- potentially-negative changes: the rapid pace of changes in the legislative and regulatory rules of functioning of universities, which negatively affects the management

processes.

The degree of satisfaction of the teaching staff and students with the management system at the University is carried out by the Department of personnel management through regular sociological survey of the teaching staff and students. According to the approved schedule, the following types of questioning of employees, faculty and students on the satisfaction of students research work at the University; involvement of teachers in research work at the University; satisfaction of students to create conditions for personal development and education; learning outcomes; satisfaction of University students to support them. A great place to exercise control over the quality of training given to the questioning of students, which is held to improve the educational program.

To determine ranking among the teaching staff of the Department responsible for the implementation of the Educational program and monitoring of their quantitative and qualitative characteristics among students is a survey. The list of questions in the questionnaire allows to identify professional and personal qualities of the teacher: knowledge, creativity, culture of speech, the ability to interest the subject, integrity, self-control, demanding. The results of the questionnaire builds an individual profile of teachers, ranks of faculty, department, faculty. Survey data are used by departments when certification of teachers, in the course of the contest for the vacant position, for participation in Republican competitions.

The results of the survey are available on the scientific-methodical Council of the University, allowing you to develop recommendations and proposals for the improvement of the educational program and educational process. Study the opinions of students about the quality of teaching and pedagogical skills of teachers helps the school to identify problems with the subsequent search for solutions. With the aim of improving the educational process it is important to know the opinion of the students about the organization of the examination session in University. The survey is conducted during the examination session for students of the correspondence Department according to the approved schedule. Interview senior management and staff of the University with the purpose of the evaluation and the qualifications of the University and its employees as the indicator for assessing the overall quality management system.

Under the model rules of the organization of universities, approved by RK Government Resolution No. 195 dated 02.03.2005, implementing educational programs of higher professional education, are administered on the principles of combining one-man management, collegiality, election and openness. The rector has his own blog on the

official website of the University where we address students, faculty, parents, and employers on a range of topics, office hours are also available in the heads of departments, the Dean and head of the Department of soil science and agrochemistry. Also interested in the successful implementation of the educational program of the person, have the opportunity to communicate by e-mail. With the purpose of obtaining information for improving the activities of the educational program, its head can be sent straight requests – electronic communications, telecommunications, etc.

Thus, the management of the educational program is carried out in accordance with the legislation of the Republic of Kazakhstan and the Charter of Kazakh Agro Technical University named after S.Seifullin. on the principles of combination of unity of command and collegiality. Implementation of all activities for the implementation of the educational program; is in the system of planning and execution and is supervised by the relevant Vice-rectors. All guiding documents of educational, scientific and extracurricular activities are formed in accordance with the requirements of the University standards. Analysis of the overall structure of the University suggests that today the University has an effective management system of the educational program, which corresponds to the mission, goals and strategy.

As part of the further improvement of the implementation of the educational program:

- updating and improving the content of the educational program; on the basis of competence-based approach and strengthening the fundamental nature of training, harmonization of the educational process and research in accordance with the principles of the Bologna Declaration;

- improving the system of control of students ' knowledge throughout the educational process through the introduction of information technology;

- creation of effective student self-government, favorable conditions for the realization of the creative potential of students.

So that the student can obtain adequate professional assistance to at-acceptance career decisions and job hunting while learning at University or after graduation for the development of entrepreneurship, career and business, which acts as the key liaison between the University and employers assists students and graduates in planning and career development and in establishing and maintaining communication with the University.

In the Center you can get information about places of professional and research practices; about vacancies and offers from potential employers; about career events. The

purpose of the career and business Center-the formation of students and graduates of S.Seifullin Kazakh Agro Technical University career skills, assistance in professional promotion, assistance to graduates in employment.

The main activities of the Center are

- assistance in the organization of educational, professional and pre-diploma practices and internships for students of S. Seifullin KATU;

- organization of events with the participation of potential employers-meetings, job fairs, seminars, presentations of companies, etc.;

- information and analytical work in the labor market, including monitoring work and organization of sociological surveys;

- information support for students and graduates;

- Employment of graduates S.Seifullin KATU;

- improving the competitiveness and mobility of graduates of S. Seifullin KATU in the labor market. Completion of the educational program is confirmed by the issuance of state diplomas.

During training at the University students can get diplomas of winners of conferences, competitions of student works, Olympiads. Monitoring of employment of graduates: constant communication with graduates through social networks, through telecommunication networks. The center of career and business is engaged in programs to support graduates, their further professional development at the University.

When implementing the educational program, special attention is paid to attracting students to research work. Research work of students is realized through the implementation of program course and diploma works in the educational laboratories of the Department. The content of course and diploma works is aimed at deepening theoretical knowledge, the formation and development of independent applied (methodical) skills of students. Management of the implementation of course work is carried out by professors, associate professors and senior teachers of departments. On the basis of term papers and theses students carry out research projects.

One of the forms of attracting students to research work is participation in the Republican subject Olympiad, which develops their professional knowledge. Students of specialty 5B080800-soil science and agrochemistry annually take part in the Republican subject Olympiad among students of higher educational institutions of the Republic of Kazakhstan, which is held at the basic University – Kazakh national agrarian University (Almaty) and take 2nd and 3rd places.

In 2014 - in the team competition, the Kazakh group "Anyz" took 2nd place, the Russian group "Saturn" - 3rd place, in the individual competition - 4th year student, Zhamaubek G., 3rd place. In 2015 - in the individual competition were taken students of the 3rd course Syrlybaeva M.M. 2nd place, Kaliaskar D.R. - 3rd place, Kolushbaev H. - a letter of thanks. In 2016 - in the individual competition of students of the 3rd course Zhedelbayeva A. took 2nd place. In 2017 - the 2nd place was taken by the 4th year student Zhedelbaeva A., Kalbaeva J. - the 3rd place. In 2018 - 2nd place was taken by 4th year student A. Mukanova, 3rd place - 4th year student A. Koisheken. In order to form an active civil position, development of personal-significant and leadership qualities, independence operates youth wing "Zhas Otan", people's democratic party" Nur Otan", the Alliance of students of Kazakhstan, the Committee on youth Affairs, Student Union, whose members are students of the educational program. Students of the educational program have the opportunity to express an opinion on the rector's blog, as well as through direct communication with teachers. Through these forms of communication are solved the actual problems of education, self-government, leisure organization.

The Department pays great attention to educational work. Developed and approved work plan of the Department, including educational work.

Various forms of work are used to carry out the planned activities: curatorial sachs, preventive talks, round tables, meetings with cultural figures and public figures.

Actively works Council of elders, curators of the academic groups involved in the work of the Board of supervisors of the faculty, student government.

The University has the alumni Association. Public Association "club of graduates of the Kazakh State Agro Technical University named after Saken Seifullin" is a public self-governing, established in accordance with the current legislation and uniting on a voluntary basis. The organization is a non-profit organization that does not have its main purpose of profit and shall not distribute profit among its founders. The organization, in fulfilling its statutory task, acts on the basis of the Constitution of Kazakhstan, the Law "On public associations", Civil code of Kazakhstan, the present Charter, is guided by generally recognized international principles and norms. Organization - is a legal entity, owns a separate property and is liable for its obligations with this property, may on its own behalf acquire and exercise property rights and personal non-property rights, bear obligations, be a plaintiff and a defendant in court. The organization has its own balance sheet, settlement and other accounts, including currency, stamp with its name, stamps and forms.

Assistance in training students from low-income families, orphans, gifted students in

need of financial support by awarding them scholarships and other assistance related to their training or for participation in public work, in Amateur performances, in various creative competitions of sports achievements;

Providing financial assistance to graduate students and young scientists of the University working in promising areas in the field of agriculture and assistance in the implementation of scientific developments in production, as well as financing the most vital scientific topics, the introduction of which will bring tangible benefits for the development of specific farms in the region;

Implementation of assistance to veterans of the University experiencing financial difficulties.

Assistance in the development and strengthening of international relations that meet the objectives of the Club, establishing business and scientific contacts with foreign organizations that perform similar functions to the activities of the Club;

Communication with other organizations (domestic and foreign), institutions and individuals in order to implement and implement projects related to the objectives of the club;

Participation in the development and implementation of projects of programs and activities aimed at improving the welfare and social protection of students and staff of the University;

Participation in charitable activities, establishment grants. The purpose of the Club is the social and legal protection, financial strengthening and enhancing the well-being of students, teachers and graduates of the Saken Seifullin Kazakh State Agro Technical University. Directly carry out international cooperation in accordance with the activities stipulated by these articles to establish automated connection with interstate and foreign networks electronic computer and data banks;

The organization carries out production and economic activities;

The organization represents the interests of its members in the authorities and management of the Republic, is included in these instances with proposals to improve the organization of educational process in the University, social support for students and University staff. The organization exercises the rights of possession, use and disposal of its property and funds, it is a legal entity. The organization is responsible for its obligations, the property owned by, under the law can be levied.

The organization is not liable for the obligations of the members of the alumni Club Kazakh State Agro Technical University as well as members of the Organization are not

liable for its obligations. The organization shall possess, use, dispose of their property in accordance with applicable law.

Income is not distributed among the members of the Organization and is achieving the statutory objectives.

The University has a mechanism to support gifted students. This scientific circles, Olympiads, competitions of scientific works among students. Evaluation of the effectiveness of research work is carried out on the following main indicators: the amount of funded research work, the volume of contractual research work, the number of patents and inventions, scientific publications, the number of students involved in research work, the implementation of the results of research work in the educational process and production. The University annually holds a competition of students 'scientific works in the framework of the event" Seifullin readings", which improved the mechanisms to stimulate research work of students, their scientific supervisors. During the reporting period, 18 students reported at the conference.

At the conference were awarded with diplomas: Hurmatbek J. (master student) diploma of the 2nd degree, a student Zhumabayev (4 year) – diploma 3 degree, students Grigulevich I., B. Zhanzakov received certificates of appreciation. Students Utelbaeva Tongarewa A. A. (head Professor A. Nayanova) the diploma of 2 degrees, Galiaskar D. (supervisor Professor V. G. Chernenok), Abilkaiyr Schwa. (supervisor associate Professor Ramazanova R. H.) - the diplomas of 3 degrees, the student Vedernikov I. A. (head Professor K. Muhammadkarimov) awarded a certificate of gratitude. In 2015-2016 in the academic year, 4 reports were made at the "Seifullin Readings-11". Student Zhanzakov B. received a diploma of 2 degrees and Zhigerbaeva A., Ali A.-received a diploma of 3 degrees. In addition, the 3rd year student Tansholshan Sh. received a letter of appreciation. The winners of the intra-University competition and competition of the Ministry of education and science of the Republic of Kazakhstan for the best research work of students are awarded a diploma of 1 degree, 2 degrees, gratitude.

The winners of the competition of scientific student work of the Ministry of Education of the Republic of Kazakhstan are: Diploma of 3 degrees Madelova Dilyara and Merzhakypova Aygerim (2nd year), research supervisor Professor Nuanova A.P. and Ivan Plyusnin (4th year), research supervisor Professor Chernenok V.G. The winners of the university competition for the best research work of a student in 2016 are: a diploma of 2 degrees - Vedernikov Igor, 4th year, Madelova Dilyara and Merzhakypova Aygerim (2 year); 3 degrees - Plyusnin I., Nurlan Madina, or Ablay 4 course; letters of thanks:

Urazymbetova Zhuldyz, Aspandiyarov Yerkebulan (2nd year), Adamzharova Nurbal (4th year In 2017, the 4th year student Zhanar Kalbaeva became the holders of the diploma of the 2nd degree, the research supervisor is Professor Nahanova A.P., the 3rd degree - the students: Tuman Balgerim- student of the 4th year, the head of the Ph.D. S.M. Kulzhanova, Arystan Koisheken, 3rd year, supervisor of the research studies of chemical sciences, E. Nurmanov, letters of thanks: Nurlybai Zhansaya, 4th year, adviser, professor Mukhametkarimov K.M., 4 course and Madi Tugelbayev 3 course, head Kulzhanova S.M. and Zhumash Aidana 4 course, scientific adviser G. Kekilbayeva. According to the results of the Republican contest research work of the student of the Ministry of education and science of the Republic of Kazakhstan students majoring IN 5b080800-soil science and Agrochemistry were holders of diplomas of 2 and 3 degrees. The Department has a scientific circle "Fertility", in which students of all courses are engaged in research activities. At the same time, master students help supervise the work of the circle.

An important place in improving the organization and summarizing the results of the student's research work is occupied by student scientific conferences. Participating in the conference for young scientists, students of the educational program have good results in publications. For expansion and deepening of knowledge, development of research skills and formation of professional competences not less than twenty percent of students are involved in scientific circles and student scientific society of faculty where in the course of occupations students acquire skills of research activity and define the sphere of the future scientific interests. The versatility of the work, which includes students in the period of training, contribute to the formation of a General professional culture of the individual and the qualitative development of the educational program.

Research work with students is carried out according to the plan, starting from Junior courses. At the senior courses, they are given the opportunity to express themselves individually, participating in the work on projects and making presentations at scientific conferences. In the 2015-2016 school year on April 20-21 for the first time at the University was conducted the research competition on the subject "Microbiology", which was in charge of the Department of soil science and agricultural chemistry under the guidance of Professor A. P. Nauanova and teachers Aidarkulova R. S., Ishmuhambetova G.N. and Botbaeva Z. T.

The continuation of this Olympiad was the interregional Olympiad in the disciplines of "soil science", "agrochemistry" and "microbiology", which is held for the third year. Active participation of students in the scientific life of the Department contributes to the

fact that they continue their studies in foreign universities in the future on the profile of the specialty. So, Galiaskar D. is studying in a magistracy under the program "Bolashak" in Canada at the University of Alberta, Nurzhan A. is continuing to study for a doctorate in China Sianscom University. Students of the master's and doctoral levels are almost all involved in the implementation of research work of the Department. Obligatory condition of their involvement in scientific research is to publish scientific articles, conference presentations. Undergraduates take part in the work of international summer and winter master's schools (Appendix 19). Postgraduates pass scientific internships in domestic and foreign universities partners - Kazakh research Institute of soil science and Agrochemistry named after U. U. Uspanov , Kazakh research Institute of agriculture and crop production, research Institute of grain farming named after A. I. Barayev, Republican scientific and methodological center of agrochemical service, Kazan state agrarian University, Kyrgyz state agrarian University, Krakow agrarian University, etc. Doctoral students are required to undergo training in foreign partner universities-Czech University of natural Sciences, Soil Institute V. Dokuchaeva, Putra University, Belarusian state agricultural Academy, Belgrade University, Timiryazev Russian state agrarian University-Moscow agricultural.

Based on the analysis of the profile "Students" we can draw conclusions: the University has a support service for students, systematically and systematically meets the educational, personal and social needs of students; the mechanism of financing and stimulating extracurricular activities of students, providing material assistance to socially vulnerable categories of students; implemented a system of information security of students, feedback through the system of social and control activities; created a system of formation of Patriotic, spiritual and moral qualities of students; there are conditions for personal development and education of students; actively working bodies of student government; working service to meet the career needs of students through the system of training, production, research and teaching practices and employment.

Table 12 - SWOT - analysis of the standard “Learners”

S (strength) – strengths (potentially positive internal factors)	W (weakness) – weaknesses (potentially negative internal factors)
- the presence of the policy of formation of the contingent of students;	- reduction of income due to arrears in payment for students

- increase of income due to increase; number of students studying on a paid basis; - strengthening the material and technical base of the University and the Department; - purposeful work on the formation of students ' corporate spirit, ability to work in a team.	studying on a paid basis; - deduction of students due to academic debt. - the lack of development of distance education
O (opportunity) – opportunities (potentially positive external factors)	T (threat) – threats (potentially negative external factors)
- strengthening the work to attract students on state orders and on a paid basis; - provision of additional paid services, including consulting services; - development of research activities on the basis of contracts for the implementation of scientific and technical services; - creative development of students through participation in the work of the Foundation's educational program, Clubs on interests, various sections.	- possible deterioration of social conditions and solvency - the population and, as a consequence, the threat of decline in budget revenues, resulting in a reduction in spending.

Specialized profile "Students" contains the following self-assessment of compliance: according to the criteria of educational programs has a strong position-6, satisfactory -5, suggests improvement-1.

8 FACULTY

Staffing for educational programs 5B/6M/6D080800 - soil science and agricultural chemistry presented in table 13.

Table 13 - faculty involved in the educational program 5V/6M/6Д080800 - soil science and agricultural chemistry

The level of education	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Bachelor's courses: The number of faculty, people Degrees, %	53 54,4	58 63,8	51 68,6	61 70	66 75
Master Number of faculty people Degrees, %	19 84	24 100	18 100	13 100	14 100
Doctorate Number of faculty people Degrees, %	8 100	13 100	8 100	5 100	5 100

The bachelor speaker of the faculty ranged from 51 to 66 people, with getting degrees from 54,4% to 75%, masters - 13-24 people and 84-100%, in doctoral studies - 5-13 in a 100% qualification educational programs. As an example, Annex 20 presents the teaching staff for 2017-2018. 82.6% of the teaching staff can conduct classes in the Kazakh language, and 18% of teachers can teach in English. All teachers in the disciplines taught have a basic education. At the Department in addition to full-time teachers, practitioners, work as part-time leading specialists and managers of enterprises and organizations, which is determined by the workload based on the calculation of 0.25 rates, which corresponds to 158-200 hours. The load of part-time practitioners includes conducting training sessions, management of theses, conducting training sessions in an interactive form, etc.

Staffing in this specialty is quite satisfactory, there is a gradual decrease in the average age of the teaching staff. Leading professors of the Department

Chernenok V. G. and Nayanova A. P., K. M. Muhammadkarimov have extensive experience teaching and conducting research works.

The Department leading teachers annually held various training courses. Each teacher for admission to work is studying the job description, as evidenced by the help of acquaintance lists. Employment and the distribution of responsibilities is made in accordance with clearly defined qualification requirements of higher education. At the University there is an effective functioning of such mechanisms of personnel management as motivation i.e. developed regulations on the establishment of an annual allowance to the basic salary, which financially motivates the employee: the Provision on the establishment of allowances to the teaching staff; the Provision on the system of material incentives for the teaching staff, departments and faculties in the nominations. The University also provides staff with training courses in the Republic of Kazakhstan and abroad at the expense of University funds. Each Faculty has available information the existing and applicable regulations and provisions. Each faculty begins to work on the established rules of the University. Credit technology training significantly changes the work of the faculty, highlights the need for continuous self-improvement and self-learning, creating a new scientific and methodological support of the educational process. Educational and methodical work involves providing the educational process of psychological, pedagogical, didactic, methodological and educational material objects to achieve high educational and developmental goals. Each professorial-teaching staff head of the Department distributes individual load. Each year, the workload of the faculty is loaded in the system "Platonus". Teaching load the teaching staff averages 640,08 hours. In the 2016-2017 academic year, the Department planned 14510,1 hours, including 300 hours of review and payment for the production practice, the Chairman of the state certification Commission . In 2017-2018 - 129 hours.

Selection and placement of scientific and pedagogical staff is carried out through the conclusion of employment contracts and election by competition in accordance With the rules of the exchange of positions of the teaching staff and research workers of higher educational institutions, approved by the order of the Ministry of education №635 from 21.01.2008. The Rules establish qualification requirements for candidates applying for positions, determine the procedure and organization of the competition Commission, the reception and consideration of documents.

The announcement of the competition is published in the periodical press. Election to the vacant positions of the teaching staff is carried out on the basis of the conclusion of the

departments, as well as the results of the secret ballot of the competition Commission. Bulletins and minutes of the counting Commission are stored in the Management of organizational, personnel and legal work. Recruitment, registration of their admission, transfer and dismissal, preparation of documents for approval in positions engaged in the Department of personnel management, which is guided by the Labor Code of the Republic of Kazakhstan dated may 15, 2007 № 251, The law of the Republic of Kazakhstan dated October 24, 2011. The University has developed a Regulation on the internal regulations of JSC " S. Seifullin Kazakh Agro Technical University " developed in accordance with the Labor Code of the Republic of Kazakhstan dated may 15, 2007 №251-III SAM, the Law of the Republic of Kazakhstan "on joint-stock companies", the Charter of JSC "Kazakh agrotechnical University. S. Seifullin" (hereinafter - S. Seifullin KATU), other regulatory legal acts of the Republic of Kazakhstan and is an internal document of S. Seifullin KATU, establishing Internal rules in S. Seifullin KATU, "on amendments and additions to the Law of the Republic of Kazakhstan "on education", Qualification characteristics of employees of S. Seifullin KATU developed in accordance with the Standard Qualification characteristics of positions of teachers, approved by the order of the Minister of education and science of the Republic of Kazakhstan on July 13, 2009 № 338, the rules of competitive substitution of posts of teaching staff, the order of the Minister of education and science of the Republic of Kazakhstan on December 14, 2007 № 635 and the Decree of the Government of the Republic of Kazakhstan dated December 19, 2007. № 1400 "Remuneration of employees of public institutions". Developed and approved Regulations on structural units and job descriptions for all employees of the University.

Currently, the University offers some form of employment:

- competitive selection of candidates for the positions of the teaching staff, followed by the conclusion of an Employment contract for 3 years;

- conclusion of an Employment contract on the application for one year.

Personnel potential reflects the readiness of teachers to perform their functions both at the moment and their ability to carry out pedagogical activities in the long term, taking into account age, scientific and pedagogical qualifications, practical experience, business activity, quality of activity.

The development of the model of partnership at the level of "student-teacher", "University-organization of education" determines the need to improve the code policy. To improve the efficiency of human resources management, special attention is paid to the following issues: permanent participation in the formation of full-time teaching staff of

only human resources services, but the heads of all departments; a clearer distribution of functions between all participants of personnel management and coordination of their actions; rational distribution of duties; professional and job promotion of employees taking into account the results of evaluation of their activities and individual characteristics; recruitment of highly qualified specialists. If there are vacancies, a competition is announced, the procedure of which is described above, to which interested persons with relevant basic education apply. Also creates a personnel reserve of the graduates of the master's degree.

Information about the teachers involved in the implementation of the educational program is available on the website of S. Seifullin KATU, which shows contact details, area of on-usnih interests, basic services, availability of development data on professional development. This information is available to everyone. The need for an educational program in full-time employees is determined on the basis of the total academic load for each academic year, and depends on the contingent of students at the levels of educational programs. At the same time, teachers with a degree of doctor or candidate of Sciences are primarily involved in teaching at the master's and doctoral educational programs.

The need of the teaching staff is met with the provision of sufficient teaching hours. Provision of material and technical base for laboratory practical training. Providing an expanded base of educational, technological base and production and pre-diploma practice. It is also possible to provide and satisfy high-quality teaching by specialists from production in the specialty. In recent academic years, the average age of teachers is stable and keeps at the level of 42-45 years.

The staff of the Department implementing the educational program is stable, consisting of three doctors of Sciences, professors, 3 associate professors, 7 candidates of sciences, 3 PhDs, masters (table 14).

Table 14-Quantitative and qualitative staff of the Department

Indicators		Academic year				
		2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Number of teaching staff	In total	18	23	24	22	23
	including regular	15	18	21	20	19
From among the staff	doctor of science	4	4	3	3	3
	Professors	1	1	1	1	2

teachers	candidate of Sciences	8	9	10	10	7
	PhD	-	-	-	1	2
	Master students	5	5	4	4	8
	degree	61	61	69	65	70

Taking into account the further development of the educational program is not enough and the Department plans to further work to improve staffing. Every year the degree of the Department increases due to the conduct of personnel policy to increase the share of the academic staff, at the expense of graduates of PhD-doctoral specialty.

Promotion of the teaching staff in the service primarily depends on the individual rating of the teacher and the University staff, which is formed at the end of each academic year. For this purpose, the University has developed and implemented Provisions covering all aspects of the teaching staff and is the basis for the competition among teachers to fill vacancies, as well as in the formation of a reserve for the positions of the administrative level of the University. Every year the analysis of the Department of personnel management and document management is required to verify the qualification of the teaching staff in order to register in the ranking of higher education institutions.

The current composition of the educational program in the specialty 5V/6M/ 6D080800 - soil science and agrochemistry fully meets the requirements for its implementation. Every year the teaching staff of the Department attend courses of pedagogical skills, as well as when hiring pay attention to the presence of certificates of completion of professional development courses of the candidate who submits documents for vacant positions. Teachers-practitioners are required to enroll in courses of pedagogical skills.

Within the framework of the educational program, when considering it, the head of the Department of the graduating specialty is responsible. The head on the basis of standard programs develops working training programs and agrees with the Department of academic Affairs. If there are vacancies, a competition is announced, the procedure of which is described above, to which interested persons with relevant basic education apply. Also creates a personnel reserve of the graduates of the master's degree.

Information about the teachers involved in the implementation of the educational program is available on the website of S. Seifullin KATU, which shows contact details, area of on-usnih interests, basic services, availability of development data on professional

development. This information is available to everyone. Promotion of the teaching staff in the service primarily depends on the individual rating of the teacher and the University staff, which is formed at the end of each academic year. For this purpose, the University has developed and implemented Provisions covering all aspects of the teaching staff and is the basis for the competition among teachers to fill vacancies, as well as in the formation of a reserve for the positions of the administrative level of the University. The rating system allows you to compare the performance of departments, faculties, quickly and flexibly vary a set of incentives and incentives to make informed decisions on the management of the educational process. The rating of the teacher is taken into account at competitive election to a position, at transfer from one post to another (official promotion), representation on an academic rank, and also at material and moral encouragement.

Methods of determining the rating of most considered all types of work teachers: educational, methodical, organizational-methodical, research and educational and their ranking by significance. The increasing and decreasing factors are taken into account. The basis for the calculation of the rating is the individual plan of the teacher. S. Seifullin KATU provides an educational program that motivates students to take an active role in the joint creation of the learning process, and the assessment of student performance reflects this approach.

Students are direct participants and partners in the development of their education. S. Seifullin KATU implements student-centered learning according to various criteria: assessment of students ' knowledge (systematic monitoring to improve the educational process, availability of criteria and methods of evaluation, assessment by several examiners, consideration of mitigating circumstances, the official appeal procedure); Support for students 'sense of autonomy (self-assessment of students - greater availability of samples of scientific student work, the code of honor of students, students' participation in the development of educational programs); Social dimension (policy support University diversity of students, their needs and interests); learning Outcomes (implementation of competence-based approach, procedures for recognition of informal and informal learning, published procedures for admission of students,

The teaching staff of higher education institutions and University students regularly review their teaching and learning methods to improve students 'learning experience and stimulate students' critical thinking and personal skills. Students have different learning styles. Some students learn more effectively through trial and error, others gain knowledge through practical experience. Students learn information better by reading literature; others

need to discuss theory in order to understand it. Students have different needs and interests. All students have needs that go beyond the course. Student-centred approach places the responsibility on the student of more responsibility, prompting him to think, to process, to analyze, to criticize, to solve the problem. The Department has an internal control system. For this purpose, a schedule of mutual attendance of classes for semesters of the academic year, the results of which are discussed at meetings of the Department and recorded in the minutes. Also, the schedule of open classes by teachers of the Department is drawn up. Open session is discussed at the meeting of the scientific-methodical seminar of the Department, is made out by the Protocol. On the basis of the analysis of classes attended at the departments of the plan of corrective actions for the further development of the development Plan of the educational program. At the faculty level, a Commission is created, members of which are experienced teachers attending classes of the teaching staff: lectures, seminars, laboratories, independent work of the student under the guidance of the teacher; the effectiveness of the use of multimedia equipment, interactive whiteboard in the educational process is evaluated. As a result of the work of the Commission, a certificate is drawn up, which is heard and discussed at the meetings of the Council. The workload of the teacher is reflected in the teacher's individual plan. It is considered at a meeting of the Department and approved by the head of the Department. Without the decision of the Department it is forbidden to make changes. At the departments introduced the practice of planning methodological activities of teachers on the orders of the scientific library. For this purpose, every year the library compiled a list of disciplines that are not sufficiently provided with literature. The progress of the planned work in the individual plan is systematically considered at the meetings of the Department, as noted in the special columns of the individual plan.

Data on the performed work in the form of results of scientific, educational and methodical work (the list of publications, patents, educational and methodical manuals and other educational and methodical literature, etc.) are represented by faculties in educational and methodical management. Every year, the form of the individual plan is revised in order to introduce into it works that ensure the actualization of pedagogical activity. Every year the teaching staff at the meetings of departments reports on the implementation of individual plans. Data on the performed work on all sections are made out as summary indicators in a complex assessment of activity of the teacher. This information is taken into account in the future when passing through the competition or when signing an employment contract.

The individual plan of the teaching staff includes such types of research work as writing and preparation for publication of textbooks, manuals, monographs, scientific articles and reports at the Department and conferences, scientific editing of textbooks, textbooks, monographs, scientific articles and reports. Statutory standard time at the principal works are voluntary and constitute an instrument for the most appropriate distribution of teaching, teaching and other work among faculty in order to make the most efficient use of teachers. In accordance with the order of the University teaching load of the faculty at the Department of soil science and agrochemistry is distributed as follows: head of the Department-swarm-730 hours, professors who are leaders of scientific projects – 650 hours, teaching staff – 800 hours. From 2016-2017, the load of the teaching staff decreased to 630 hours and it became differentiated for the teaching staff engaged in science, leading classes in English, head of the Department and, accordingly, amounted to-640,08 hours, in 2017-2018 - 428,3 hours.

The mode of working time of the teaching staff is determined By the internal regulations of S. Seifullin KATU., who contribute to the scientific organization of labor and training, rational use of working time, high quality of work, increase productivity, efficiency and improve the quality of the educational process. In General, the load is distributed in accordance with the regulations of the Ministry of education and science of the Republic of Kazakhstan, it depends on the qualification of the teaching staff.

The distribution of the load between the teachers of the Department is the prerogative of the head of the Department. Table 15 shows data on the average load of the faculty.

Table 15-teaching load of the faculty of the Department for 2013-2017

Years	Total load	On average per 1 faculty
2013-2014	12176,8	608,8
2014-2015	15599,0	678,0
2015-2016	14332,6	623,0
2016-2017	14129,0	642,0
2017-2018	12849,0	428,3

As can be seen from the table, the annual workload of the teaching staff is reduced. This is because the load distribution is differentiated. Thus, the teaching staff who are the leaders of one or two projects have a load-315, 472 hours, the head of the Department, depending on the number of teaching staff, learning levels - 315 hours, the teaching staff

leading classes in English also have a load-472 hours. The sociological survey is aimed at the identification and subsequent solution of problems associated with the activities of the faculty and staff of the University, to further develop measures to resolve the identified problem situations. The technical organization of the sociological survey is provided by the Department of personnel management and document management. The results of the sociological survey are reported and discussed for decision-making at the Meeting of the Board of JSC " S. Seifullin KATU " head of the personnel management Department. The process of cascading involves consistent transfer to each unit of the University, formed strategic goals and activities (in different directions). According to the announced competitions of scientific projects, the teaching staff informs the Department of science of the University. Since the implementation of scientific projects raises the rating of the University, as well as increase the publication of cited journals. In the implementation of the strategy, the participation of teachers is necessary, as in the individual load there is a scientific guidance of students. To carry out research grants, funded projects, the performers have certain research tasks. Scientific projects are financed by the Ministry of education and science of the Republic of Kazakhstan and the Ministry of agriculture of the Republic of Kazakhstan. Also the staff has the opportunity to participate in international research projects: EU Erasmus+ 574099-EPP-1-2016-1-ITEPPKA2-CBHE-SPPAWER "Paving the way to inter-regional mobility and to ensure compliance, quality and equity of access"; a Joint technical study on creation of environmental protection in developing cities "economic belt of the silk road (China). In recent years, the teaching staff of the Department carried out funded grant projects. in 2017, the project of Professor of the Department of science A. P. on commercialization of water biological resources is being implemented. Within the framework of the project, a scientific laboratory for the development of biological preparations from poultry manure was created. Appendix 21 provides a list of research work on the Department of soil Science and agrochemistry for 2015-2017.

During the period 2015-2018 years the teaching staff of the Department on the results of research work published 7 monographs, issued 6 security documents, published articles in the journals database Thomson Reuters-3, Scopus, Springer, Elsevier-7, the Committee for control in education and science, The Russian science citation index, the Russian science citation index-80, conference materials-54. Performed research projects have an integrated relationship with the educational process, as they involve students

(undergraduate and postgraduates). Materials obtained as a result of professional practices are the basis for the writing of diploma works, master's and doctoral theses.

The faculty of the Department annually take courses of improvement of qualification in different directions. A faculty pass a language course to improve foreign language as teaching faculty required in three languages. The following table 4 shows the courses of qualification of the teaching staff of the Department.

The University organizes different training courses with the aim of quality training of students and exchange of foreign scientists. According to the educational program, the teaching staff has been trained abroad in recent years (Annex 22).

For the period 2014-2018 protected four of the thesis for the degree of doctor of philosophy (PhD) degree 6D080800 - soil science and agricultural chemistry:

- Zvyagin, G. A. - "Agro transformation of agrochemical and physico-chemical properties of soils of Northern Kazakhstan and development of measures aimed at their improvement" (heads Kurishbayev A. K., doctor of agricultural Sciences, Professor, Co-Guth, B. M., D. SC.N., Soil Institute. Dokuchaev (Moscow)

- Baimbetova E.M., "Creating a combined microbiological fertilizer mixture on soil microorganisms and determining their efficiency on grain grops" (Heads of Nauanova AP, Professor, Christopher Te Bung Sung, University of Putra, Malaysia)

- Almanova J. S. Agroecological assessment of lands of Northern Kazakhstan" (heads Kurishbayev A. K., doctor of agricultural Sciences, Professor, Kiryushin V. I.., d.b.N., Soil-s ' Institute.Dokuchaev (Moscow)

- Zhumabek B. «The process of soil formation and transformation of fertility indicators in the northern Kazakhstani forest ecosystem» (heads - Ramazanova R. H., K. S.-agricultural Sciences, associate Professor, Lyuboch Boruvka, PhD, Czech University of life Sciences). In accordance with the Law of RK "On education" must undergo refresher training at least 1 time in 5 years to improve teaching skills, and professional competences. For the purposes of training and professional development of faculty and teaching staff implementing educational programs of the University research centre for Humanities research and educational technology.The centre's main functions are the operational needs of the teaching staff of the University in improving educationIn the educational process in the form of certification Commission were involved candidates and doctors of science from production. Director of RSE "agrochemical Service" Bazilzhanov E. K., conducted classes in the discipline "Methods of agrochemical research" on the basis of the enterprise, carried out scientific management of undergraduates. In 2014-2015 academic year the

Deputy General Director of the Kazakh research Institute of soil science And Agrochemistry O. Ospanova D. S. was involved in 2015-2016 academic year, the Vice-rector of Kyzylorda state University was appointed the Chairman of the state certification commissions.Korkyt ATA doctor of agricultural Sciences Tautenov I. A. In 2016-2017 he was appointed Chairman of the state certification commissions chief specialist of the Department of land and real estate of the joint-stock company "Government for citizens" Vasilchenko N. And... candidate of agricultural Sciences, who is also the head of postgraduates. The University promotes young scientists in increase of their professional level. Provides an opportunity for the development of scientific potential and realization of their creative opportunities - participation in scientific conferences, presentations; represents, protects and implements professional, intellectual, legal and social interests and rights; promotes scientific knowledge and the latest achievements of science. Young scientists are part of the faculty Council (Casaphon A., Zhumabek B.), taking part in various exhibitions of achievements of S. Seifullin KATHU (Almanova Zh. S.)

The library has free access to international and domestic information resources of various databases of scientific journals, access to dissertations, it is possible to obtain full-text documents. There is a patent Department that can support the intellectual property of young scientists. To motivate the teaching staff, the rating indicators are reviewed annually, for the possibility of improving the rating. For example, in recent years, an indicator on the availability of publications in the journal with a high impact factor, I-Hirsch, points for scientific articles in terms of Q-quartile is included.

The University provides staff and students on campus the opportunity to use library resources databases Scopus, SciVal, AHPC, Elsevier, Thomson Reuters, Springer, Cabi.org. and also fallow Deer, eLIBRARY.RU. To motivate the activity of young teachers, the University uses various forms - holding competitions for the best scientific work among young scientists, awarding, awarding diplomas, sending for an internship at the expense of the organization, solving social issues - providing dormitories, improving working conditions, etc.

Encouraging professional and personal development faculty of the Department is governed by the rating, which provides a differentiated approach to payroll. To ensure monitoring of satisfaction of the teaching staff and employees of the University annually a survey (see the regulations on the procedure of sociological research in JSC " S. Seifullin KATU " PPSI – quality management system 11010.13 - 2013). For the introduction of innovative teaching methods, developed a program for the introduction and pirmanti

innovative technologies in the educational process of the Department of soil science and agricultural chemistry, approved at the meeting of the Academic Council (Protocol №17 dated 28.04.2016).

In the framework of international cooperation the University has concluded agreements, memorandums and agreements with over 100 universities, organizations of the Republic of Kazakhstan and countries near and far abroad. Within the framework of these documents, the Department has established relations with the University of Putra (Malaysia) from which to lecture, and to guide the scientific work of doctoral students twice invited Christopher Te Bung Sung. From the Russian state agrarian University-Moscow agricultural Academy K. Timiryazev was invited by academician V. I. Kiryushin, with whom was developed and implemented the educational program of the magistracy in the direction of "Agroecological assessment of land and design of agricultural landscapes", appointed scientific management of doctoral dissertation, with the Soil Institute.V. Dokuchaev in scientific PY-management PhD students are invited Professor B. M. Kogut to give a lecture "A new paradigm of organic matter in the soil".

The Department collaborates with the University of Kastamonu (Turkey), where he was visiting Professor Temel, Sariyildiz. For the teaching staff and students were given lectures on soil protection, together with him Ramazanova R. H. was published a scientific article in the materials of the "National Congress of Turkey on environmental protection." In the framework of joint research work was carried out with the Russian Academy of Sciences of the Russian Academy of Sciences Zavalin, published joint scientific articles (all-Russian research Institute of Agrochemistry. D. N. Pryanishnikova). In April 2018, a representative of the Ekorost company Tampur I.D. gave a lecture on organic farming. (Ukraine). On technology of cultivation of field crops Professor Ian Turan and Dr. Sanja Vasiljevic Institute of field crops (Novi Sad, Serbia), with whom the Department has business relations. In the framework of the scientific projects as a consultant to the state included doctor of biological Sciences, Professor, academician of the RAS A. A. Zavalin, head of laboratory of mineral and biological nitrogen all-Russian research Institute of Agrochemistry named after D. N. Pryanishnikov (Moscow). A close academic relationship established by researchers from the Czech University of life Sciences, University of Belgrade, Institute of Agrochemistry named after D.N. Pryanishnikova (Russian Federation), Belarusian state agricultural Academy (Belarus).The University has made agreements on cooperation with foreign universities such as the University of California, Davis (USA), Warsaw University of life Sciences (Poland), Xinjiang University (China),

D. N. Pryanishnikov Perm agricultural Academy. (Perm, Russia), Timiryazev Moscow agricultural Academy (Moscow, Russia), Institute of field husbandry and vegetable growing (Novi Sad, Serbia). Scientists of the Department are engaged as experts in the submitted projects, reports of other organizations on scientific and research work. The staff of the Department is actively involved in the social activities of the University, as well as in the life of incoming students, postgraduates and doctoral students (table 16).

Table 16 – Participation of faculty in various organizations in Kazakhstan

Full name of the teaching staff	Name of works
Chernenok V. G.	Members of the editorial Board of "Perm agricultural Bulletin»
	Member Of the international Union of agrochemists and ecologists of the Union of independent States
Nayanova A. P.	Member of the editorial Board of "in the world of scientific discoveries" / in the World of Scientific Discoveries/ Russia
	Member of the Dissertation Council of L . Gumilyov Eurasian national University on specialty "Ecology»
Kulzhanova S. M.	The expert of the Republican center "Okulyk"
Ramazanova R. H.	Member of the Republican educational-methodical Council at the Kazakh national agrarian University, scientific Secretary of the dissertation Council for agricultural science S. Seifullin KATU

Since the beginning of the school year until the end of the year, teaching staff participate in various activities of the University, the city administrations. Name the event shown in table 17.

Table 17 - List of event held and the list of faculty participants

№	The name of the events and the organizers	The name of the Participant	Location	Dates
1	International exhibition "Science and education»	Tursunbayeva A. E.	Exhibition center "Korme»	November, 2017
2	13th Kazakhstan international specialized exhibition of	Khamzina B. N., Chernenok V. G.	Astana, Exhibition	March 2018

	equipment and technologies for agriculture		center "Korme»	
3	"Microbiological analysis: possibilities of time-of-flight mass spectrometry on the example of BioTyper, Bruker»	Nayanova A. P.	Astana	March 2018

In order to improve the quality of teaching, the teaching staff of the Department "soil science and agrochemistry" in accordance with the schedule were trained at the school of lecturers at S. Seifullin KATU. "Innovations in the educational process of higher education": "Theoretical and methodological foundations of innovation in the educational process of the University", "Interactive teaching methods in higher education", "Methods of teaching in modern higher education", "Advanced training in the education system", "Theory and practice of Informatization of the educational process of the University". The teaching staff of the Department of soil science and agrochemistry acquainted with the Position of the quality management system bonuses, as evidenced by the familiarization sheets. Developed regulations on the allowance of the faculty (the rating) and the Position and bonuses are an essential motivation for the publication of scientific articles in journals with nonzero impact factor. For the period 2015-2018 the faculty of the Department of the results of research work published 7 books, designed 6 security documents, published articles in journals database Thomson Reuters - 3, Scopus, Springer, Elsevier - 7,of the Committee for control in education and science, Russian science citation index, Agricultural Research Information System - 80, in conference proceedings - 54 (reports of the faculty of the Department for the 2015-2017).The Department took the 3 place in a nomination the best Department of S. Seifullin Kazakh Agro Technical University for 2017.Thus, the teaching staff of the Department, implementing the educational program 5V/6M / 6D080800 specialty soil science and agrochemistry meets the qualification requirements of licensing educational activities, has full knowledge, modern teaching methods and provides a really high quality higher education

Table 18 - SWOT analysis of the standard " teaching staff; and teaching effectiveness»

S (strength) – strengths (potentially positive internal factors)	W (weakness) – weaknesses (potentially negative internal

	factors)
- - residual high degrees of educational programs; - - compliance of the basic education of the teaching staff with the profile of the educational program; - - extensive scientific, pedagogical and practical experience; - - experience of participation of the teaching staff in scientific competitions, educational programs; - - heads of structural units have appropriate qualifications and practical experience - - application of innovative methods and forms of training by the teaching staff . - - system of material stimulation of scientific and pedagogical personnel	insufficient involvement of the teaching staff in the system of professional development of the international level; - lack of international projects and grants; - poor knowledge of a foreign language teaching staff.
O (opportunity) – opportunities (potentially positive externalities)	T (threat) – threats (potentially negative external factors)
- - organized system of cooperation with educational and research institutions of near and far abroad- ability to conduct scientific research.	- - the presence of competition from state higher educational institutions

Special profile "faculty and effective teaching" includes the following self-assessment compliance criteria educational program has a strong position - 6, satisfactory – 4, suggests improvement - 2.

9 EDUCATIONAL RESOURCES AND STUDENT SUPPORT SYSTEMS

The main factor to insure quality of education and guarantee of sustainable development of JSC S.Seifullin Kazakh Agro Technical University is the continuous improvement of material and technical resources and infrastructure. The University has a material and technical base that insures execution of all necessary training programs and research work of teaching staff and students provided by curriculum,

There is methodical work on improvement of material and technical base where all available resources of the Department are reviewed annually and adjustments are made, depending on the students enrolled and the results of the monitoring are recorded in the minutes of the meeting of the Department conducting OP in the minutes of the Faculty Council. To replenish the resource fund on the basis of the submission of the department, applications for the purchase of resources are submitted to the public procurement department. The results of the public procurement carried out are posted on the web portal of the State Healthcare Institution of the Republic of Kazakhstan and the university's web portal.

Students of educational program OP 5B / 6M / 6D080800 - Soil Science and Agrochemistry have access to the use of the following objects:

- Learning campus № 1, (main building) total area -13 560,2 ($м^2$), which includes lecture halls, classrooms for practical lessons, laboratory, multimedia classes, computer classrooms, lingaphone –computer classrooms, library, reading halls, lunchroom, sports gym

- Learning campus No. 5 (building of the Faculty of Agronomy), total area - 5 354.6 (2 m), including lecture halls, halls for practical and laboratory practical classes, laboratories,

multimedia classrooms, computer classrooms, reading hall, canteen

- Learning campus № 2 (building of the Faculty of Biology), – 8 123,6 ($м^2$), which includes lecture halls, classrooms for practical lessons, laboratories, lingaphone –computer classrooms

multimedia classrooms, computer classrooms, canteen

- Learning campus № (building of Technical Faculty), total area –5400 ($м^2$), which includes lecture halls, classrooms for practical lessons, laboratories, lingaphone –computer

classrooms

multimedia classrooms, computer classrooms, canteen

- Two students dormitories № 5 and № 8 with total area 3 168,9 and 8 755.6 (m2) with rooms for students for accommodation, leisure room, reading hall and gym.

For the implementation of the Educational program 5B080800 "Soil science and agrochemistry" there is enough number of classrooms, computer classes, sports halls, rich books fund .

The department has the following classrooms: lecture halls for 30 and 100 seats - 4; the laboratory of agrochemistry - 2, the laboratory of soil science - 1 and the laboratory of microbiology - 1, the soil research laboratory - 1.

All the above mentioned rooms meet the requirements for conducting classes. The educational equipment used in the educational process reflects the specifics of educational programs. Conducted laboratory classes involve the acquisition and development of students skills in devices related to the determination of soil properties, chemical composition of plants, analysis of fertilizers, etc. All methods of soil and agrochemical analyzes are classical and generally accepted in soil and agrochemical laboratories of research institutes, SPC, laboratories of mass analysis.

There is Museum of soils of Northern Kazakhstan which operates at the department - the only soil profile museum in the region. It presents the soil forest steppe, steppe and dry steppe zones of Kazakhstan. The basis of the exposure are soil monoliths with a detailed description of their physical, physicochemical and agrochemical properties. In addition, the museum has a collection of minerals and rocks, a large-scale "Map of soil zones of Kazakhstan."

During the mastering of the discipline, the teacher provides individual assistance to the students (consultations) in the form of a conversation, issuing and receiving assignments, calculations, interviews, etc., during the delivery of the SRTP. The time assigned for the provision of advice is indicated in the syllabus. The student can contact the teacher, giving classes during the time allotted for consultations, as well as outside hours.

In the absence of a teacher, teachers of the department who specialize in the same field of knowledge can provide advice. The problems of students that may arise during the period of study include: absence of students at classes for various reasons; adaptation of first year students; complicated relationships with the teacher or with fellow students; social problems (housing, poor students, health); academic debt; employment, etc.

To solve the above problems, the department and the dean's office monitor students' attendance at classes and identify the causes of absence. In case of a good reason for illness, when the relevant certificate is provided, an individual training schedule is developed and the opportunity to master missed classes is given, and thus, the academic scores are raised or the student can go on academic leave.

The department and the dean's office conduct consultations, conversations, questionnaires with first-year students explaining the trajectory of education at the university, and participate in the resolution of conflict situations of students and teachers. To solve social problems, the dean's office has the right to submit students for assignment to a state social or nominal scholarship, to allocate places in a hostel.

To further improve the educational process, the dean's office develops forms of self-government among students, maintain relations with various public organizations, and works to promote the employment of graduates through holding of a graduate fair, open door days, and so on.

For the qualitative organization of the educational process, by order of the Chairman of the Board of the University, advisors are appointed for 1-4 courses to advise students on the issues of the EP. From the 1st year the advisors provide students with a reference guide, an academic calendar, Ethic code of graduate, conducts group and individual consultations with students for the rational compilation of students 'individual curricula based on their individual abilities, prospects for growth, and the needs of community society, in order to develop students' individual curricula rationally which is based on their individual abilities, growth prospects, and community needs of the community, students in order to rationally compile individual curricula based on their individual abilities, growth prospects, and community needs.

Informing students of planned activities is done via stand- materials, which are hung in the buildings of Learning Campus No. 1, and 5 of the University.

Information is placed on the stand of the faculty for students: announcements about contests, conferences, etc.

The educational equipment used in the educational process reflects the specifics of educational programs. Conducted laboratory classes involve the acquisition and development of students' skills in devices related to the determination of soil properties, chemical composition of plants, analysis of fertilizers, and so on. All methods of soil and agrochemical analyzes are classical and generally accepted in soil and agrochemical laboratories of research institutes, SPC, laboratories of mass analysis.

The available resources of the department are analyzed annually and adjustments are made depending on students entolled. The results of monitoring are reflected in the minutes of the meeting of the department implementing the EP, in the minutes of the faculty council. To replenish the resource fund on the basis of the introduction of the department, applications for the purchase of resources are submitted to the public procurement department. The results of the public procurement carried out are posted on the web portal of the State Healthcare Institution of the Republic of Kazakhstan and the university's web portal.

The fund of educational and methodical literature is also updated in accordance with the monitoring of new educational publications on the disciplines of the department, through the publication of their own textbooks and educational and methodical literature. Educational materials, software, educational literature are available for all students.

The training of students, including the necessary material-technical and informational resources, is in line with the objectives of the software program. For the effective operation of the infrastructure, the modernization of the software and hardware is carried out. The computers of educational corporations have access to the Internet network with the permissive capacity of the channels to access the Internet from 100 Mbit / s and the internal data exchange with a speed of up to 535 Mbit / s;

Students and teachers of the department have free access to a network of Internet via (Wi-Fi) from any computer in any campus and dormitory.

Access to Internet resources is provided in the computer classes and lecture halls, equipped with interactive boards and other multimedia techniques and reading rooms.

Besides informative aspect of site the first place takes interactive communication through virtual space, access to educational services and automated informative systems , such as electronic encyclopedia, catalogue of electronic educational resources, catalogue of training programs, library site of S.Seifullin KATU , to AIS PLATONUS, electronic mail, internal portals, electronic fair of graduates.

The library is available in all educational institutions and includes 4 reading halls (in campus No. 1 (main building), No. 6 (in building of architectural and land management departments); No. 5 (in building of agronomic faculty) and in dormitory No. 6) and electronic reading hall

The number of seats for users (numbers) campus No. 5 - 60. Reading halls are equipped with modern technical equipment: computers, printers, a scanner. In the electronic hall, students of the EP 5B080800 “Soil Science and Agrochemistry” work with

electronic textbooks, the electronic catalog, the Kazakhstani and foreign electronic resources (Thomson Reuters, Elzevir, Springer ScienceDirect, Scream Scopus, etc.,), electronic library PMAB , etc

The book fund complies with the preparation profile EP 5B080800 - "Soil science and agrochemistry". The application is filled in annually by the department for the purchase of new literature. The fund of educational and methodical literature is also updated in accordance with the monitoring of new educational publications on the disciplines of the department, through the publication of their own textbooks and educational and methodical literature. The annual survey indicators of educational, training and methodological and scientific literature disciplines of EP 5B080800 - Soil science and agrochemistry is shown in Tables 19,20.

Table 19 – The availability of educational , educational – methodological and science fiction literature of EP 5B080800- Soil science and agrochemistry

Academic year	Students enrolled		Educational literature		Scientific literature		Educational – methodological literature		Total amount of literature	
	Kaz	Rus	Kaz	Rus	Kaz	Rus	Kaz	Rus	Kaz	Rus
2013/14	102	100	7530	25690	3780	12650	5000	17120	16310	55460
2014/15	121	118	7756	25925	3900	12890	5160	17280	16816	56095
2015/16	111	106	7960	26300	3980	13150	5200	17520	17140	56970
2016/17	119	92	8214	26436	4106	13216	5462	17624	17782	57276
2017/18	161	94	8507	26627	4253	13313	5605	17740	18365	57680

The main library fund of EP 5B080800- Soil Science and Agrochemistry is: for the 2013-2014 academic year - 71770 units, of which 33220 are educational literature, 16430 units are scientific literature, 22120 units are educational and methodical literature, on electronic media - 71770 units; for the 2014-2015 academic year - 72911 units, of which 33681 units are educational ones,16790 units are scientific literature, 22440 units are

educational materials, on electronic media - 72911 units; for the 2015-2016 academic year - 74110 units, of which 34260 are educational units, 17130 units are scientific literature, 22720 units are educational and methodical literature, on electronic media - 74110 units; for the 2016-2017 academic year - 75058 units, of which 34650 are educational units. training, 17322 units are scientific literature, 23086 units are educational materials, on electronic media - 75058 units; for the 2017-2018 academic year - 76045 units, of which 35134 units are educational units, 17566 units are scientific literature, 23345 units are educational materials, on electronic media - 76045 units. The volume of the book fund for 1 student is 417.8 units.

Table 20 – The availability of educational, educational and methodical literature of EP on electronic media (cycles BD,PD) of EP 5B/6M/6D080800 – Soil Science and Agrochemistry

Academic year	Number of disciplines (BD and PD)	Total in the fund in Kazakh	%	Total in the fund in Russian	%
2013/14	79	16310	23	55460	77
2014/15	90	16816	23	56095	77
2015/16	76	17140	23	56970	77
2016/17	68	17782	24	57276	76
2017/18	66	18365	24	57680	76

Students and professors are concerned with the search in electronic data bases and full data bases. The library has an electronic reference library containing a list of documents of the library fund. Since 2013, all reader services have been completely transferred to the modern electronic system of book distribution, thanks to the use of special automated library information systems IRBIS and ERFID technology.

As a result of using the automated library information system “IRBIS”, university readers were able to enter the electronic catalog via the Internet, search for the necessary literature, receive information on the number and location of free copies; receive messages about the debt by e-mail via the Internet. For readers in the electronic reading rooms of the library there are seats to work with the electronic catalog, the Internet, digital media.

The library user has the opportunity, free of charge, through the University’s website, to use the database of electronic catalogs of the scientific library, which reflects the entire library fund, as well as full-text databases of electronic resources: to the resources of the

Republican Interuniversity Electronic Library, Kazakhstan National Electronic Library, to the world electronic resources Thomson Reuters, Elzevir , Springer ScienceDirect, Sciverse Scopus.

Through the use of ICT, students develop knowledge about information and communication technologies in their professional activities; skills to work on modern computer equipment, office equipment, communications and systems ; use information obtained from global computer networks; apply computer methods of collecting, storing, processing and analyzing information; PC skills with applied software and modern methods of information processing; with a computer as a means of control, working with general-purpose software.

Computer fund of the university - 1590 units, including 101 units at the Faculty of Agronomy -, at the department - 12, 3 system units, 6 laptops, printers, there are projectors in all classrooms.

Determination of the use of equipment and software in the industry corresponding to the specifics of the EP (soil science and agrochemistry) is carried out by the head of the EP, teaching staff, employers involved in the implementation of the EP. For this purpose, university representatives go to relevant companies, undergo internships, etc. The need to purchase equipment is determined by the presence or absence of such equipment for doing a certain type of analysis and work.

Monitoring of laboratories is carried out by annual calibration of measuring devices, during inventory, by the commission of the relevant university structures, as well as by the commission of the ministry and departments, upon which programs scientific research is carried out.

In 2017, the provision of new soil laboratory with equipment started with modern instruments acquired under the GPIIR program for more than 31 million tenge. Professor Nahanova A.P. opened a new microbiology laboratory, within the framework of funding from the World Bank project.

The laboratory's need for material resources is determined by the volume of research work and the volume of academic load on major disciplines of the department. Each year, the material base of the department is updated and supplemented by own funds of the university and at the expense of funds allocated under the grant funding of scientific research (Appendix 23).

When operating equipment, students are provided with safety announcement when working in analytical laboratories, the mark of which is put in a special journal. Safety

requirements are regulated by the organization's standard for occupational health and safety measures.

When going into on job training, instruction is given, the mark of which is also put in a special journal. Educational program Guide provides equal opportunities for students, regardless of the language of instruction, gender.

S.Seifullin KATU forms academic groups according to study levels, language of study. For the undergraduate level, the number of students in a group is set to not more than 25 people. During 2013-2018, two groups are formed annually for the course with Kazakh and Russian languages of study. In master's and doctoral studies, depending on the admission, groups with multilingual education are formed in accordance with enrolled students.

Identification of the needs of students is carried out in accordance with the Law of the Republic of Kazakhstan "On education" and satisfied through their choice of subjects, training and elective courses, classes as part of extracurricular activities and associations in the system of additional education. The university takes into account the needs of groups of working students, foreign students, students with disabilities, gifted students.

Working students are taught by correspondence, foreign students have preliminary preparatory training at Russian language courses. Students from the category of ethnic Kazakhs, have the opportunity to study in groups with the state language of study. There are no students with disabilities under EP

Thus, in order to provide quality educational services, the university has a modern material and technical base and constantly updates and improves it in accordance with the Mission, strategy and goals. There is a positive trend in equipping the material and technical base, library and information resources. The further development of the material and technical base of educational laboratories and the expansion of the possibilities of using information retrieval systems are underway.

Table 21 -SWOT - analysis of the standard "Educational Resources and Student Support Systems"

S (strength) - strengths (potentially positive internal factors)	W (weakness) - weaknesses (potentially negative internal factors)
a rich library fund, staffed by new educational	insufficient amount of textbooks in

literature in all disciplines; highly skilled personnel potential; improvement of electronic database management systems for the development and effective use of computer handouts; connection of all educational buildings to a common corporate network; free access; Internet connection speed increase; the number of Internet users increase; availability of research laboratories;	the state language; Low printing quality of new books, the rapid decay of literature in recent years; Specialized laboratories need to upgrade educational equipment and furniture.
O (opportunity) - favorable opportunities (potentially positive external factors)	T (threat) - threats (potentially negative external factors)
modern level of reader service; improvement of the activity on completing the fund with books and electronic publications; introduction of new information technologies availability of material and technical base (specialized classrooms, laboratories, etc.) availability of UMKD in the disciplines of the EP.	cost of literature increase will negatively affect the volume of the fund; insufficient amount of computer equipment; obsolescence of computer equipment and laboratory equipment.

The specialized profile “Educational resources and student support systems” contains the following self-assessment of compliance: according to the criteria the EP has satisfactory –6, suggests improvement-3

10 PUBLIC INFORMATION

Information about EP is available on the university website www.katu.kz. In the specialty of soil science and agrochemistry, EPs are implemented in three levels of study:
1. Undergraduate - "Agrology", "Agrochemistry". Learning outcomes - a specialist of new formation in the field of soil science and agricultural chemistry, competitive and in demand in the agricultural sector, and the global scientific and educational space
2. Masters - scientific and pedagogical directions "Agrology and plant nutrition", "Agroecological assessment of land and design of adaptive-landscape farming systems", profile - "Agrochemistry and agroecology", "Management of soil fertility and plant nutrition", "Agrochemical maintenance of agriculture ".
Learning outcomes - a specialist with a high level of professional culture, having a civil position, able to formulate and solve scientific and practical problems, to carry out research, management, teaching activity

3. Doctoral - scientific and pedagogical areas "Scientific basis of plant nutrition and fertilizer use", "Reproduction and conservation of soil fertility"; profile - "Agrochemistry and agroecology". Learning outcomes - a specialist with a high level of theoretical and practical individual training in the field of soil science and agricultural chemistry for the implementation of research and management activities in various agricultural enterprises and organizations; with a high level of professional culture, ready to teach in high and secondary schools .

Upon completion of training at the level of:- the bachelor degree (higher education) is awarded the qualification of the bachelor of agriculture in the specialty 5B080800 - Soil Science and Agrochemistry;- Master (postgraduate education) profile - Master of Agriculture, scientific and pedagogical - Master of Agricultural Sciences in the specialty 6M080800 - Soil Science and Agrochemistry;
- doctoral studies (postgraduate education) profile - doctor in profile, scientific and pedagogical - doctor PhD, specialty 6D080800 - Soil science and agricultural chemistry

.Information about teaching, learning is shown in the syllabus, EMCD, it is placed in the PLATONUS system. The evaluation procedure is the same for all EPs regulated by ND: Monitoring and evaluation of students' knowledge; Standard of organization. Control of knowledge and carrying out final certification of students of postgraduate education. Control of knowledge and carrying out final certification of students of postgraduate education, the conditions of timely delivery of self-study , midterm control with at least 30

points during the semester. The maximum number of points that may be obtained is 40 at the exam and 20 is minimum

The university has its own scientific publications: Herald of Science KATU, Science Review, is controlled by the Department of Science and Innovation Activities (http://kazatu.kz/ru/nauka-i-innovacii/nauchnie-izdaniya-katu-im-s-seyfullina/). The evaluation of satisfaction with information on the activities of the university and on the specifics of the implementation of EP is carried out by questioning.

All information on the university website, in social networks ("Kazakh Agrotechnical University", "Faculty of Agronomy"), the media for the public and all interested persons meets the requirements for it. The Information on the website of the EP is : History of the department, Department's specialties, scientific and innovative activities, international cooperation, student life, information on the subject Olympiads in the department, contact information, Accreditation certificates of EP 5B / 6M / 6D080800 - soil science and agrochemistry. In the section "Applicant" a brief description of the EP is presented. Information about the university, the EP is placed on the pages of social networks: in particular, on Facebook, Vkontakte contains videos about the specialty, information about protected doctors, Youtub video about the specialty Soil science and agrochemistry, etc. National development programs of the country are announced in The new strategy and mission of S.Seifullinf KATU , posted on the website in the section "Vision, mission, strategy of KATU named after S.Seifullin."

With the aim of consistent transformation into a modern Western-style research agricultural university, in 2015, a new development strategy of S.Seifullin KATU “KATU-2025” until 2025 was developed and approved, which was approved at the meeting of the Academic Council on June 3, 2015, protocol No. 20 , and approved by the Board of Directors of S.Seifullin KATU December 14, 2015.

On the website of S.Seifullin KATU provides information on financial statements: Separate financial statements for 2012-2016; Consolidated financial statements for 2012-2016; Development Plan for 2012-2016 (http://kazatu.kz/ru/ob-universitete/finansovaya-otchetnost). Information characterizing the university as a whole in the context of the EP is posted on the website under the heading "Specialties", "Faculties and Chairs" (http://kazatu.kz/ru/obrazovanie/fakulteti).

The information about the faculty of the EP is posted on the university's website under the heading "Specialty", "Faculties and Chairs" (http://kazatu.kz/ru/obrazovanie/fakulteti/kafedra).

The public information about cooperation and collaboration with partners within the EP, including with scientific / consulting organizations, business partners, social partners and educational organizations, through the university's website, through advertising in the media, on social networking pages. To address current issues there is an email address for the teacher, the head of the department. Everyone has free access to the staff of the department and the dean's office. The site contains information on the accreditation of the EP, the results of the assessment of students' knowledge about the republican subject Olympiads, the content of the EP.

The EP of Soil Science and Agrochemistry undergoes an external expertise procedure in ratings and ranking of national agencies (Table 22).

Table 22 - Educational program positions in the ratings of specialties in the Republic of Kazakhstan

Years	Agency	Bachelor	Master	PhD
2014	CBPAM,	3	-	-
2015	IAAR	1	1	2
2016	IKAQAE, IAAR	2	2	2
2017	PPA, IAAR	3	1	2

In 2014, an external expertise of the EP was conducted by the IAAR Agency ,in which the certificates of IAAR accreditation were issued to 5B (6M) 080800 - Soil Science and Agrochemistry (No. AV0076, No. AV0077 of 05/21/2014 with a validity period of 03/05/2019.) and EP 6D080800 - Soil Science and Agrochemistry (No. AV0467 dated 12.22.2014, valid until December 18, 2019) .

The site contains information about the results of student participation in the Republican Subject Olympiad among students of higher educational institutions of the Republic of Kazakhstan, which is held at the base university - the Kazakh National Agrarian University (Almaty) and our students take prizes 2 and 3 places. The external evaluation procedures are carried out annually by filling in data in the questionnaires of the National rating agencies, which reflect the achievements of the EP. According to these ratings, EP of 5B / 6M / 6D080800 - Soil Science and Agrochemistry annually take 1 and 2 places.

An external evaluation of students` achievements which show good results, is carried out annually.

Table 23 - SWOT - Analysis of the Public Information Standard

S (Strength) - strengths (potentially positive internal factors)	W (weakness) - weaknesses (potentially negative internal factors)
- information about the implemented EP;- information on teaching, learning, assessment procedures;- audited financial statements published on web resources;- availability of information about the faculty;	- insufficient information in the press and on television of EP activities ;- lack of feedback from graduates;
O (opportunity) - favorable opportunities (potentially positive external factors)	T (threat) - threats (potentially non-negative external factors)
- ways of disseminating information to inform the general public and interested parties; - communication or cooperation with potential consumers of educational services;- government bodies relations ; - cooperation with other universities that implement the same educational program;- involvement of Kazakhstan research organizations in the educational process-strengthening partnership with the business community	- dependence of financial activities on external and internal factors of a market economy; - reorganization of potential partner enterprises; - failure of potential partner enterprises to cooperate, etc .; - rapidly changing situation on educational services market; - growing requirements for technical the equipment of the educational process;

The specialized profile “Informing the public” contains the following self-assessment of conformity: according to the criteria the EP has strong positions - 7, satisfactory –5, improvement - 1.

11 STANDARD IN A SECTION OF VARIOUS SPECIALTIES FIELDS

The organization of educational activities in the context of the accredited EP is carried out through the planning of the educational process and the content of education, the choice of methods of conducting.

Teaching is conducted on the basis of modern achievements of science and practice in the field of specialization, as well as using advanced teaching methods and technologies.

For the formation of professional competences, the use of training trainings, business games is widely practiced, and information and communication technologies are also used in teaching. All EP disciplines are aimed at the formation of certain competencies that allow you to achieve the objectives of the program, the planned learning outcomes.

EP Soil Science and Agrochemistry

In order to familiarize students with the professional environment and topical issues in the field of specializations, as well as to acquire skills based on theoretical training, the EP includes disciplines and activities aimed at gaining practical experience and skills in the specialty in general and the major subjects in their programs They include questions containing information on modern problems of education, methods and techniques of modern education. The practical part of the disciplines allows to solve the practice-oriented goals and objectives of training. The specificity of EP and formation of professional competencies is shown in Annexes 24-26 . The content of the modular educational programs of three-level training is available on the website. (http://kazatu.kz/ru/obrazovanie/fakulteti/agronomicheskiy-fakultet/kafedra-pochvovedeniya-i-agrohimii/).

Professional practice of students is an essential part of the training of highly qualified specialists. It aims to consolidate the knowledge gained in the process of learning, to acquire practical skills and develop skills in the professional field. In the process of practical training, students acquire experience in professional and organizational work. At the undergraduate courses the study practice will be organized to collect the herbarium, familiarize with the peculiarities of the geomorphological conditions of the surrounding areas. Technological practice is organized on the campus of the university, on the field experience of the department, in the machine-tractor park of the university.

Industrial, research practice is carried out at the enterprises - bases of practices with which the university has an agreement. According to EP of 5B, 6M, 6D080800 - Soil Science and Agrochemistry, about 30 contracts have been concluded.

The materials collected during the period of practice are the basis for graduation work.

In order to strengthen the practice-oriented training in EP, dual training is being introduced in enterprises. Today, the number of classes at enterprises is not enough, but there are objective reasons for this - enterprises do not have an adequate class fund, do not have freed employees who could be constantly with students. Therefore, the mode of conducting classes is once a week.

Field lessons are practiced in the "Agrochemical Services"RNMTs, SPPTSZH named after AI Baraeva, where students get acquainted with the structure of the organization, the work of laboratories and departments.

The university annually holds a competition of student research papers within the framework of the “Seifullin readings event”, where the mechanisms for stimulating the research work of students and their academic leaders are improved. During the reporting period, 18 students reported at a conference.

In 2014-2015 there were 8 reports at the "Seifullin Readings-10". The following diplomas were awarded at the conference: Hurmetbek J. (undergraduate) with a diploma of 2 degrees, a student Zhumabaeva A (4 year) with a diploma of 3 degrees, Grigulevich I., Zhanzakov B. received letters of thanks. In 2014-2015 - students Aigul Zhedelbayeva, Arailym Türgaraeva(head professor A.Nauanov) got diploma of 2 degrees, Kaliaskar Dauren (head professor VG Chernenok), Abilhayyr Asel (head associate professor Ramazanova R.Kh.) got - diplomas 3 degrees, student Vedernikov I.A. (Head Professor профессор. Mukhametkarimov)was awarded a letter of appreciation.

In 2015-2016, there were 4 reports at the "Seifullin Readings-11". Student Zhanzakov B. received a diploma of 2 degrees and Zhigerbayev Aidan, Ali Ablai - a diploma of 3 degrees. In addition, the 3rd year student Tahsholpan Sharipbaeva received a letter of appreciation.

The winners of the competition for the best NIRS and the Ministry of Education of the Republic of Kazakhstan are awarded with diploma of 1 degree, 2 degrees, letter of thanks.In 2016, the winners of the competition of scientific student works of the Ministry of Education of the Republic of Kazakhstan were: Madelova Dilyara and Merzhakypova

Aygerim, diploma of 3 degrees (2nd year), research supervisor Professor Nauanova A. and Ivan Plyusnin (4th year), scientific advisor Professor Chernenok V.G.

The winners of the internal competition " Best NIRS" in 2016 were: - Igor Vedernikov, 4th year student, Madelova Dilyara and Merzhakypova Aygerim (2nd year); 3 degrees - Plyusnin I., Nurlan Madina, or Ablay 4 course; letters of thanks: Urazymbetova Zhuldyz, Aspandiyarov Yerkebulan (2nd year), Adamzharova Nurbal (4th year).

In 2017,Zhanar Kalbaeva ,4th year student , a research supervisor, professor Nahanova A.P., students are: Toman Balgerim, a 4th year, a supervisor Ph.D. S.M. Kulzhanova, Arystan Koisheken, 3rd year, supervisor of the research studies of chemical sciences, E. Nurmanov, letters of thanks: Nurlybai Zhansaya, 4th year, professor M.K. Muhametkarimov, Aygeldi Aziz, 4th course zhane Tugelbayev Madi 3 course, head Kulzhanova SM and Zhumash Aidan 4 course, Kekilbaeva G.R.supervisor of the research studies

According to the results of the Republican contest NIRS MES RK, students of specialty 5B080800 - Soil Science and Agrochemistry were holders of diplomas of 2 and 3 degrees.The department has quite a wide experience in conducting scientific research (see Appendix 21). In 2017, agreements were concluded with farms to conduct soil surveys and develop recommendations on the system of fertilizer use.

This year, the teaching staff of the department has been recruited as experts to participate in the program for the implementation of the event for the dissemination of knowledge for the subjects of the agro-industrial complex on a grant basis for 2018 as part of the budget program 267 "Increasing Accessibility of Knowledge and Research" subprogramme 100 of the agro-industrial complex at no cost ”according to the specifics of 159“ Payment for other services and work ”. The purpose of the event is to introduce elements of digital technologies in agriculture on the basis of 9 pilot farms and increase the competence of at least 270 subjects of the agro-industrial complex. Students, graduate students and doctoral students are involved in this work.

According to the assessment of the external expert commission of the IAAR on EP accreditation 5B / 6M / 6D 080800 - Soil science and agrochemistry, the following recommendations were made In 2014 :

According to the standard "Management of the educational program" in the field of further development of cooperation with domestic and foreign universities, implementing similar educational programs, EP teachers have been trained at the University of Putra (Malaysia). In 2017, 69 grants were allocated for the State Program for Industrial and

Innovative Development (SPIID) to the direction “Soil Science and Agrochemistry” (order No. 307M / D from 10/31/2017)

S.Seifullin KATU took part in the development of a model curriculum for the specialty 6D080800 - Soil Science and Agrochemistry (together with Kaz-NAU, 2016); joint proposals on the qualifier of specialties were prepared; participation in the meetings of the RMMS (Head of the Department of Soil Science and Agrochemistry, R.H. Ramazanova is a member of the RMMS at KazNAU).

. Joint educational literature is being published - Eleshev R.Ye., Ramazanova R.Kh., Balgabaev A.M. “Agrochemicals Zertteuler Singlemetsi” Almaty, 2016. - 262 pp., (With a grid of MES RK); "Agrochemistry practicums" Tutorial (Eleshev R.E., Balgabaev AM, Ramazanova R.Kh., Salykova A.S.). - Almaty, 2016. - 282 p, Kayta Shygaru (KazAKAU together); "Agrochemistry" textbook (Eleshev R.Ye., Balgabaev A.M., Ramazanova R.Kh.) - Almaty, 2016. - 320 p. Eleshev R.Ye., Balgabaev A.M., Ramazanova R.Kh. Smdikter Chemistry қ Frames zəne қ Rektenui - (joint with KazNAU). - Almaty, 2015; Eleshev R.Ye., Balgabaev A.M., Ramazanova R.Kh. Minerals туңаутқyshtar oldoldanu tekhnolasy - (joint with KazNAU). - Almaty, 2015; Eleshev, R.E., Ramazanova, R.Kh., Balgabaev, A.M. Chemical composition and mineral nutrition of plants - (joint with KazNAU). - Almaty, 2015; J.E. Elemesov, R.Kh. Ramazanova, G.R. Kekilbaeva, B.N. Khamzin Zhalpy geology (Adistemik nқsұaular). - Almaty, 2016; Yelemesov J.E., Ramazanova R.H., Kekilbaeva G.R., Khamzina B.N. Methodical instructions on educational practice "General geology" for students of the 1st course of the specialty 5B080800 - "Soil science and agrochemistry". - Almaty, 2016.

The scientific management of foreign consultants is being carried out (Czech University of Natural Sciences, Putra University (Malaysia), Belgrade University, Belarussian State Agricultural Academy (approving orders of scientific consultants No. 277-M / D from 10.31.2016, No. 307M / D from 31.10. 2017)

According to the standard "Specificity of the educational program": Develop cooperation with leading universities in Kazakhstan and abroad to develop joint educational programs, conduct joint research, organize academic mobility of students and teaching staff

In 2017-2018 academic year, 3 undergraduates from the Irkutsk State Agrarian University under the cooperation agreements were trained in the specialty 6M080800 - Soil Science and Agrochemistry during the first academic semester.

The Staff of the Department of Soil Science and Agrochemistry became the

performer of the international educational project PAWER in the framework of the Erasmus + program in 2017-2019.

According to the standard "Teaching staff and the effectiveness of teaching": Improve the personnel policy of the university, taking into account the compliance of the faculty with the specificity of educational programs being implemented

According to the Department of Soil Science and Agrochemistry of the teaching staff, participants of EP doctoral studies implementation have a basic education in the field, the degree of EP - 100%\

The distribution of academic load in accordance with the competence of the faculty and discussion staffing at the meeting of departments.

In order to improve the quality of the teaching staff of "Soil Science and Agrochemistry department " in accordance with the schedule training courses in the School of lecturers have been attended at S. Seifullin KATU "Innovations in the educational process of higher education": "Theoretical and methodological foundations of innovation in the educational process of the university", "Interactive teaching methods in higher education", "Methods of teaching in modern higher education" , "Advanced education in the education system", "Theory and practice of informatization of the educational process of the university."

At the department, there were three doctoral assistants, they defended and received a Ph.D. in the specialty 6D080800 - Soil Science and Agrochemistry. Doctoral student Zhumabek B. passed the defense on June 15, 2018.

According to the standard "The teaching staff and the effectiveness of teaching": To consider the issue of the motivation of teaching staff to publish scientific articles in journals with a high impact factor.

The faculty of the Department of Soil Science and Agrochemistry are familiar with the position of the QMS on bonuses, about that the review of sheets is shown.

The developed Regulations on the supplement of teachers (rating) and the Regulations and bonuses are a significant motivation for publication of scientific articles in journals with a non-zero impact factor. The department for the last year

has published 7 articles in publications included in the Web of Science database, Scopus, 14 in the RSCI database, 12 in publications recommended by CCES (reports of the faculty of the department for 2017, 2018).

According to the standard "Teaching staff and the effectiveness of teaching": Seek the opportunity of commercialization of scientific developments of teaching staff. Conduct

an analysis of scientific research of faculty and enhance the participation of faculty in the submission of documents

In the Department of Soil Science and Agrochemistry in 2016, Professor Nahanova A.P. won a project on the theme “Development of poultry manure processing technology for organic bio-fertilizer with the help of new domestic biological products and their introduction into crop production” under the Project “Stimulating Productive Innovations” developed under the Loan Agreement between the Republic of Kazakhstan and the International Bank for Reconstruction and Development under the grant program, the group of senior researchers (GCSN) No. APP-SSG-16 / 0726F in the amount of 280 million tenge, including the amount of co-financing - 50 million

According to the standard "Students": To intensify the participation of students in the research. Conduct an analysis of the participation of students in research

. The participation of doctoral students in funded research projects of the Department of Soil Science and Agrochemistry - 100%. One doctoral student of the specialty "Soil Science and Agrochemistry" participated in the International Research Project "Development of a model of adaptive landscape agriculture and agrotechnologies of various levels of intensification with information support of agro-ecological land assessment" underway between Russia and Kazakhstan. Contract No. 2-16 between Pavlodar NIISH LLP (Kazakhstan), Center for Agrotechnologies LLC (Russia) and the V.V. Soil Institute Dokuchaeva (Russia) (Appendix 27).

The Department of Soil Science and Agrochemistry has developed programs to improve the quality of doctoral training, which reflects their participation in research and development.According to the standard "Resources available for educational programs": To strengthen the work on publishing and acquiring educational materials in foreign languages

The work on the publication and acquisition of educational materials in foreign languages is reinforced . The analysis of security UML is done.

The scientific library has a book collection with a volume of 1577076 storage units, of which 806308 is a collection of literature in the state language, 95169 – publications on electronic media, of which 2520 are teaching staff, 4582 electronic publications of scientific journals. Through the university’s electronic library on the IP address range of the university, access to remote information resources, advanced electronic libraries in the world, such as ThomsonReuters, Springerlink, CabiAbstract, is provided. To the Russian databases “Lan publication”, “eLibrary.ru”Table 24 - General Library Fund

Indicators	2014 y.	2015 y	2016 y	2017 y	2018 y
Total Fund, ind.	1360320	1466963	1577076	1589952	1690349
including in Kazakh	584500	604800	806308	812719	818264
Study material,total , ind.	663397	756755	853120	864889	873366
including in Kazakh	501082	540012	718441	724733	725218
including in English	639	942	541	2299	3131
including in English	75341	82742	95169	95200	185923
including in Kazakh	20361	22465	22656	22670	26623
Scientific literature, total copies	587033	593122	594215	595191	596300
including in Kazakh	59174	61015	61230	61235	62540
Scientific literature, total copies	34549	34344	34572	34672	34760
including in Kazakh	3883	3773	3981	4081	4117

In 2018 The state language book fund has increased by 40% in comparison with 2014 . Availability of English textbooks in the specialty 5B / 6M / 6D080800 - Soil Science and Agrochemistry is 60%. An analysis was made and an application was submitted for the purchase of UML to the university library. “Soilbiota” study guides were published by(AP Nauanova, R. Aidarkulova). “ Methods of agrochemical research”, 2016 (Nurmanov E.); “Zeolite and its application in agriculture ” - Astana, 2017 (Kulzhanova S.M.,PopovV.).

Table 25 - Library Fund on the EP

№	Name specialties	2014-2015			2015-2016			2016-2017			2017-2018		
		.in Fund Russian	kazakh	English	Russian	Kazakh	English	Russian	kazakh	English	Fund Russian	.in Fund Kazakh	.in Fund English
1	Soil science and agrochemistry	39129	11640	20	39450	11940	25	39650	12320	30	39940	12760	40

Standards in the perspectives of individual specialties: To strengthen the work on attracting teachers to the staff with practical experience

EK Basilzhanov, General Director of the State Institution "RNMC Agrokhimsluzhba" was included in the staff of the department "Soil Science and Agrochemistry" on a part-time basis.

The Representatives of organizations - bases of practice (RNMTSAS, NPTsZem in the city of Astana and regional branches, Kazakh NIIPAA named after Uspanov LLP, Kyzylorda Scientific-Research Institute of Rice-Growing named by Y. Zhakhaeva "and others.) are involved in leading the practical training of students, scientific supervision of undergraduates on the basis of hourly rate). For the current academic year, it is planned to conduct separate laboratory classes for soil mapping on the basis of "NPTsZem" (by order of S. Seifullin KATU No. 545-C dated 04/21/2017, 466-C dated 04.24.2016) (ref Letter No. 12074/314 dated February 6, 2018)

Director of GU "RNMTs Agrohisluzhby" Bazilzhanov EK conducts classes on the basis of the organization and provides guidance to undergraduates (agreement No. 65 dated 1/19/2018)

Table 26 - SWOT - risk analysis of the educational program implementation 5B/ 6M/6D 080800 – Soil Science and agrochemistry

S (Strenght) –strengths (potentially positive internal factors	W (weakness) –weaknesses (potentially negative internal factors)
-; university response rate to the changes in the external environment - high qualification of teaching staff - long-term positive practice of teaching; - - cooperation with potential consumers of educational services; - participation of faculty and employers in the development and management of EP; - the presence in the content of academic disciplines of professional content; - continuous training in three levels and the availability of alternative specializations in EP; - dynamics of growth in the degree of scientific potential of the teaching staff; - support system for students, young teachers,	- limited financial resources of faculty for advanced training in foreign universities - forms and methods of career guidance - insufficient involvement of highly qualified foreign specialists on EP; - insufficient information in the press, on television of the activities of the EP; -insufficient coverage of faculty by management programs - insufficient academic mobility of teaching staff —lack of joint educational programs with foreign universities.

etc .; - staff incentives	
O (opportunity) –opportunities (potentially positive external factors)	T (threat) –threats (potentially negative external factors
-; cooperation with other universities that implement the same educational program - involvement of Kazakhstan research organizations in the educational process - expansion of academic freedom of university - development of academic mobility with the involvement of the best foreign and domestic teachers, conducting joint research in the implementation of EP - increasing the demand for highly qualified personnel, scientific research; - the possibility of using new development models and technologies in the field of education.	- dependence of financial activity on external and internal factors of a market economy - the outflow of qualified teachers in commercial structures; - reorganization of potential partner enterprises - failure of potential partner enterprises to cooperate, etc. -; the complexity of the requirements for the content of educational programs - rapidly changing situation on educational market - increased competition between universities

The specialized profile “Standard in the perspective of individual specialties” contains the following self-assessment of compliance: according to the criteria, EP has satisfactory –4, it implies improvement - 1.

The conclusion in the perspective of EP 5B/ 6M / 6D 080800 - Soil science and agrochemistry

1. The implementation of EP is carried out on the basis of modern achievements of world science and practice in the field of soil science and agrochemistry using modern and advanced teaching methods.

2. Stakeholders have guaranteed access to up-to-date and current data (statistics, news, scientific results) in the field of paper specialization (newspapers, statistical data collections, textbooks) and electronic media;

3. Objectives and learning outcomes are aimed at obtaining learning competencies sufficient for positioning in the labor market;

4. Graduates of the EP have professional skills, and these skills are really in demand in the market;

5. The implementation of the EP involved a highly qualified faculty with experience in practical and scientific-pedagogical activity.

CONCLUSION OF THE SELF-ASSESSMENT COMMISSION

№	Evaluation Criteria	Position of the organization of education			
		Strong	Satisfactory	improvement	Unsatisfactory
Standard "Management of the educational program"					
1.	The university must have a published quality assurance policy.		+		
2.	The quality assurance policy should reflect the link between research, teaching and learning		+		
3.	The university should demonstrate the development of a culture of quality assurance, including in the context of the EP.		+		
4.	Commitment to quality assurance should relate to any activity performed by contractors and partners (outsourcing,. , including the implementation of joint / double diploma education and academic mobility			+	
5.	EP management provides transparency in developing of EP development plan based on an analysis of its operation, the real university positioning and the focus of its activities on meeting the needs of the state, employers, stakeholders and students.	+			
6.	, The EP management demonstrates the functioning of the mechanisms for the formation and regular review of the EP development plan and monitoring its implementation, assessing the achievement of learning objectives, meeting the needs of students, employers	+			

	and society, making decisions aimed at the continuous improvement of EP.				
7.	EP management should involve representatives of stakeholder groups,. , including employers, students and teaching staff to formulate a development plan for the EP.	+			
8.	The EP management has to demonstrate the individuality and uniqueness of the EP development plan, its coherence with the national development priorities and the development strategy of the organization of education	+			
9.	The university has to demonstrate a clear definition of those responsible for business processes within the framework of the EP, clear distribution of duties of staff, the division of functions of collegial bodies.	+			
10.	EP management has to provide evidence of the transparency of the educational program management system.		+		
11.	EP management has to demonstrate the successful functioning of the internal quality assurance system of the EP incorporating its design, management and monitoring, improvement, decision-making based on facts		+		
12.	.EP management should implement risk management		+		
13.	EP management has to ensure the participation of representatives of interested persons (employers, teaching staff, students) as part of the collegial bodies of management of the educational program as well as their representativeness in making decisions on the management of the educational program		+		
14.	The university should demonstrate the management of innovation in the framework of the EP, including analysis and implementation of innovative proposals		+		

15.	, EP management has to demonstrate evidence of openness and accessibility for students, teaching staff, employers and other interested parties.		+		
16.	EP management has to be trained in educational management programs		+		
17.	The management of the EP should strive to ensure that achieved since the last external quality assurance procedure taken into account in preparation for the next procedure		+		
Total standard		**5**	**11**	**1**	
Information Management and Reporting Standard					
1.	The university has to ensure the functioning of the collection system, analysis and information management based on the use of modern information and communication technologies and software.		+		
2.	The management of the EP has to demonstrate the systemic use of the treated adequate information to improve the internal quality assurance system.		+		
3.	There should be a regular reporting system within the EP. reflecting all levels of the structure, including an assessment of the effectiveness and efficiency of the activities of departments and departments, scientific research		+		
4.	The university should establish the frequency, forms and methods of evaluating of EP management activities of collegial bodies and structural divisions. top management, research projects	+			
5.	The university should demonstrate the definition of order and ensuring the protection of information, including the identification of responsible persons for the accuracy and timeliness of information analysis and provision of data.		+		
6.	. An important factor is the involvement of students,		+		

	employees and teaching staff in the process of collecting and analyzing information, as well as making decisions based on them.				
7.	, The management of EP has to demonstrate the presence of a communication mechanism with students, employees and other stakeholders including the existence of conflict resolution mechanisms.			+	
8.	The university should provide a measure of the degree of satisfaction of the needs of faculty, staff and students in the framework of the EP and to demonstrate the evidence to eliminate the deficiencies found.		+		
9.	The university should evaluate the effectiveness and efficiency of activities, including in the context of the EP		+		
	Information collected and analyzed by the university should take into account				
10.	key performance indicators;		+		
11.	the dynamics of the contingent of students in the context of forms and types;	+			
12.	уровень успеваемости, достижения обучающихся и отчисление; learning achievement and decline in learning achievement	+			
13.	students' satisfaction with the implementation of the EP and the quality of education in the university	+			
14.	availability of educational resources and support systems for students;	+			
15.	employment and career growth of graduates..	+			
16.	Trainees, employees and teaching staff have to document their consent to the processing of personal data.		+		
17.	EP management should assist in providing all the necessary information in the relevant fields of science.	+			
Total standard		**7**	**9**	**1**	

Standard "Development and approval of educational programs"					
1.	The university should determine and document the procedures for the development of EP and their approval at the university level.	+			
2.	The EP management has to ensure that the developed EP comply with the established goals, including the expected learning outcomes		+		
3.	The management of EP must ensure the availability of developed models of graduate of EP, describing the results of training and personal qualities.	+			
4.	The management of EP has to demonstrate the conduct of external examinations of EP.	+			
5.	Qualifications obtained at the end of the EP should be clearly defined, explained and correspond to a certain level of the NSC.		+		
6.	The management of EP has to determine the influence of disciplines and professional practices on the formation of learning outcomes.		+		
7.	An important factor is the possibility of preparing students for professional certification.			+	
8.	EP management must provide evidence of the participation of students, faculty and other steak holders in the development of EP, ensuring their quality.		+		
9.	The complexity of the EP should be clearly defined in Kazakhstan loans and ECTS.	+			
10.	The management of EP should provide the content of academic disciplines and learning outcomes to the level of education (bachelor, master, doctoral).		+		
11.	The structure of the EP should provide for various types of activities corresponding to the results of training.		+		
12.	An important factor is the presence of joint EPs with foreign educational organizations.			+	

Total standard		**4**	**6**	**2**	
Standard "Constant monitoring and periodic evaluation of educational programs"					
1.	The university should monitor and EP periodical assess in order to achieve the goal and meet the needs of students and society. The results of these processes are aimed at continuous improvement of EP.		+		
	Monitoring and periodic evaluation of the EP should consider:				
2.	the content of programs in the light of the latest achievements of science in a particular discipline to ensure the relevance of the discipline taught;		+		
3.	changes in the needs of society and the professional environment;		+		
4.	workload, academic achievement and graduation of students;	+			
5.	the effectiveness of assessment procedures for students;	+			
6.	**expectations, needs and students `satisfaction with training in EP;**		+		
7.	educational environment and support services and their compliance with the objectives of the EP.		+		
8.	The university and the administration of EP have to submit evidence of the participation of students, employers and other stakeholders in the revision of the EP.		+		
9.	All interested parties should be informed of any planned or taken actions in relation to the EP. All changes made to the EP should be published.		+		
10.	The EP management has to ensure a review of the content and structure of the EP taking into account changes in the labor market, the requirements of employers and the social request of the society		+		
Total standard		**2**	**8**		

Standard "Student-centered learning, teaching and assessment of progress"					
1.	The management of EP should ensure respect and attention to the various groups of students and their needs, providing them with flexible training paths.		+		
2.	The management of EP should ensure the use of various forms and methods of teaching and learning.	+			
3.	An important factor is the presence of its own research in the field of teaching methods of academic disciplines of the EP.			+	
4.	EP management has to demonstrate the presence of a feedback system on the use of various teaching methods and evaluation of learning outcomes.		+		
5.	The management of EP must demonstrate support for the autonomy of students with simultaneous guidance and assistance from the teacher.		+		
6.	EP management has to demonstrate the existence of responding procedure to the students` complaints.		+		
7.	The university has to ensure the consistency, transparency and objectivity of the mechanism for evaluating the results of training for each EP, including the appeal.		+		
8.	The university has to ensure that the procedures for evaluating the results of teaching students in EP correspond to the planned learning outcomes and the objectives of the program. Criteria and assessment methods in the framework of the EP should be published in advance.		+		
9.	In a higher education institution, mechanisms should be defined to ensure that each graduate of the PFs master the learning outcomes and ensure the completeness of their formation.	+			
10.	Evaluators should be proficient in modern methods of	+			

	assessing learning outcomes and regularly improve their skills in this field.				
Total standard		**3**	**6**	**1**	
Standard "Students"					
1.	The university should demonstrate the policy of forming a contingent of students from enrollment to graduation and ensure the transparency of its procedures. The procedures governing the life cycle of students (from admission to completion) must be defined, approved, published.	+			
2.	EP management has to demonstrate the implementation of special adaptation and support programs for students who have just entered and foreign students.		+		
3.	The university has to demonstrate the compliance of its actions with the Lisbon Recognition Convention.	+			
4.	The university should cooperate with other educational organizations and national centers of the European Network of National Information Centers for Academic Recognition and Mobility / National Academic Information Centers of Recognition ENIC / NARIC to ensure comparable recognition of qualifications.	+			
5.	EP management has to demonstrate the presence and application of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and non-formal training.	+			
6.	The university should provide an opportunity for external and internal mobility of students of EP, as well as assist them in obtaining external grants for training.			+	
7.	The management of EP should make the maximum amount of efforts to provide internships for the internship, to facilitate the employment of graduates, to maintain communication with them.		+		
8.	The university has to provide graduates with documents		+		

	of EP confirming the qualification obtained, including the achieved results of training, as well as the context, content and status of the acquired education and evidence of its completion.				
9.	An important factor is the monitoring of the workplace and the professional activity of graduates of EP.		+		
10.	The management of EP should actively encourage students to self-education and development outside the main program (extracurricular activities).	+			
11.	An important factor is the existence of an acting association / associations of graduates	+			
12.	An important factor is the availability of a support mechanism for gifted students.		+		
Total standard		**6**	**5**	**1**	
Standard "Teaching staff"					
1.	The university should have an objective and transparent personnel policy, including recruitment, professional growth and staff development, ensuring the professional competence of the entire state.		+		
2.	The university should demonstrate the compliance of the staff potential of the faculty with the development strategy of the university and the specifics of the EP.		+		
3.	EP management has to demonstrate awareness of responsibility for their employees and ensure favorable working conditions for them.	+			
4.	The management of EP should demonstrate a change in the role of the teacher in connection with the transition to student-centered learning.		+		
5.	The university should determine the contribution of teaching staff to the implementation of the development strategy of the university, and other strategic documents.		+		
6.	The university should provide opportunities for career growth and professional development of teaching staff	+			

	of the EP.				
7.	The management of EP should involve practitioners to teach relevant industries.	+			
8.	The management of EP should provide targeted actions for the development of young teachers.	+			
9.	The university should demonstrate the motivation of professional and personal development of teachers of EP, including the promotion of both the integration of scientific activities and education, and the use of innovative methods of training.	+			
10.	An important factor is the active use of information and communication technologies faculty in the educational process (for example, on-line training, e-portfolio, MEP, etc.).			+	
11.	An important factor is the development of academic mobility within the framework of the EP, attracting the best foreign and domestic teachers.			+	
12.	An important factor is the involvement of teaching staff in the community (the role of teaching staff in the education system, the development of science, the region, the creation of a cultural environment, participation in exhibitions, creative competitions, charity programs, etc.).		+		
Total standard		**6**	**4**	**2**	
Standard "Educational resources and student support systems"					
1.	The management of the EP has to demonstrate the adequacy of material and technical resources and infrastructure.		+		
2.	The management has to demonstrate the availability of procedures to support various groups of students, including information and counseling.		+		
	The EP management has to demonstrate the compliance				

	of information resources with the specifics of the EP, including compliance with:				
3.	technological support for students and teaching staff in accordance with educational programs (for example, online training, modeling, databases, data analysis programs);			+	
4.	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;		+		
5.	expertise of the results of research, final works, dissertations on plagiarism;			+	
6.	WI-FI functioning on the territory of the organization of education.		+		
7.	The university should seek to ensure that the training equipment and software used for the development of EP, were similar to those used in their respective industries.			+	
8.	The university has to ensure compliance with safety requirements in the learning process.		+		
9.	The university should seek to take into account the needs of various groups of students in the perspective of EP (adults, workers, foreign students, and students with disabilities).		+		
Total standard			**6**	**3**	
Standard "Public Information"					
	The information published by the university in the framework of the EP should be accurate, objective, relevant and should include:				
1.	implemented programs, indicating the expected learning outcomes;	+			
2.	information about the possibility of awarding	+			

	qualifications at the end of the EP;				
3.	information on teaching, learning, evaluation procedures;	+			
4.	information about passing points and training opportunities provided for students;	+			
5.	information about graduate employment opportunities.		+		
6.	EP management should use various ways of disseminating information (including the media, web resources, information networks, etc.) to inform the general public and stakeholders.		+		
7.	Public awareness should provide support and clarification of the national development programs of the country and the system of higher and postgraduate education.		+		
8.	The university should publish audited financial statements on its own web resource.		+		
9.	The university should demonstrate the information on the web resource describing the university as a whole and in the perspective of the EP.	+			
10.	An important factor is the availability of adequate and objective information about the teaching staff of the EP, in the perspective of personalities.	+			
11.	An important factor is informing the public about cooperation and interaction with partners in the framework of EP, including with scientific / consulting organizations, business partners, social partners and educational organizations.			+	
12.	The university should place information and links to external resources on the results of external assessment procedures.	+			
13.	An important factor is the participation of the university and the implemented EP in a variety of external assessment procedures.		+		

Total standard		**7**	**5**	**1**	
Standards in the section of individual specialties					
Agricultural sciences:					
	Educational programs in the fields of soil chemistry and agrochemistry should meet the following requirements:				
1.	In order to familiarize students with the professional environment and topical issues in the field of specialization, as well as to acquire skills based on theoretical training, the education program should include disciplines and activities aimed at gaining practical experience and skills in the specialty in general and major disciplines in particular, including: - excursions to enterprises in the field of specialization (factories, workshops, research institutes, laboratories, educational and experimental farms, etc.), - conducting separate classes or whole disciplines at the enterprise of specialization, - conducting seminars to solve practical problems relevant for enterprises in the field of specialization, etc.		+		
2.	The faculty involved in the curriculum should include full-time faculty members with long-term work experience as a staff member in enterprises in the field of specialization of education programs.		+		
3.	The content of all disciplines of EP should be based in some way or another and include a clear relationship with the content of the fundamental natural sciences, such as mathematics, chemistry, and physics.		+		
4.	The management of the EP should provide measures to enhance practical training in the field of specialization.			+	
5.	The management of EP should provide training for students in the application of modern information technologies.		+		

Total standard		**4**	**1**	
Total	**40**	**64**	**13**	