NATIONAL UNIVERSITY OF LIFE AND
ENVIRONMENTAL SCIENCES OF UKRAINE

SPECIALIST CURRICULA AND TRAINING PROGRAMS

2013

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1. Overview

The National University of Life and Environmental Sciences of Ukraine

1.1. Basic institution of the University

The history of the National University of Life and Environmental Sciences of Ukraine originated from Agricultural department (1898) and Veterinary faculty of Kyiv Polytechnic Institute (1920), Department of Forestry of Agricultural Institute in Marimont (Poland), (1840).

Nowadays, the National University of Life and Environmental Sciences of Ukraine (Ukrainian abbreviation NUBIP of Ukraine) is one of the leading higher educational institutions of Ukraine of IV accreditation level.

The head of NULES of Ukraine is the Rector, the Hero of Ukraine, the Academician of National Academy of Sciences of Ukraine and National Academy of Agricultural Sciences of Ukraine, Doctor of Biological Sciences, Professor **Dmytro Melnychuk.**

According to the Resolutions of the Cabinet of Ministers of Ukraine № 945 dated on October 30, 2008 and № 76 dated on February 03, 2010 the National University of Life and Environmental Sciences of Ukraine received the status of **self-governing (autonomous) research national university**.

NULES of Ukraine conducts educational, research, scientific, innovation, production and consultancy activities aimed to develop modern approaches to problems of life and environmental sciences, the use, reproduction and sustainable development of biological resources in soil and aquatic ecosystems, the introduction of new environmental agro-biotechnology, technologies of soil safety and fertility, energy saving agricultural technologies, environmental and legal management in rural areas, monitoring and enforcement of standards, quality and safety of agricultural products, processing technologies and the environment.

The structure of the basic educational institution of the University (Kyiv) includes 12 educational and research institutes that combine 14 scientific and research institutes, 26 inter-institute educational and research centers and 25 educational and research centers, 20 faculties and 125 departments.

The following structural subdivisions are functioning within the structure of the University: Southern Affiliate of NULES of Ukraine «Crimean Agrotechnological University» (AR Crimea); structural subdivisions (SS) of NULES of Ukraine:12 higher educational institutions of I-Ш accreditation levels in different regions of Ukraine − „Berezhany Agrotechnical Institute» (Ternopil region), „Nizhyn Agrotechnical Institute» (Chernihiv region), „Irpin Economic College «, „Nemishayevo Agrotechnical College», „Boyarka College of Ecology and Natural Resources» (they are located in Kyiv region), „Zalishchyky Agricultural College named after Y. Khraplyvyi (Ternopil region), „Bobrovytsya College of Economics and Management named after O. Maynova (Chernihiv region), „Mukachevo Agricultural College (Zakarpattya region), „Pryberezhanskyi Agricultural College», „Crimean Agroindustrial College», „Bakhchisaray College of Consrtuction, Architecture and Design», „Crimean Technical School of Hydromelioration and Mechanization of Agriculture» (they are in AR Crimea), 5 education information and consulting offices (EICO) «Tarashcha EICO (Kyiv region)», «Lubny EICO (Poltava region)», «Malyn EICO (Zhytomyr region.)», «Mukachevo EICO (Zakarpattya region)» and «Bobrovytsya EICO (Chernihiv region)».

NULES of Ukraine has its own facilities for student practical training: 3 scientfic and research stations (two are situated on Kyiv region and one – in AR Crimea); 7 training and research farms (four of them are located in Kyiv region, three are in Chernihiv, Ternopil and AR Crimea); special basis for practical training at structural subdivision of NULES of Ukraine – regional higher educational institutions of I-III accreditation levels; training and

research center of ecology, biology of subtropical plants and landscape science of NULESU (AR Crimea); Botanical garden of NULES of Ukraine.

Total area of these farms is above 37000. hectares (including approximately 18000 hectares of forest territories). There are a lot of experimental fields, greenhouses, animal farms, some machine and tractor parks, workshops, polygons, repair shops, etc are functioning there.

According to the Resolution of the Cabinet of Ministers № 584 dated on October 2, 2003 the Ukrainian laboratory of quality and safety of agricultural products was founded within the structure of the National University of Life and Environmental Sciences of Ukraine

NULES of Ukraine provides professional training according to such educational and qualification levels and scientific degrees as:

- Junior specialists in 33 specialties (only in regional higher educational institutions);
- Bachelors in 29 directions of study;
- Specialists in 19 specialties;
- Masters in 45 specialties and in more than 180 master programs;
- Candidates of Science in 78 specialties;
- Doctors of Science in 64 specialties.

Besides, the University provides professional training and retraining with the opportunities to obtain the second higher education of «Bachelor» and «Specialist» EQL according to the appropriate accreditation directions and specialties.

Forms of studying: full-time, extra-mural and externship.

Training period for different EQL is „Bachelor» – 4 years; „Specialist» – 1 year; „Master» – 1-1,5 years.

The fee for tuition according to the agreement in 2013/2014 studying period for different EQL and directions of full-time form of studying is hryvna per year: «Bachelor» – 7845-14550; «Specialist» – 8315-15480; «Master» – 12550-19600.

More than 3000 of the academic staff ensure the academic process and scientific research at University of Life and Environmental Sciences of Ukraine including about 1500 persons working at the basic institution of the University (Kyiv), 350 doctors of sciences and professors, 1300 candidates of sciences and assistant professors.

Students enjoy a modern scientific library, in the fund of which there are 1000000 books, 400000 of which are references, textbooks and manuals and 607000 – scientific literature.

A campus includes 13 student hostels where about 80% of full- time students live there. There are also canteen, snack bars, cafeterias etc.

The sports complex of the basic institution of the University includes a modern open stadium and a building to have physical training and go in for sports.

In the area of international cooperation National University of Life and Environmental Sciences of Ukraine has signed numerous memoranda on mutual recognition of the educational system between the Universities of the USA: Iowa University (dated on May 6, 1996 and June 12, 1998), Louisiana University (dated on August 31, 1998, memorandum was renewed in March), DePaul University (Chicago, dated on September 1, 2006), Ghent University (Belgium, dated on September 26, 2002); Germany Universities: Humboldt University (Berlin, dated on September 27, 2002), Weihenstephan University of Applied Sciences (dated on April 14, 2005), Anhalt University of Applied Sciences (dated on October 30, 2006); Wageningen University (Netherlands, dated on October 19, 2006).

1.2. Southern Filial of NULES of Ukraine «Crimean Agrotechnological University»

The history of the education institution originated from the Agricultural Faculty, the Tavria University, in 1918 on the basis of which the Crimean Institute of Agricultural Industries was established in 1922, being renamed into the Institute of Special Crops in 1923.

In 1936, the Institute of Special crops changed its name for the Crimean Agricultural Institute that also changed its location in 1965 – it was relocated to the lands of «Communar», a training and research farm.

In 1997, by the resolution of the Cabinet of Ministers of Ukraine, the Institute was renamed into the Crimean State Agricultural University. The Pryberezhne State Farm and Technical School and the Crimean Technical School of Hydromelioration and Mechanization joined it the same year, the Crimean Agrotechnological College and its affiliate – the Bakhchisaray Construction Technical School – joined it in 2002.

In 2003, by the resolution of the Cabinet of Ministers of Ukraine, on the basis of the agricultural University, the Crimean State Agrotechnological University, along with a scientific and research institute of seeds as its constituent part, was established.

In 2004, according to Resolution 517-p of the Cabinet of Ministers of Ukraine, July 26 2004, the University became a structural unit of the National Agricultural University as the Southern Filial «Crimean Agrotechnological University», (SF «CATU» NAU).

In 2008, SF «CATU» NAU changed his name for the Southern Filial of the National University of Life and Environmental Sciences of Ukraine «Crimean Agrotechnological University» (Order 827 of NULESU, 15.12.2008).

The University is headed by **Mykhajlo M. Melnykov**, Provost in the Activities of Separate Subdivisions of NULESU in the AR of Crimea, Director of SF NULESU «CATU», Candidate of Agricultural Sciences, Professor, Honored Worker of Education of Ukraine, and academician of the Academy of Technological Sciences of Ukraine.

The structure of the education institution includes the following functional units:

- faculties of:
  - Agronomy;
  - Mechanization for Production Technology and Processing of Agricultural Products;
  - Veterinary Medicine;
  - Forestry, Park and Gardening Management and Landscape Architecture, and Hunting;
  - Land Management and Geodesy;
  - Economics;
- scientific and research institute of seeds;
- training, scientific and production centers:
  - scientific, education and methodological center;
  - training and scientific center of information and telecommunication systems;
  - center of postgraduate training and employment for graduators;
  - training, scientific and technological crop center;
  - training, scientific and technological livestock center.

There are more than five thousand students studying at the University, including more than three thousand students studying full-time, who take:

- 11 directions for professional training of EQL «Bachelor»;
- 14 specializations − EQL «Specialist»;
- 10 specialties − EQL «Master».

There are two academic buildings, a pavilion for mechanical engineering, Student Palace, seven student residences, a canteen, workshops and all necessary services on the territory of the campus. The total area of premises is 113472 sq. m, of residences - 24134 sq. m; the librarian fund comprises 594.7 books of scientific and educational literature; there are 550 places in the reading halls.

The academic process and scientific research are provided by 300 members of the academic staff, including 46 doctors of sciences, 28 professors, 173 candidates of sciences, 115 associate professors, 29 honored workers of science and technology, 7 honored workers of education, 18 academicians and corresponding members of different academies of sciences who are authors and co-authors of education references and textbooks for disciplines of basic and professionally oriented training.

The peculiar feature of studying at the University is a combination of theoretical and practical training. Students obtain knowledge and skills in crop and livestock production and methods for their processing while producing. The place of practical training is a training, scientific and technological crop center the main activities of which are growing crops on the area of over 2.5 thousand ha; training, scientific and technological livestock center the activities of which are connected with ensuring the supply of products from 1.8 thousand cattle; 69 educational and education and research laboratories; advanced innovative enterprises of the South of Ukraine.

19 student creative groups and studios, into which approximately 400 participants of creative activities are united, provide students with realization of their creative skills. Physical education of students and mass sport activities are provided by football, volleyball, track and weightlifting sections.

There are 15 scientific schools that have been formed at the University. 8 dissertations to get a degree of doctor of sciences and 39 dissertations to get a degree of candidate of sciences have been defended over the last five years.

According to scientific research findings, the scientists annually receive up to 15 patents on inventions and utility models, publish more than 500 articles and 20 monographs. Staff is trained in nineteen postgraduate and three doctoral specializations. There are specialized scientific councils in: 05.05.11 – Machinery and the Means of Agricultural Production Mechanization; 06.01.09 – Crop Production; 06.01.05 – Selection and Seed.

The University maintains close relations with Ghent University (Belgium) Humboldt University (Germany), Wageningen University (Netherlands). A memoramdum on intent is signed between College of Agricultural, Biological and Climatic Sciences, Chungbuk National University (South Korea) and SF NULESU «CATU». The educational institution has signed bilateral cooperation agreements with RSRTIBI (Russian Federation), on effects of environmental factors on the health of people with Kaunas Medical University and West Kazakhstan State Medical University. Seven international scientific and practical conferences are annually held at the University. 30 undergraduate and postgraduate students take workshops and probation in Germany, France and other countries every year. According to the results of such practical training, students get a possibility to take a six-month training (probation) at education institutions abroad.

60 % of the activities of the University are funded from the general fund, whereas 40% - from the special fund.

1.3. Structural subdivision of NULES of Ukraine «Berezhany Agrotechnical Institute»

Berezhany Agricultural Production Mechanization Technical School was created by Order 2 of the Ministry of Agriculture of Ukraine on March 11 1959.

V.M. Pavlinsky has been the head of the education institution since February 9 1992.

An agrotechnical college was established on the basis of the technical school according to Order 60/67 of both the Ministry of Education of Ukraine and the Ministry of Agriculture and Food of Ukraine on July 7 1992.

In 1997, the college was included into the structure of NAU (Order 526 of the CMU, May 29 1997).

In 2001, BATI NAU was created by Order 434 of the CMU, May 6 2001. All the specialties and the Institute were accredited to get Level III.

In 2006, Separate Subdivision NAU «Berezhany Agrotechnical Institute» was established on the basis of the Institute (Order 392, June 19 2006).

In 2008, it was renamed into SS NULESU «Berezhany Agrotechnical Institute» (Order 759, November 21 2008).

The director is **Vasyl M. Pavlinsky**, Doctor of Technical Sciences, Professor, Honored Machinist of Ukraine, Acting member of the Ukrainian Academy of Economic Cybernetics and the Ukrainian Academy of Tribotechnology of Ukraine.

The education institution has the following structural units:

- 2 faculties: Agroengineering, Economics and Environmental Management;
- 10 chairs: Agricultural Economics and Agribusiness Organization; Accounting and Audit; Ecology and Natural Sciences; Forestry and Landscape Architecture; Humanities; Energy and Automation; Energy Machinery and Technical Service for Agriculture; Information Technology and Higher Mathematics; General Engineering Disciplines; Machinery and Technology for Agriculture;
- 1 subdivision: training of junior specialists;
- 6 cycle commissions: of humanities; special electro-technical disciplines and agricultural mechanization; physical and mathematical sciences; natural sciences; physical education and sports; special economic disciplines;
- 3 departments: humanitarian education, education and student affairs; practical training and course training; the department of information and communication technology.

There are 4 specialties of professional training for EQL «Specialist», 6 directions – EQL «Bachelor», 8 specialties – EQL «Junior Specialist».

In the education institution there are:

–2716 students studying, 1298 taking a full-time studying form.

– 170 academic staff working, including 4 doctors of sciences, 3 professors, 24 associate professors, 48 candidates of sciences, 2 teachers-methodologists, 15 Excellent Workers of Education of Ukraine.

– «Graden-Zaberezky», a functioning training and production base which has 11.65 ha of arable lands, as well as a training and production workshop the area of which is 1348 sq. m, and 70 pieces of equipment, and «Arboretum», a training and scientific and production base, and two nurseries for crops that occupy an area of 0.19 ha, «Golytsky», a botanic reserve.

– 7 academic buildings the total area under which is 18216 sq. m, 2 residences for 260 places; 69 laboratories; 51 classrooms, 22 computer labs equipped with 248 computers.

Scientific topics for scientific research being done are: preparation of biomass for biogas and bioethanol production; production and use of biogas and bioethanol; use of vegetable oils in fuel systems of diesel engines; resource efficient ecologically friendly agricultural technological systems for the western region of Ukraine. 15 monographs and 620 articles for scientific journals have been written, as well as 74 patents on utility models and inventions have been received.

Students enjoy a library the literature fund of which has 53538 books, 624 periodic editions, a reading hall for 120 places and a reading hall for 62 places in the residence; a stadium, a sports hall, 2 gyms, 3 playgrounds.

There are 4 groups of amateur creative activities: a folk choir, a dance ensemble, a pop ensemble and a vocal ensemble.

The cooperation with foreign partners has the following directions:

- an agreement on cooperation in training and scientific and research work has been signed with Hochschule Wismar, University of Applied Science, Technolgy, Business and Design;
- cooperation between Berezhany Agrotechnical Institute and Agroimpuls, a Swiss company, regarding student training at advanced agricultural companies of Switzerland is maintained; as well as with the International Association of Agricultural Higher Education Institution Students of Ukraine «IAAS» regarding training at advanced agricultural companies of Austria;
- cooperation with D. Frayneker and A. Plank, a company, in producing pellet of wheat straw and biogas; with «Stirl – Anlagentechnik» GmbH Ltd in biogas technology; with «Hartmut Dybek Gesellschaft fur Wirtschafts- und Strukturentwicklung mbH».

1.4. Structural subdivision of NULES of Ukraine «Nizhyn Agrotechnical Institute»

A separate subdivision of NULESU «Nizhyn Agrotechnical Institute», founded in 1895 as Nizhyn vocational school, has been through a range of reorganizations, being now one of the leading higher education institutions of the III accreditation level in the Chernihov Region. According to the decision of Radnarcom of Ukraine, the education institution was named as Technical School of Mechanization for Agriculture in 1895 to provide training for technicians-mechanics for the fields and farms of the Chernihiv Region.

Nizhyn Agrotechnical College came under the governance of the National Agricultural University according to Resolution 448 of the Cabinet of Ministers of Ukraine approved on April 23 1996.

Nizhyn Agrotechnical Institute was created on the basis of Nizhyn Agrotechnical College on May 16 2001 by Resolution 508 of the Cabinet of Ministers of Ukraine.

To execute Resolution 945 of the Cabinet of Ministers of Ukraine, October 30 2008, Separate Subdivision of the National Agricultural University «Nizhyn Agrotechnical Institute changed its name for Separate Subdivision of National University of Life and Environmental Sciences of Ukraine «Nizhyn Agrotechnical Institute» according to Order 759 of Chancellor of National University of Life and Environmental Sciences of Ukraine, November 21 2008.

SS NULESU «Nizhyn Agrotechnical Institute» is headed by **Vasyl S. Lukach**, Candidate of Pedagogical Sciences, Docent, Honored Worker of Education of Ukraine, Excellent Worker of Agricultural Education and Science, Excellent Worker of Education of Ukraine

The structure of the education institution comprises 3 faculties: Mechanization for Agriculture, Electrification and Automation for Agriculture, Economics and Management that consists of 10 chairs, 2 departments on training of junior specialists and preparatory course, 10 cycle commissions.

The Institute provides with professional training of both full-time and extra-mural studying in 4 directions and 4 specialties for education and qualification levels of «Bachelor», «Specialist» and in 6 specialties for EQL «Junior Specialist». Shortened training programs for graduators to get a level of «Qualified Worker» are offered. There are 109 students taking training programs to get EQL «Specialist, 502 – EQL «Bachelor», 607 – EQL «Junior Specialist».

The academic process is provided by more than 180 scientific and academic staff. There are18 doctors of sciences, 78 candidates of sciences, 30 lectures of a higher category, an honored worker of education, 12 excellent workers of education of Ukraine, 10 excellent workers of agrarian science and education among them. SS NULESU «Nizhyn Agrotechnical Institute» has its own place for student practical training – a training, scientific and production subdivision consisting of scientific and research subdivision with training, scientific and research laboratories of biological agriculture, energy efficiency, quality and safety of agricultural production, agricultural production processing, intellectual property, and a training and production subdivision with laboratories of crop production, livestock breeding, agricultural management, technical and technological maintenance, service and repair, as well as an autodrome.

SS NULESU «Nizhyn Agrotechnical Institute» has 6 academic buildings occupying a total area of 27320 sq. m, 3 residences for 760 places; 67 laboratories; 32 classrooms, 19 computer labs equipped with 216 computers.

The directions for its scientific and research activities are:

- biologization of agriculture;

- environmental protection, biotechnologies, sustainable development of society;
- quality, safety, certification and standardization of production technology for agriculture and foods;
- economics, marketing, management;
- mechanization, electrification and automation for agricultural production;
- rationalization of social development of rural areas.

The main task of the academic staff is to increase efficiency of the academic process in the Institute with the help of its organization and didactic means. It is important to create a new generation of scientific and methodological support for academic disciplines and for the organization of the academic process on the whole, to diversify the forms and the content of individual student work, to improve its organization and to work out assessing means for its efficiency to be controlled. Methodological recommendations for course and graduate projects have been created for technical specialties. Methodological recommendations for control papers for extra-mural students in all curricula's subjects have been written.

The department on education provides students with advice and methodological help in protection of their rights, works out and implements a system of incentives for the best students, community activists, members of groups of amateur creative activities and prominent sportsmen of the Institute. There are 11 groups of amateur creative activities acting nowadays in which approximately 300 students take part, a vocal ensemble, a recitation group. Students of the Institute take an active part in «Holosievska Vesna», a traditional international festival, in which Nizhyn Agrotechnical Institute has won for a number of years. Students of the Institute are laureates and winners of festivals and contests «Sofiivsky Zori», «Barvy Oseni», «Vesnyana Khvylya», «Session», «Siver-tone».

More than 270 students go info sport in sport sections of the Institute in the following kinds: volleyball, basketball, football, table tennis, martial arts, tourism, kettlebell lifting, athletics, chess, shaping.

Nizhyn Agrotechnical Institute has extensive experience in international cooperation with its partners from different countries. Since the international friendship club was founded, representatives of more than 40 countries of the world have visited the Institute. A bright page of the history of the Institute was a three-year program of cooperation among education institutions of Ukraine and the USA. In 2012, an agreement on cooperation between the Institute and Industrial and Economic College named after acad. G.S. Seytkasimov (Republic of Kazakhstan) was signed. Nowadays, the Institute has the tightest links with Polissya State University (Republic of Bilorus), Bilorus Agricultural Academy, Velykolutska State Agricultural Academy (Russia), Marinhorsky Agricultural and Technical College named after V. Lobanka (Republic of Bilorus), Consular Department of the Embassy of the Republic of Poland in Ukraine, the Public Affair Section of the U.S. Embassy in Ukraine. The Institute cooperates with such programs as: «G's Marketing Ltd», S&A, Tunstead, HOPS, etc. More than 50 students of the Institute annually take their training abroad.

1.5. The concept and objectives of educational activities

The concept of the educational activities of the National University of Life and Environmental Sciences of Ukraine is determined by the **status of a research university** that conducts educational, research, scientific, innovation, production and consultancy activities aimed to develop modern approaches to problems of life and environmental sciences, the use, reproduction and sustainable development of biological resources in soil and aquatic ecosystems, the introduction of new environmental agro-biotechnology, technologies of soil safety and fertility, energy saving agricultural technologies, environmental and legal management in rural areas, monitoring and enforcement of standards, quality and safety of agricultural products, processing technologies and the environment.

The University aims to meet the educational needs of individuals, society and the state in accordance with the **Constitution of Ukraine, Laws of Ukraine «On Education», «On Higher Education», «Regulations on the organization of the academic process in higher education.»**

NULESU conducts its research activities in accordance with the European scientific and educational requirements and standards, participates in research programs and projects, including international cooperation with leading foreign universities and partners.

Educational activities at the university are secular in nature, independent from political, civic and religious interference. The main objective of the university is to integrate into the global educational system and achieve the international status.

NULESU is accredited as a higher educational institution of the IV level and enjoys the right to train specialists in the following educational levels:

- Junior specialists in 33 specialties;
- Bachelors in 29 fields of study;
- Specialists in 19 specialties;
- Masters in 45 specialties and in more than 180 master programs.

The basic institution of the University (Kyiv) implements the degree system of training «bachelor-master». In addition, the university offers training for candidates and doctors in 78 and 64 specialties respectively, as well as retraining and advanced training of specialists for the agricultural sector.

Over 40,000 students study at 20 faculties of the basic institution of the University (Kyiv), Southern Filial «Crimean Agrotechnological University» (Simferopol) and 12 regional higher educational institutions of NULESU of I – III accreditation levels.

The concept of the university educational activities is based on the following principles:

• access to higher education for individuals who meet the requirements of professional selection (competition) considering the existing benefits for rural youth and those living in the areas contaminated by the Chernobyl disaster;

• equality of conditions for any student, learner, postgraduate, doctoral candidate in order to realize their abilities, talent, personality;

• transparency of higher education, creation of preconditions for selecting the form and specialty of education;

• the priority of universal spiritual values, humanism and democracy in the academic process;

• logical unity and continuity of the academic process and its integration with science and production;

• correspondence of educational level to international requirements;

• open competition and contracts for vacancy positions of heads of departments, deans, professors, associate professors and other employees.

The main objectives of the educational activities at the university are:

• Organization of the academic process through innovative master and postgraduate programs, advanced research and professional training of masters, PhDs (Doctors of Philosophy) and doctors for scientific and pedagogical activities at universities, research institutions and high-tech science-intensive industries;

• Introduction of Master's and PhD programs, teaching and research staff of the University on the basis of their research activities through close integration of research with the academic process and providing in-depth fundamental component in teaching and research;

• strengthening and effective use of human scientific, educational and research potential of the University through effective, world-class, research and training process;

• development and implementation of new integrated technologies, methodologies, technical training into the training process;

• integration of education with science and industry in the framework of the educational, scientific and production associations (including interdisciplinary), basic departments, their subdivisions in the institutions of NAS and NAAS of Ukraine and other academic institutions for teaching and research;

• training of personnel for innovative development of Ukraine on the basis of creativity, competence in modern information technology, methods of development, use and protection of intellectual property, basics of innovation management, marketing, product innovation, commercialization of scientific and technological developments;

• ensuring a high level of employment of graduates, young scientists with deep scientific, research and technical training, developers of new techniques and technologies, managers of scientific and technological business and public administration in education, science and technology;

• involving students into research, development and implementation of complex scientific and technical knowledge intensive systems as a component of the academic process;

• ensuring high requirements for competitive selection of the teaching staff taking into account their scientific achievements;

• development of a virtual educational and scientific information environment by involving all academic and research units of the University;

• training of managers and professionals of organizations, enterprises and institutions who obtain and implement the results of research and technological achievements of the University;

• promoting the spiritual and cultural development of society, shaping the country's knowledge base, developing high-tech industries and innovative business environment.

The academic process at the University is based on a systems approach to foster students' broadmindedness, original thinking, abilities to solve industrial and socio-economic problems.

The educational process is an integral part of academic activities and provides education of future professionals in the best traditions of national and world culture based on common priorities, renewal and development of the national economy, culture, science and spiritual unity of the nation and the peoples of Ukraine.

One of the key areas of strategic objectives of the University is creation of a new mechanism of interaction of all participants in the academic and educational process, based on respect for the principle of the unity of their interests, educational opportunities and personality needs.

The main objectives of the methodological activity in the context of degree education system are:

• development of a professional of XXI century model and the requirements to the level of professional knowledge, capacity for self-learning, flexibility in market conditions and self-development;

• involvement of the University staff into the scientific-methodological commission of the Ministry of Education and Science of Ukraine and the Ministry of Agrarian Policy and Food of Ukraine engaged in improvement of organizational and methodological support of academic process, developing branch standards for higher education;

• creation of scientific-methodological complex, fields of training (specialties) and discipline teaching methods based on advanced educational technologies and related educational and laboratory facilities;

• compliance with state standards of higher education;

• adaptation of scientific and technical literature, written by the University staff, to the requirements of international standards of WTO and the European Union;

• determining the content and forms of educational activity for various stages of training and certification;

• identifying the content and character of graduates employment in order to make amendments and additions to the content of curricula and the organization of the educational process;

• development of guidelines and forms of rating system, assessment criteria, tests to determine the level of professional knowledge and skills;

• development of new information and communication systems to support the academic process.

1.6. Specialties in Specialist degree programs

The National University of Life and Environmental Sciences of Ukraine trains specialists in the following specialties:

agronomy, selection and genetics of agricultural crops, fruit *and vegetable science and viticulture, veterinary medicine, land management and cadastre, forestry, park and gardening management, energetic in agroindustrial enterprises, machinery and equipment of agroindustrial production, economics of enterprise, accounting and auditing, finance and credit, administration management, technologies of fats and fat substitute, technologies of products of fermentation and viticulture, technologies of preservation, conservation and processing of milk; law science, professional education.*

Specialist degree is an education and qualification level (EQL) in higher education which can be obtained by a person who completed secondary education and received basic and special skills and knowledge about generalized object of work (activity), sufficient for doing tasks and responsibilities (work) of a certain level of professional activity that are provided for primary positions in a certain kind of economic activity.

Educational and professional training bachelor program offers higher education in the field of study and the appropriate qualifications.

The contents of training are science-based methodological and didactic teaching materials, which provide education and training according to educational and qualification level.

The contents consist of:

- the regulatory part - obligatory content of education, formed according to the requirements of educational and skill characteristics as thematic modules, indicating their amount and level of acquisition, as well as forms of state certification;
- the elective part - recommended content of education, formed as thematic modules, indicating their amount and level of acquisition, as well as forms of state certification, aimed to meet the needs and capabilities of an individual, regional needs for specialists in particular specialization.

Regulatory training period is 1 year. The students who take specialist training program are able to choose the advanced specialization.

Individuals who successfully passed state certification, obtain standard documents about obtaining basic higher education in the relevant field of study and degree qualifications.

Specialists are trained at the faculties of the basic institutions of the University (Kyiv) and the Southern Filial NULESU «Crimean Agrotecnological University» («CATU»), in separated subdivisions of NULESU «Berezhany Agrotecnological Institute» and «Nizhyn Agrotecnological Institute» (table 1.1).

Training in all units is realized on agreed curricula and programs, involving teaching staff of the basic institution of the university to give lectures at separated subdivisions of NULESU. This allows to successfully implement a degree system, to create favorable conditions for capable students, to provide individualized training program and transition to higher level programs.

Table 1.1. Specialties in Specialist Degree Programs

№	Specialties	Departments that provide Bachelor degree training and licensed amount of applicants (full-time/extra-mural)	
		Faculties of the basic institution	SF «CATU», SS of NULESU
1	2	3	4
1	7.03040101 – Law science	Faculty of Jurisprudence (60/75)	
2	7.03050401 – Economics of enterprise		SF «CATU» (30/40) Berezhany agrotechnical institute (25/200)
3	7.03050801 – Finance and credit		SF «CATU» (30/30)
4	7.03050901 – Accounting and Auditing		SF «CATU» (80/80) Berezhany agrotechnical institute (75/75) Nizhyn agrotechnical institute (30/30)
5	7.03060101 – Management of organization and administration		SF «CATU» (30/20) Nizhyn agrotechnical institute (30/30)
6	7.05170102 – Technologies of fats and fat substitutes		SF «CATU» (25/20)
7	7.05170106 – Technologies of products of fermentation and viticulture		SF «CATU» (30/-)
8	7.05170108 – Technologies of preservation, conservation and processing of milk		SF «CATU» (30/15)
9	7.08010103 – Land management and cadastre		SF «CATU» (60/60)
10	7.09010101 – Agronomy		SF «CATU» (40/40)
11	7.09010104 – Fruit and vegetable science and viticulture		SF «CATU» (40/40)
12	7.09010105 – Selection and genetics of agricultural crops	Faculty of Agrobiology (25/-)	
13	7.09010301 – Wood processing technologies		SF «CATU» (30/30)
14	7.09010303 – Park and gardening management		SF «CATU» (40/20)
15	7.10010101 – Energetics of agricultural production		Berezhany agrotechnical institute (75/100) Nizhyn agrotechnical institute (50/30)
16	7.10010103 – Electrification and automation of agriculture	Faculty of Energetics and Automation (10/10)	
17	7.10010203 – Machinery and agricultural equipment		SF «CATU» (95/95) Berezhany agrotechnical institute (75/100) Nizhyn agrotechnical institute (50/50)
18	7.11010101 – Veterinary medicine		SF «CATU» (30/-)
19	7.01010401 – Professional education	Faculty of Education (-/150)	-

Graduates of NULESU who have received EQL «Specialist» in a particular specialty can continue their education and receive master's degree (in terms of contract with the individual or legal persons) in the basic institution of the University (Kyiv) and SF NUBiP Ukraine «CATU» (Simferopol) in specialty, related to the Specialist course specialty, or in «Specific categories» field of knowledge (only in basic institution of the University).

8.18010010 – «Quality, standardization and certification»
8.18010018 – «Administrative Management»
8.18010020 − «Management of Educational Institution»
8.18010021 – « Pedagogy of Higher School»

1.7. Admission procedure

Dates and deadlines of documents admission in training programs EQL «Specialist» and entrance exams at basic university (NULESU) are in the table below:

major	Forms of study			
	full time		extra-mural	
	application deadline	entrance exams	application deadline*	entrance exams
Selection and genetics of agricultural crops	17.06-08.07.2013 p.	09.07.-18.07.2013 p.	17.06-08.07.2013 p.	09.07.-18.07.2013 p.
Electrification and automation of agriculture	17.06-08.07.2013 p.	09.07.-18.07.2013 p.	17.06-08.07.2013 p.	09.07.-18.07.2013 p.
Law science	17.06-08.07.2013 p.	09.07.-18.07.2013 p.	17.06-08.07.2013 p.	09.07.-18.07.2013 p.
Professional education (according to types)			29.10-22.11.2013 p.	23.11.2013 p.

The period of study in training programs EQL «Specialist» – 1year for full time and 1.5 years for extra-mural forms of study (for manor «Professional training» – 2 years.

Applicants personally apply the following documents to the Admission committee of NULESU:

- an application form
- a document of completed education and qualification level obtained and its appendix, original or certified copies at the applicant's choice;
- a medical certificate (form 086-O (original or certified copy);
- 5 color photos 3x4 cm;
- a copy of the identification number (3 copies);
- a copy of passport (1st, 2nd pages and permanent address 3 copies).

Applicants in education and professional program EQL «Specialist» of specialists retraining on the basis of completed higher education in minor «Professional education» (by type) of extramural form of study apply in addition to the application form a certified copy of work-record card and recommendation letter from agricultural higher educational universities of I-II levels of accreditation.

A Ukrainian passport or the other documents identifying a person and citizenship and documents certifying their right to apply for, are submitted by an applicant in person.

Entrance exams and competition selection:

Competition grades are calculated as all results of entrance exams and diploma scores and scored from 100 to 200 points.

Entrance exams to specialists training programs EQL «Specialist» are in the form of different types of tests from professional disciplines of normative cycle according to the program of bachelor training.

Applicants submit the documents to:

03041, Kyiv-41, str. General Rodimtsev, 19, building № 1, office 12.

How to get to the admission committee:
underground station «Lybids'ka», route taxi 212.

Documents are submitted daily from 8.30 to 16.30, on Saturday - from 9.00 to 14.00.
Sunday - Closed.

Phone: (044) 258-42-63, 527-83-08
http:www.nubip.edu.ua
E-mail: commission@twin.nauu.kiev.ua

1.8. Organization of the training process

There are the following forms of studying at National University of Life and Environmental Sciences of Ukraine:

- full time studying;
- extra mural studying;
- externship.

A full time studying is a basic form of obtaining a certain level of education or qualification.

An extra mural studying is a part-time form of obtaining a certain level of education an academic process of which, as a rule, consists of two laboratory and examination sessions the period of which (30-40 calendar days) is regulated by the Law of Ukraine «On Vacations». In-between the sessions, the academic process organization is regulated by student individual possibilities and capabilities to continue studying according to the syllabi for self-education.

Externship is a special form of studying for the students who have a correspondent level of education (qualification) for them to be able to obtain a certain level of education or qualification while studying academic disciplines by themselves, examinations and the other forms of control, foreseen by their syllabi for self-education at the University.

An academic process is a structuralized system of organizational and didactic measures aimed at the realization of the education content of a certain education and qualification level according to the requirements of the national standards for higher education.

Scientific, humanistic, democratic and continuous principals of education and training to obtain different degrees are **the fundamentals of the academic process** the main objective of which is to educate and train intelligent and harmoniously developed personalities who are able to renew their knowledge, to be professionally mobile and to quickly adjust themselves under the transition period of reforming the national economy of agriculture and forestry.

According to the Law of Ukraine «On Higher Education», **a system of degrees** in higher education **«associate degree-bachelor's degree-specialist-master's degree»** (**«bachelor's degree-master's degree»** – at the University's basic institution) is implemented at NULESU. The system gives a wide range of possibilities to satisfy educational needs and to solve educational problems for a person, increasing universal education flexibility for professional training and the level of social protection regarding the changes of the needs of the economy and the labor market. It ensures a desired qualification to be obtained or sharpened concerning directions of professional training or specialties and correspondent educational programs.

The regulatory and legislative framework for the academic process organization at the University is **the Laws of Ukraine «On Education», «On Higher Education»**, the national standards for higher education, «The Regulation on the Academic Process at Higher Education Institutions», professional training programs for training qualified specialists of correspondent directions and qualification levels.

The content of education is a scientifically grounded system of the didactically and methodologically framed education material for different educational levels. The content of education is determined by education and training programs, structural and logical training schemes, curricula for disciplines, as well as by the other regulative acts of the state administrative and executive bodies for education and by higher institutions. The content is reflected in references, manuals, textbooks, methodological materials, and didactic means, as well as it also finds reflection during academic classes and other

education activity forms.

An education program for professional training is a list of prerequisite and elective subjects with the volume of hours for studying and examining.

Structural and logical schemes are scientific and methodological grounds for the implementation of education programs for professional training.

The content of education consists of prerequisite and elective parts. The prerequisite part is determined by the correspondent national standards for higher education, whereas the elective one is determined by the scientific councils of the faculties of the University.

The main normative document determining the academic process organization for a specific direction of education and training **is a curriculum** that is realized by the dean's offices of the University on the grounds of education programs for professional training and structural and logical schemes for education and training. Lists of prerequisite and elective subjects and their volume, sequences of studying the subjects, forms of classes and their quantity, charts for the academic process, forms and means of examinations are determined by the curriculum. The curricula are approved by the University Chancellor. It is designed for each academic year.

The place of a discipline and its importance, its annotation and the requirements for the level of knowledge and skills obtained are determined by the training program in the discipline. Regarding the education program and the curriculum, training programs specifying outlines, sequences, organizational forms and hours, forms and means of examination determined for studying disciplines are designed by correspondent departments.

The academic process at the University has the following forms: classes, individual tasks, student individual tasks, practical training, and examinations.

Lectures, laboratory research, practical classes, seminars, individual classes, consultations are the main forms of classes.

The organization of classes is scheduled for semesters (trimesters) according to the annual schedule for the academic process.

Student individual tasks are the main form to obtain knowledge and skills out-of-class. The hours determined for student individual tasks that are to be not less than half the total hours of student academic hours for studying a specific discipline are regulated by the curricula.

Student practical training is a compulsory component of the training program for obtaining a qualification level that aims to have students acquire professional skills. It takes place at the independent subdivisions of NULESU educational and research farms and research stations, at advanced modern agricultural and forestry enterprises under scientific supervision of scientific and training staff of the University and experts from the enterprises.

Control is divided into a current control and a final control. During practical classes, laboratory research and seminars, the aim of the current control is to assess students' preparation to be able to carry out specific tasks. Forms of the current control are determined by correspondent departments. Moreover, in accordance with the requirements of a module-rating system of education and training that has been implemented at the University, after the content module is over, an obligatory assessment of how well the students have learnt the material takes place.

The final control aims to assess the results of education and training at a certain education level or at its separate finished stages. According to «The Regulations on Examinations and Credits at NULESU», the final control takes two forms: an examination or a credit in a specific academic discipline.

A credit is a form of assessing of student laboratory research and practical in-class activities, of student knowledge about separate parts of academic disciplines, course projects (papers), educational and practical training. Credits in laboratory research and practical in-class activities are to be over before examination sessions start.

Examinations (course examinations) aim to assess student knowledge about academic disciplines, students' abilities to creatively apply their knowledge and skills obtained in order to solve practical problems of their professional direction.

Examinations are to be taken during the period of examination sessions according to the academic calendar of the University and the schedules of the academic process.

Examination results are scored according to the national four-grade scale – «excellent», «good», «satisfactory», «unsatisfactory» and to European Credit Transfer and Accumulation System (ECTS) – A, B, C, D, E, FX, F. For conversion from the Ukrainian national grades into ECTS grades see Table 1.2. Credit results are scored by the national marks «passed» and «failed» and by the correspondent ECTS grades.

Student academic workload is determined by the number of time measure units for training programs. An academic hour, an academic day, a week, a semester, a course and a year are student academic workload time units.

An academic hour is a minimum academic student workload unit in which there are 45 minutes.

An academic student day lasts no longer than 9 academic hours, an academic week – 54 academic hours among which there shall be the following number of hours for in-class activities: training programs for EQL «Associate « and EQL «Bachelor» – 30 hrs, EQL «Specialist» – 24 hrs, EQL «Master» – 18 hrs, the other academic hours being for student individual tasks.

One of the peculiarities of the academic process organization at NULESU is **a credit-module system of education** for all the training courses and programs for professional training of EQL «Bachelor», EQL «Specialist» and EQL «Master» witch is regulated by «The Regulations on the Credit-Module System of Education at NULESU».

Dividing the content of each academic discipline considering its volume and structure into several content modules is **the principle of module training**. **A content module** is a logically completed part of theoretical and practical material of academic disciplines that contains, as a rule, several lecture topics, practical classes (seminars), laboratory research, calculation problems and so on. The number of content modules for one discipline is determined by the scientific and research faculty member who is responsible for the discipline, the number being approved at the meeting of the chair. Content modules are included into the curriculum for the discipline.

It is recommended that there be from 2 to 4 content modules for one discipline within the period of one semester with an obligatory control over the knowledge obtained. Knowledge and skills are acquired in-class and individually by students while doing individual tasks assigned.

Total academic workload (in-class and out-of-class activities, individual tasks, etc.) is measured in hours and ECTS-credits (one ECTS-credit corresponds to 36 hrs.).

Table 1.2. Conversion of the Ukrainian National Grades into ECTS Grades

The Ukrainian National Grade	ECTS Grade	best/next at the European Universities	Definition of the ECTS Grading	Student Rating, Score
1	*2*	*3*	*4*	*5*
Excellent	**A**	10	**EXCELLENT** – outstanding performance with only minor errors	**90 – 100**
Good	**B**	25	**VERY GOOD** – above the average standard but with some errors	**82 – 89**
	C	30	**GOOD** – generally sound work with a number of notable errors	**74 – 81**
Satisfactory	**D**	25	**SATISFACTORY** – fair but with significant shortcomings	**64 – 73**
	E	10	**SUFFICIENT** – performance meets the minimum criteria	**60 – 63**
Unsatisfactory	**FX**	-	**FAIL** – some more work required before the credit can be awarded	**35 – 59**
	F	-	**FAIL** – considerable further work is required	**00 - 34**

An overall student academic workload is not less than 60 ECTS-credits per academic year, 30 ECTS-credits per semester, and 20 ECTS-credits per trimester.

At the University, after a logically completed part of lectures and practical classes (a content module) for disciplines is over and at the stage of a final control of knowledge and skills, students' levels of knowledge and skills are assessed according to **student assessment rating.** The student assessment rating doesn't eliminate a traditional grading system, both assessment systems being used together. However, that makes the assessment system more flexible, objective and promoting systematic and active individual student performance during the whole period of studying, ensuring a sound competition among the students in their learning, facilitating student capacity outcome and development.

The student assessment rating in academic disciplines, course papers (projects), reports on all training practices (training and production), state examinations, graduation projects (graduation bachelor's papers, graduation papers (projects) and graduation master's papers) is scored **on the 100-point scale.**

The student rating for knowing academic disciplines comprises of their training rating – 70 points the highest and their attestation rating – 30 points the highest. Consequently, a content module being a constituent part of educational content of an academic discipline is scored 70 points the highest. Rating grades in content modules, as

well as an attestation rating, is scored on the 100-point scale.

For grades to be logged into an examination record, a student grade record and a student assessment register, the rating in different types of academic training is transformed into national grades and ECTS-grades according to the points of a student.

The student rating for knowing academic disciplines comprises of their training rating – 70 points the highest and their attestation rating – 30 points the highest. Consequently, a content module being a constituent part of educational content of an academic discipline is scored 70 points the highest. Rating grades in content modules, as well as an attestation rating, is scored on the 100-point scale.

For grades to be logged into an examination record, a student grade record and a student assessment register, the rating in different types of academic training is transformed into national grades and ECTS-grades according to the points of a student (*see Table 1.5.*).

The students having 60 points and more in academic training have the right not to take an examination (credit) and to get an examination grade (a credit) «Automatically» according to the number of the points they have being transformed into national grades and ECTS-grades (*see Table 1.2.*).

If the students want to get a higher rating to get a better grade in academic disciplines, they go through a semester attestation which is obligatory to be taken by the students having less than 60 points for their academic training. To be allowed to take a form of attestation, a student is required to have not less than 60 points for each content module that is not less than 42 points for academic training.

The students with a higher rating for education have the following benefits:

- workplace after their graduating from NULESU;
- accommodation and scholarships;
- a better choice where to have production and training practices;
- individual academic plans and schedules;
- transfer to another specialty;
- probation abroad.

1.9. Practical training of students

Student practical training is a constituent part of the academic process at National University of Life and Environmental Sciences of Ukraine. It is regulated by «The Regulations on Student Practical Training at Higher Education Institutions of Ukraine», approved by Order 351 of the Ministry of Education of Ukraine , 20.12.1994, and by «The Regulations on NULESU Student Practical Training», approved by Order 351 of the University Chancellor, 26.05.2011.

NULESU **student practical training aims to** generalize theoretical and practical knowledge and skills obtained, to sharpen professional knowledge and skills to meet the requirements of education and qualification levels for qualified professionals with higher education and to ensure professional training quality improvement.

The objectives of practical training are:

1) to train a professional able to solve organization and production problems under current market conditions, knowing methods and techniques of innovative technology;

2) to obtain skills in:

- making decisions in specific situations;
- implementing advanced technology and scientific findings into production;
- team working;
- a certain profession.

NULESU student practical training is a continuous and coherent process which goes on during the whole period of studying, which facilitates certain competences acquired by future bachelors, specialists and masters.

Practical training includes laboratory research and practical classes, training and production practices of students.

Laboratory research takes place at university laboratories specially equipped with facilities for the academic process (training hardware, machinery, etc.). Labs for the students of Technology of Production and Processing of Livestock Products, Veterinary Medicine, Agrobiology, Plant Protection, Engineering for Agrobiosystems, Design Engineering for Machinery and System of Nature, Forestry, Economics, Agricultural Management, Foodstuffs Technology and Quality and Safety of Livestock Products take place in real professional environment – at educational and production and educational, scientific and production laboratories of the educational and research farms of NULESU.

Practical classes take place in classrooms or in the University laboratories equipped with necessary technical means for teaching and computerized. Practical training includes solving problems of different levels of difficulty, tests to assess how well the students have learnt crucial theoretical principles and grounds, which are to be prepared before it occurs for the students to practice solving them in class.

The students have to take **training practices** when they are in their first and second years of doing bachelor's degree training programs at educational, educational and scientific, educational, scientific and production laboratories, clinics, workshops, on the fields of the educational and research farms (ERF) of NULESU, as well as at the leading companies, enterprises, organizations and institutions of Ukraine and other countries that meet the requirements of the education programs for professional training to get a bachelor's degree. The practices aim to introduce specific features of directions and specialties to the students for them to be competent meeting education and qualification characteristics, and, in some cases, for them to get a working profession out of the number of a wide range of professions of a correspondent field. Training is supervised by the scientific and teaching stuff of the University and the leading specialists of ERF of NULESU. According to the University chancellor's order, they are responsible for training

practice programs to be completed. The practices are also supervised by the staff of the student practical training educational and scientific center (SPTESC) assisting directly at ERF to ensure the training programs' tasks to be done.

Production training (technological, operational, engineering, teaching, in economics and so on) is to be taken by undergraduates (bachelor's and master's training programs). The training aims to widen, deepen and sharpen the skills obtained by the students while studying cycles of special disciplines, which helps the students get new skills required to be able to use their knowledge and skills for production. It also aims at improving professional skills and at gathering actual material and data for graduation course papers (EQL «Bachelor» and EQL «Master»). Production training takes place at educational and educational, scientific and production laboratories, ERF of NULESU, as well as at the leading companies and enterprises of Ukraine and other countries according to the contracts signed. Training is supervised by the scientific and teaching stuff of the University's chairs and top management of farms, enterprises, organizations and institutions. Moreover, the staff of SPTESC assists in production training at ERF of NULESU.

Scientific and research graduation practice is a final stage of practical training being a period of preparation to graduation course papers (EQL «Bachelor» and EQL «Master»). Undergraduates take it during their last year of studying to generalize and sharpen their skills, to master experience in their professions to get ready for their further work without supervision, as well as in order to find actual data for graduation course papers.

Places for student practical training

Educational, educational and scientific, educational, scientific and production laboratories of the basic institution of NULESU and its separate subdivisions (SS), mainly ERF of the University for labs and classes, as well training, technological, scientific and research, graduation and other training in Plant Protection, Animal Husbandry, Processing and Storing Crop Production, Technology for Biodiesel Production, Livestock and Fish Breeding, Methods for Diagnosing and Preventing Animal Diseases, Maintenance Technology, Agricultural Machinery Maintenance and Testing, Forestry, Woodprocessing, Hunting and Game Laws, Economics, Accounting, Marketing and Management in the agricultural production, etc.

NULESU has the following places for practical training:

- 3 research stations – SS of NULES of Ukraine «Agronomy Research Station», SS of NULES of Ukraine «Boyarka Forest Research Station» (Kyiv Oblast), educational and research station of hill gardening, viticulture, horticulture and forestry, village of town type Foros (AR the Crimia);
- 6 educational and research farms - SS of NULES of Ukraine «Velyka Snitynka Training and Research Farmstead named after O.V. Muzychenko», SS of NULES of Ukraine «Training and Research farmstead «Vorzel» and ERF SS of NULES of Ukraine «Nemishayevo Agrotechnical College» (Kyiv Oblast), State enterprise (SE) «Training and Research Breeder Plant» named after Frunze of NULESU», ERF SS of NULES of Ukraine «Zalishchyky College of Agriculture named after. E.Khraplyvyi» and ERF SS of NULES of Ukraine «Nizhyn Agrotechnical Institute» (Chernihiv Oblast);
- special places for practical training at south branch of NULESU «Crimea Agrotechnology University»
- special places for practical training at regional higher education institution of NULESU of I-II accreditation levels;
- Training and Research Centre of Biology and Ecology of Subtropical Plants and Landscape of NULESU (Yalta, AR the Crimea);
- Botanic Garden of NULESU.

The total area of agricultural lands under the structures mentioned above is more than 35 000 ha, including approximately 18 000 ha of woods, fields under research, green houses, livestock complexes, automobile and tractor garages, workshops, polygons, manufactories etc.

The farms of the University are located in different soil and climatic zones of Ukraine – Woodlands, Steppe and Subtropics (AR the Crimea). The specific features of the practical training places of the University are correspondent chairs and their branches, as well as over 80 training and production and training and scientific and production laboratories which are the places for the students' labs and practical classes, training and production practice, etc.

At **SS of NULES of Ukraine «Agronomy Research Station»**, students study modern technologies for crop production, taking part in raising elite seeds of winter and spring crops, vegetables and fruit and elite seedlings of elite crops. There are training and production subdivisions of crop and livestock production raw processing and a bank of agricultural crop kinds at the station which store approximately 300 kinds of wheat, barley, peas, oats, maize, sugar beet, rapeseed, soybeans, potatoes, vegetables, etc.

There are 5 forestry parks and 2 wood processing manufactures, a botanic garden of the University which has more than 700 kinds of trees and bushes in the structure of **SS of NULES of Ukraine «Boyarka Forestry Research Station».** These subdivisions of NULESU are perfect training places for the students from the faculties of Forestry and Park, Gardening and Landscape. The students study advanced technology for forest plantations, forest protection against pests, forest care, logging and wood processing.

SS of NULES of Ukraine «Velyka Snitynka Training and Research Farmstead named after O.V. Muzychenko» has educational, scientific and production laboratories in crop production and livestock breeding. Wheat, peas, oats, triticale, buckwheat, vetch, sugar beet, rape, maize, potato, vegetables, root crop, annual and perennial grasses are grown there. The Chair of Machinery Testing and Practical Training, that provides the agricultural machinery and electrical facilities of the farm with maintenance being serviced by the students, is located at the farm. The processing enterprises – manufactures of cheese, sausages, pasts and bakery products, and equipped educational laboratories are situated there as well.

The specialization of **SS of NULES of Ukraine «Training and Research farmstead «Vorzel»**is dairy and meat products. While taking their training, the students have a possibility to study the cycle of breeding abardyn-anhuska and Ukrainian black speckled breed of cattle, growing vegetables in greenhouses. Oats, potatoes, vegetables, corn, annual and perennial grasses are grown there.

State enterprise (SE) «Training and Research Breeder Plant» named after Frunze of NULESU» is located in Autonomous Republic of Crimea. Its main activities are selecting and breeding pedigree poultry and milk production. Barley, oats, maize, annual grasses, etc. are grown there.

Training and Research Centre of Biology and Ecology of Subtropical Plants and Landscape of NULESU is located in village of town type Nikita (Yalta) on the territory of Nikitsky Botanic Garden – the National Scientific Center of the NAAS of Ukraine, in a laboratory building. The students take their practical training and scientific research in biotechnology, ecology, forestry recreation, nature conservation, subtropical crop production, landscape and park and gardening for subtropical conditions.

Training and production practice of the students of **SS of NULES of Ukraine «Berezhansky Agrotechnical Institute»** takes place at arboretums «Berezhansky», «Raivsky Park», educational and production place «Garden», nursery ornamental crops, educational and research laboratories of biogas and biofuel, production workshops.

At **SS of NULES of Ukraine «Nizhyn Agrotechnical Institute»**, professional practical training is provided by ESF having a laboratory of crop production, a farm in which the loose boxed cattle and De Laval milking equipment. Barley, pea, oats, maize, rape, annual grasses are grown there.

Agricultural lands, collection and research field, educational, scientific and production laboratories of mycology, fisheries, livestock, poultry, farm pond (19.6 ha), machine and tractor garage with workshops, operated granaries are the places of the student practical training.

Wheat, oats, potato, vegetables, maize, annual and perennial grasses are grown at **ERF SS of NULES of Ukraine «Nemishayevo Agrotechnical College»**. It also has fish-breeding and fruit processing manufactures.

ERF of **SS of NULES of Ukraine «Zalishchyky College of Agriculture named after. E.Khraplivyi»**, a laboratory of ecological expertise, collection and research field, an arch greenhouse are the places of student training and production practice of students. Wheat, oats, peas, buckwheat, maize, potato, vegetables are grown there.

The mentioned above practical training places are the places where NULESU implements advanced agro technologies at the expense of the cooperation with well-known foreign companies: John Deere (the USA), Valtra Valmet (Finland), M&P Farma (Switzerland), ACCO (Denmark), Alfa Laval Ukraine (Sweden) VUZT (Chech), FML (Germany) that provide the University with advanced technology, equipment, agricultural machinery etc.

The places for NULESU student practical training includes leading institutions, enterprises, organizations of different ownership in Ukraine and abroad that meet the requirements of the education programs for professional training. The University and the practical training places sign agreements with passports being kept in the Academic Department and deans' offices. The period of the agreements is the period of a definite practical training or a five-year term.

1.10. Teaching and academic staff

More than 3000 of the academic staff ensure the academic process and scientific research at University of Life and Environmental Sciences of Ukraine. There more than 1500 of the faculty working at the basic institution of the University (Kyiv), including 288 doctors of sciences and professors, over 1000 candidates of sciences and assistant professors.

Among the academic staff of the basic institution of NULESU, there are:

- Heroes of Ukraine – 2;
- Academicians of the NAS of Ukraine – 1;
- Academicians of the NAAS of Ukraine – 13;
- Correspondent Members of the NAS of Ukraine – 4;
- Correspondent Members of the NAAS of Ukraine – 20;
- Correspondent Members of the APS of Ukraine – 1;
- Honored Workers of Science and Technology of Ukraine - 20
- Honored Workers of Education and Public Education of Ukraine – 13;
- Honored Workers of Higher School of Ukraine – 2;
- Honored Inventors of Ukraine – 2;
- Honored Workers of Transport of Ukraine – 1;
- Honored Doctors of Ukraine – 1;
- Honored Workers of Veterinary Medicine of Ukraine – 1;
- Honored Workers of Agriculture – 8;
- Honored Electrical Engineers – 1;
- Honored Constructors of Ukraine – 2;
- Honored Economists of Ukraine – 4;
- Honored Foresters of Ukraine – 1;
- Honored Lawyers of Ukraine – 1;
- Honored Workers of Culture and Sports of Ukraine – 4;
- Honored Masters of Folk Art – 1;
- Honored Artists of Ukraine – 3;
- Honored Coaches – 1;
- Masters of Sports of Ukraine – 1;
- State Prize Winners – 16.

365 Doctors of sciences and Professors and 1435 Candidates of sciences and assistant professors work at all structural divisions of NULESU.

The scientific and academic staff of a higher qualification takes post-graduate and doctoral courses. 575 postgraduate students (242 of which are at the extra mural department) and 69 searches are taking postgraduate programs, 27 PhD students are doing doctoral programs.

The work and performance of 20 specialized scientific councils for defending dissertations to get a degree of Candidate of Sciences in 78 specialties and a degree of Doctor of Sciences in 64 specialties is organized and coordinated by the education and scientific center of education and attestation of the academic stuff of a higher category. The faculty members and postgraduate students submitted and defended 7 dissertations to get a degree of Doctor of Sciences and 76 dissertations to get a degree of Candidate of Sciences in 2013.

16 doctors of sciences joined the academic staff of the University in 2013.

1.11. Facilities of the University

Main location base institution of the National University of Life and Environmental Sciences Committee of Ukraine – Golosievo , one of the most picturesque parts of the city of Kyiv.

Courses and practical training of students in the basic institution of the University is conducted in 17 schools and buildings , as well as educational, scientific and educational, scientific and industrial laboratories located in separate sections of NULES of Ukraine˜ teaching and research farms and research stations in Kiev, Chernihiv and Ternopil regions and Autonomous Republic (AR) region . All have modern logistics equipment necessary for efficient learning process.

The students Modern Library, a fund which is more than 1 million copies, of which 400 thousand - books and manuals , 610 thousand - Scientific Literature.˜ 14 campus dormitories, where about 80% full-time students live there, canteen, cafeteria buffets and more. In addition, educational and research facilities (NDH) and Research Station of the University are also dormitories to accommodate students during their practical training of students, namely:

- Agronomic Research Station˜ 100 people
- Velykosnitynske NDH them. O. Muzychenko˜ 110 people
- Boyar Forest Experiment Station - 120 persons
- NDH « Vorzel» - 75 people
- Teaching and Research Bird Breeding Plant. Frunze of NULES of Ukraine (Crimea) - 50 people
- Teaching and Research Center of Biology and Ecology of Subtropical Plants and Landscape of NULES of Ukraine (Crimea) - 70 people.

Sports complex base institution university has modern outdoor stadium and an indoor enclosure for complete physical training and sports.

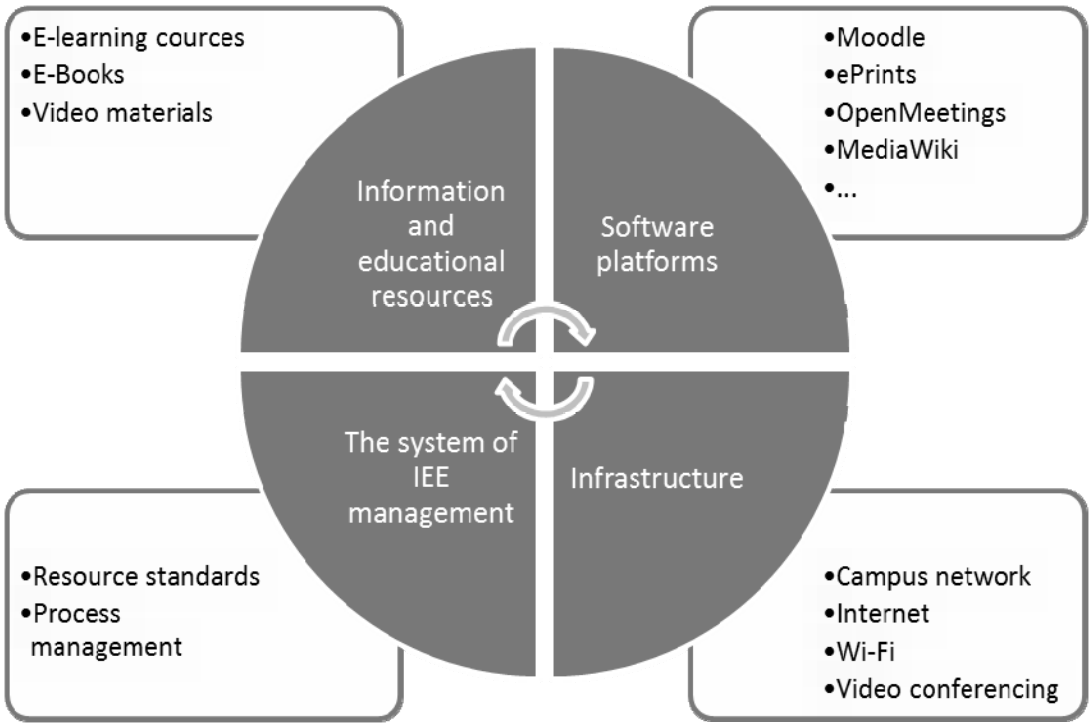
The structure of the University consists of Ukrainian Laboratory of Quality and Safety of Agricultural Products, Ukrainian Institute of Agricultural Radiology, State Scientific -Research and Design Institute «Konservpromkompleks» (Odessa) and others.

The University operated Southern Filial of NULES of Ukraine «Crimean Agricultural University» (ARC) and separate units of NULES of Ukraine˜ 12 regional universities and˜ W accreditation in different regions of Ukraine: Berezhansky Agricultural Institute (Ternopil region)., Nijinsky Agricultural Institute (Chernihiv region), Irpin Economic College, Nemishaivo agricultural College , Boyarsky College of Environment and natural Resources (all three˜ in the Kiev region.) Zalishchyky Agricultural College, E. Khraplyvy (Ternopil region), Bobrovitsky College of Economics and Management University. O. property (Chernihiv region), Mukachevo Agricultural College (Transcarpathian region), Prybrezhnenskyy Agricultural College , Crimean agricultural college, Bakhchisarai College of Architecture and Design, College of Crimean Hydromelioration and mechanization of agriculture (the last four˜ in Crimea) and 5 educational information and counseling centers (NIKP): Tarashchansky NIKP (Kyiv region), Bobrovitsky NIKP (Chernihiv region), Lubensky NIKP (Poltava region). , Malyn NIKP (Zhytomyr region). NIKP and Mukachevo (Transcarpathian region).

Each institution has academic buildings and dormitories, some of them are educational and experimental farms, research fields and so on.

1.12. Information and telecommunication support of the Educational process

The main objective of the university - training highly qualified specialists for the agricultural sector that can have computers up to date. To make efficient use of ICT in the educational process in Ukraine NULES established corporate information-educational environment (ITS), which highlighted the following components: the development of computer infrastructure, software platforms, information and educational resources management system and ITS (Pic. 1).



Pic.1. Information - Educational Environment of NULESU

Infrastructure University provides students access to information and educational resources. In general, the University, including all Computer Park, security is about 3.4 students / 1 computer. At the end of 2012 as part of the information system function NULES Ukraine 2872 computers. Their work provides the servers that are running Windows 2003 Advanced Server (available 6 server licenses), SQL Server 2000 (1 license available) and 12 servers on free software Unix Free BSD and Linux. For all academic buildings and dormitories wound main LAN cable with a bandwidth of 1 GB / s in each direction, set network equipment that runs on technology Wi -Fi, and at its base a separate local network with free internet access. To provide teaching and research university uses the provider of «Ukrkom « with a capacity of volume 200 Mbit / s in foreign and Ukrainian segment of the Internet. In addition, for remote lectures in regional schools and the smooth operation of Administrative Services University leases data channel with a bandwidth of up to 100 Mbit / s Ukrainian traffic and up to 70 Mbit / s foreign (service provider of « Scientific and Production Company» FOL «).

To support educational activities in information- educational environment NULES of Ukraine, the following software platforms:

- Training and Information Portal (moodle.nubip.edu.ua), which includes e-learning courses (ENK) for students 12 educational and research institutions. Each academic

discipline that is taught to students electronic support in the form of e-course with theoretical material resources for laboratory and practical work, independent work, formative , interim and final evaluation . Experts of NULES of Ukraine developed a standard structure ENK and its evaluation, the system of teachers to develop ENK;

- An electronic archive of scientific and educational materials (http://elibrary.nubip.edu.ua), which includes electronic copies of papers of the university , conference proceedings , held at the University of abstracts of theses defended in NULES of Ukraine , scientific articles and dissertations of masters, training materials to support the learning process , a description of open e-learning courses , patents ;

- Vikiportal (http://agrowiki.nubip.edu.ua), where scholars, educators and students are placed thematic articles on the problems of research, standards (Codex Alimentarius , ISO, JMA, BS) , portfolio ;

- Video Portal (http://video.nubip.edu.ua), which houses educational videos video classes, video lectures and other video content produced of the University and used in educational, cultural and educational work.

University cooperates with regional educational institutions using technology that provides informational education environment of NULES of Ukraine. In particular, the broadcast of lectures held at such educational information and counseling services and separate units of the university: VP NULES of Ukraine «Mukachevo Agricultural College «, EP NULES of Ukraine «Bobrovitsky College of Economics and Management University .O.Maynovoyi «, EP NULES of Ukraine «Zalishchyky Agricultural College named after E. Khraplyvy «, EP NULES of Ukraine « Berezhansky Agricultural Institute « , EP NULES of Ukraine « Irpin Economic College «, EP NULES of Ukraine « Nijinsky Agricultural Institute. « In 2012, using broadcast during June - July held international workshop students of NULES of Ukraine and the University of Wageningen (Netherlands).

1.13. Scientific library of the University

Scientific Library – a modern, scientific, cultural, educational, information center, to realize the needs of the users in getting the most current information at the same time creates a culture of information future professionals who will work in a fundamentally new information society.

Research Library's history begins with 1904, when the library was founded on the basis of agricultural club Kiev Polytechnic Institute, later farming department KPI, from 1924 - Library of the Kiev Agricultural Institute. After creating the Ukrainian Agricultural Academy in 1954, merged the library of the former farming , veterinary and forestry institutions , bringing its capital amounted to 112,467 copies of books, pamphlets, periodicals. From 1992 - Library of Ukrainian State Agrarian University from 2000 - Library National Agrarian University, the modern name - Library of National University of Life and Environmental Sciences of Ukraine .

With the strengthening of the logistics changing the structure of the library improved the educational process necessary literature, expanded topics acquisition fund, readers perfected quality service.

One of the main objectives is to develop the scientific library fund according to the profile of the university and the information needs of all categories of users. Library fund diversified, more than one million copies of domestic and foreign literature, including rare books (from 1779), abstracts of dissertations (since 1950) , dissertations (since 1946), annually receives more than 300 titles of journals and more than 50 different newspapers .

Foundation of rare, valuable records of more than 3,500 documents. Pearl Foundation is a rare and unique books such as «Proceedings Petrovskoy zemledelcheskoy and Lesnoy Academy» (1779), «Russian Chronicles by Nikonov list» (p.. 3, 6, 7, 1786-1791 years), «Archive of Veterinary Sciences», «Lesnoy journal» (1873) and others.

Wide and full use of the library fund contributes bibliographic apparatus, electronic, alphabetical, systematic catalogs and card indexes. The scientific library of automated key processes. From the September 2011 issue of Library books began to users in an automated mode. To familiarize freshmen with a library under the program «Information Culture» classes on how to use reference and research library staff (both traditional and electronic catalog). Informational events, conducting scientific library, are complex and on topical issues of the university.

Scientific Library is a great focal point that works with independent divisions of NULES Ukraine. Research Library staff perform methodical and scientific work, participate in international conferences, seminars, and more.

Information about the research library, including its resources can be found at the library: http://library.nubip.edu.ua.

Since 2006 the Library is a depository library FAO (FAO - Food and Agricultural Organization) in Ukraine. Depository stock includes 700 documents in English, including analyzes, statistical compilations, reports , which are reflected in the electronic catalog of scientific libraries. Some materials are equipped with CD-ROMs. Literature FAO stored in the central library.

The area occupied by the Library, is 2844 m2. Members of the scientific library cater to 8 of 8 tickets and reading rooms for 580 persons. The structure of scientific library consists of 5 divisions and five branches of the scientific library.

Department of staffing, scientific processing documents and directories. The main objective of the department - the full, scientifically based recruitment library book fund for the educational process and research activities of the University.

Information and bibliography. The main objective of the department - quickly and fully meet the information needs of the users Scientific Library.

The department of information technology and computer software. The main objective of the department - the functioning of the automated library and information systems « Irbis- 64» and maintaining electronic information resources library.

The department of information technology and computer software provides:

- Support Website Research Library (http://library.nubip.edu.ua);
- content database library users to serve them in the automatic mode ;
- fund digitization of rare and valuable books to be placed in the database electronic catalog ;
- servicing of computer equipment.

Service Department of educational literature. The total book stock of items is 51176 (the books , periodicals, instructional materials for laboratory and practical work).

There are users subscribe to issue textbooks, reading room with 140 seats , free Internet access and Wi-Fi.

Service department and scientific literature. The main objective of the department - customer service science and fiction. Book Fund Department - more than 450,000 items , including:

- 400,000 copies of scientific literature ;
- 58,000 copies of fiction;
- 9500 copies of foreign literature.

Branch Technical Research Library of the Institute . The total book stock branch is 48900 units (the books , periodicals, instructional materials for laboratory and practical work).

It is the user passes in distribution of textbooks , reading room with 83 seats , free Internet access and Wi-Fi.

Branch Research Library of the Institute of Forestry and Landscape Architecture. The total book stock branch is 22567 units (the books, periodicals, collections conferences, teaching learning materials).

It is the user passes in distribution of textbooks , a reading room with 40 seats, free Internet access and Wi-Fi.

Branch of the Institute of Business Research Library . The total book stock branch is 51800 units (the books, periodicals , collections conferences , foreign literature).

It is the user passes in distribution of textbooks , reading room with 80 seats, free Internet access and Wi-Fi.

Affiliate of scientific library of ESI of land resources and law science.

The total book collection of the affiliate is 13800 items (books, periodicals, instructions to laboratory and practical works).

Visitors can use lending library of academic literature, reading room for 47seats, free Internet and Wi-Fi access.

Affiliate of scientific library of ESI of veterinary medicine and livestock products quality and safety. The total book collection of the affiliate is 48900 items (books, periodicals, instructions to laboratory and practical works).

Visitors can use lending library of academic literature, reading room for 100 seats, free Internet and Wi-Fi access.

1.14. Educational, cultural, sport and social activity

Educational activity remains an important component of the educational process at the university. It was discussed at meetings of the Academic Council and the university administration, where important and necessary decisions were made. Due to this thing an integrated system of education has developed that involves a lot of educational events.

The purpose of NULES students' education is to gain social experience by young generation, inherit spiritual heritage of the Ukrainian people, to achieve high culture of international relations, to develop spirituality, physical perfection, intellectual, moral, art and aesthetic, legal, political, labor and environmental culture.

Educational work with students of NULES of Ukraine involves the following areas of education: intellectual education, moral, civil, national and patriotic, legal, labor, art and aesthetic, environmental, and physical education.

A lecturer from each college was appointed to perform functions of an educator in a students' hostel with the purpose to organize educational process, keep discipline and order in hostels.

Educators conduct lectures, trainings, seminars, individual work about healthy lifestyles and prevention of antisocial phenomena, the best room contests, sports competitions, organize wall newspapers edition among students living in hostels.

Tutors of academic groups and students organizations of the colleges do educational work in colleges. Tutor's performance is regulated by «The Regulations about a tutor of an academic group (or course).»

Educational Scientific Center of cultural, educational and social work operates with the aim to support all legal initiatives of university students, to create conditions for young generation to gain social experience, inherit spiritual heritage of the Ukrainian people, regardless ethnicity, form personal traits of citizen of Ukraine and form developed personality, create conditions for the realization of creative potential of student personality, develop his skills and talents, provide appropriate conditions for accommodation in student hostels.

Center comprises of the department of educational and Student activity, department of social support, campus, Passport office, department of culturology, department of physical education, SS NULES of Ukraine «Sanatorium-dispensary», educational and cultural center, sports camp «Academic», students recreation centers of NULES of Ukraine, sports centers of SS NULES of Ukraine, cultural centers of SS NULES of Ukraine, Museum of NULES of Ukraine history.

Department of educational and student activity organizes and coordinates the educational work of the University, provides consultative and methodological assistance to students in their rights protection, develops and implements the incentive system of the best students of NULES of Ukraine, community activists, members of amateur groups and leading sportsmen of the university.

The Regulations on Academic Ranking of students of NULES of Ukraine was developed by the department of educational and student activity to identify the common approaches for all collages and institutes of the university as to the use of rating system of assessment of academic, scientific, social, sport, art and other achievements of students. Also there was created student's directory which includes the most important information about the structure of the university academic and educational process and specific legal issues about rights and responsibilities of students.

Mass events, amateur performances, meetings with war veterans, theme parties, sport competitions, discos occur at the university during the academic year. In general, cultural and educational activity is implemented through the following measures:

organization and preparation of theme parties with students, cultural and educational meetings of students with the intellectuals, visiting Kyiv theaters, concerts, participation in creative contests and competitions organized at the colleges, university and beyond it.

A lot of amateur groups and clubs operate in the university. Their work is coordinated by the department of cultorology.

They are:

- Folk Music and Dance «Kolos» (choir, dance group, ensemble of folk instruments);
- National Student Theatre «Berezil'»
- Academic studio of solo singing, group of bandura players;
- Academic Choir, Vocal Ensemble «Vodohray»;
- Choreographic ensemble «Divoche suzirria»;
- Studio of pop solo singing, vocal ensemble «Octava»
- Ballroom Dance Club «Charivnist'»;
- Vocal and instrumental band «Octava»;
- Music chamber «Zolota lira»;
- Media studio «Ideal»;
- Art Studio «Holosiivska palitra», «Decoratyvna florystyka»
- Theatre «Melpomena».
- Group «Decorative Floristic»;
- Press studio «Ideal»;
- Research group - cultural club «Our regions.»

All events organized by the department of Culturology in collaboration with other structural subdivisions of NULES of Ukraine, allow teachers to conduct purposeful correction of education, erudition, cultural behavior of students on public, providing high level of individual education of young people.

The university has such sports facilities: football stadium with athletic racing tracks and stands for 5,000 seats ; sports building with 5 gyms (games gym, karate gym, weightlifting gym, fitness gym, wrestling gym), outdoor playgrounds for basketball, handball, mini-football on artificial turf, tennis courts.

Sports buildings of the University borders on Golosiyevo park named after M.T. Ryl's'kyi and Golosievo forest which is the great place for cross jogging, sports orienteering, sports direction finding, skiing, and tourism.

Coordinates the work of sports clubs department of physical education.The university students are engaged in 16 sports sections:

- football;
- mini-football
- basketball (women and men);
- athletics;
- Kyokushinkai karate;
- ski racing;
- volleyball(women and men);
- sport orienteering;
- dance aerobics;
- table tennis;
- power lifting;
- weight lifting;
- sports direction finding;
- Free and Greek and Rome wrestling.

Classes in sports training departments are conducted by the teachers of the

department of physical education who have coach qualifications in particular kinds of sports or academic titles.

According to the «Regulations on mass and sports activities in the university» different sport competitions are annually held:

- university sports contests between combined teams of students of ESI;
- university sports contests between combined teams of students of colleges;
- sports contest «Health» between university teaching staff;
- sports contests between students living in hostels.

University combined teams participate in city and all Ukrainian competitions. The university best sportsmen are sent to the international competitions.

By December 30, 2012 the department of physical education trained: 4 - Honored Masters of Sports, 21 - masters of sports of international level, 110 - masters of sports, 240 - Candidate of Masters of Sports, 1162 – sportsmen of 1st category.

The department of social support helps students. Its main tasks are:

- Organization of students health improvement;
- Accounting and organization of work on paying compensation to the students the victims of the Chernobyl accident;
- Monitoring of financial provision of appropriate allowances to orphan students and children deprived of parental care;
- Formation of the draft orders and materials as to passing orphan students and children deprived of parental care to full social security.

At the university there are the necessary conditions for students' sanitation and rest.

Separate subdivision «Sanatorium-dispensary» operates the all year round to treat and make students healthier. The main task is health improvement, disease prevention, and healthy way of life - a combination of study, work and leisure.

Sanatorium has a medical practice in the following specialties:

- Therapy;
- Physiotherapy;
- Preventive dentistry.

Dispensary canteen, which is located in separate building, offers diet meals.

University students have the opportunity to spend summer vacations on the Black Sea coast in the sports camp «Academic», in family recreation centre «Wave» and recreation centre of separate subdivision of NULES of Ukraine «Prybrezhnenskyi Agricultural College»

1.15. International cooperation

National University of Life and Environmental Sciences of Ukraine has been engaged in international activities since 1950.

During this period more than 3000 foreign students from 89 countries have graduated with master degrees in various fields of agriculture, forestry, fishery and veterinary medicine at NULES (Ukraine). More than 500 of them continued their education as postgraduates and doctoral students and have obtained scientific degrees of doctors and PhDs.

For a significant contribution into the international recognition of education system of NULES of Ukraine 36 professors of partners universities received the title of «Honorary Doctor of NULES of Ukraine « and 57 - title «Honorary Professor of NULES of Ukraine.»

Fruitful cooperation with world leading universities contributed to the reform of the NULESU education system adapting it to market economy and world universities requirements. Two U.S. universities (Iowa -1996 and Louisiana -1998), the University of Ghent (Belgium, 2002) and Humboldt University (Germany, 2002) recognized educational system of NULES of Ukraine as the one that complies with their requirements. Within the period from 2005 to 2008, NULESU signed Memoranda of double diploma with universities: the University of Wageningen (Netherlands) in the field of environmental sciences, bio-economy, biotechnology; Humboldt University - Master's program for process control and quality management; Tokyo University of Agriculture - program for international biobusiness; University of Applied Sciences Weihenstephan (Germany) - the MBA program and the University of Applied Sciences Anhalt (Germany) - MFA and MBA programs. In 2012 NULESU signed Memoranda of double diploma with Russian State agricultural university (MAA named after K. A. Timiriazev) and Warsaw University of life sciences, Poland.

Iowa State University, NULES of Ukraine and Humboldt University (Germany) initiated the foundation of GCHERA (Global Consortium of Higher Agricultural Education and Research) at the international conference devoted to the 100th anniversary of NAU (now NULES of Ukraine) in 1998. The main task of the consortium is to reform the world system of higher education and science on the base of the latest achievements of fundamental and applied sciences and information technologies, and their adaptation to the appropriate economic, national and religious peculiarities of the regions.

Rector of NULESU, Academician D. Melnychuk, who was the President of the Consortium from 2001 to 2003, is currently a member of the Executive Committee and Honorary President of the Consortium.

The seventh world conference «Increase of the strategic role of agricultural and life sciences universities, as driving force of sustainable rural development at the local level, in areas around the world, and in contribution to global initiatives achievement» was held in 2011 the Polytechnic Institute of LaSalle Beauvais (France).

The eighth world conference «Bioresources of the planet and biosafety of the Environment: issues and prospects» will be held on 4-6 November 2013 at the National University of Life and Environmental Sciences of Ukraine.

For significant contributions to the development of cooperation between universities the rector of the National University of Life and Environmental Sciences of Ukraine Dmytro O. Melnychuk was awarded with such titles: Honorary Professor of Iowa State University (USA), Honorary Doctor of the Humboldt University (Germany) and Honorary Doctor of Ghent University (Belgium), Honorary Doctor of the Russian State Agrarian University - Moscow Agricultural Academy named after. KA Tymiriazev, Honorary Senator of Louisiana (USA), visiting professor of Tokyo University of Agriculture (Japan), Honorary Professor of

Warsaw University of Life Sciences, Honorary Doctor Lublin University of natural sciences (Poland).

At present, NULESU maintains international contacts and cooperation with about 90 universities and research institutions around the world, including: 54 - in Europe, 18 - in America (15 - in the USA), 16 - in Asia.

One of the priorities of the development of international cooperation is to promote training of student of NULES of Ukraine in international master programs with the possibility to obtain double diploma of NULES of Ukraine and foreign partner university. Master students of the following programs:

• Masters of Business Administration in Agriculture (MBA) obtain the diploma of Master of NULES of Ukraine and the Weihenstephan University of Applied Sciences, Germany;

• Master of Food and Agribusiness (MFA) - Anhalt University of Applied Sciences, Germany;

• Master's Program «Environment protection», «Bioeconomy» and «Biotechnology» - Wageningen University, The Netherlands;

• Master's program with a double diploma «Process and quality management « Humboldt University, Berlin (Germany);

• The «International Bio-Business» program - Tokyo University of Agriculture (Japan).

NULES of Ukraine cooperates with such foreign companies as «John Deer» (USA), «Valtra Valmet» (Finland), «M & P Farma» (Switzerland), AGCO (Denmark), «Alfa Laval Agri in Ukraine» (Sweden), etc.

Some collaboration programs were sponsored by the families of Ukrainian diaspora in the United States: S. Dvoyak, A. Voskobiinyk, B. Lehman, V. Golovatyi, M. Yatsyk.

Every year about 300 teaching staff and researchers of NULESU take part in international conferences, symposia, seminars, workshops. Some scientists are invited to give lectures by partner universities. Cultural students and teachers exchange programs with Belgian, German, Polish and USA universities were organized. Every year the University holds more than 50 international conferences, seminars and workshops. About 100 undergraduate and graduate students of NULES of Ukraine obtain training at leading universities in the U.S. and Western Europe.

NULES of Ukraine is visited by the official delegations from the USA, Canada, Germany, France, Denmark, the Netherlands, Ireland, Italy, China, UK, Iran, Poland, Lithuania and Sweden. Representatives from partner universities give lectures to students of NULES of Ukraine.

1.16. Student self-governing

There is a student organization at National University of Life and Environmental Sciences of Ukraine. It is the core of student self-governing. The student organization of NULESU is a school leadership, a form of youth self-education and training of future leaders.

The organization is independent from political, religious or civic organizations influence. It was created by students to protect and represent their rights, to organize students' leisure and recreation, to foster the quality of education at the university, to help students realize their capabilities and engage them in social activities. The student organization includes self-governing bodies of the basic institution of NULESU (Kyiv), 13 regional universities (subdivisions of NULESU, student organizations of 19 faculties, 11 student hostel councils, which are united into the joint committee of student hostel councils and clubs.

The student organization includes the following clubs and recreation centers:

- Club of Experts of NULES
- Scientific Club
- Travel Club
- Media Center «FOCUS»
- Sport Club
- Social Center

Student Organization cooperates with many national and international organizations and institutions, student councils from other universities, finds new prospects, undertakes joint actions and implements projects.

A specialized unit - University Guard - has been organized in order to improve the struggle against crime and administrative offenses at NULESU and its subdivisions.

The Regulation on imposing disciplinary penalties on residents of hostels – violators of internal accommodation rules at university hostels was worked out and approved by the organization.

In order to prevent delinquency among students, The Rules of behavior for students of National University of Life and Environmental Sciences of Ukraine» were worked out.

1.17. Areas of graduates' employment

According to government regulations of Ukraine, graduates of environmental, biological, technical, agricultural specialties that have obtained a qualification level Bachelor can occupy the following positions: technicians, engineers, foresters, forest engineers, economists, accountants, agronomists, veterinary doctors or specialists in the fields of agriculture, forestry and fishery, veterinary services, processing industry, power engineering, technical services, mechanical engineering, public administration, commerce etc.

Graduates of the National University of Life and Environmental Sciences of Ukraine can be employed at the agricultural enterprises of different forms of ownership, fish farms, meat and fish processing enterprises, state-owned agricultural and land inspections, environmental enterprises, central government agencies in the field of agriculture and land resources, their regional departments, state quarantine service, state nature reserves, sanctuaries, regional and district agricultural administration departments, public and private veterinary clinics of veterinary medicine, state forestry and hunting enterprises, zoological parks, institutions of nature reserve fund, public and commercial wood processing and furniture enterprises, public utility companies, landscape gardening organizations, landscape design offices, joint ventures and subsidiaries of international companies, etc.

Graduates can also continue their studies at the basic institution of the University (Kyiv) or Southern Filial NULESU «Crimean Agrotechnological University» (Simferopol, Crimea) in master program specialties within the field of training listed in Table. 1.2 or in specialties «Specific categories»:

8.18010010 «Quality, Standardization and Certification»
8.18010018 «Administrative Management»
8.18010020 «Management of Educational Institution»
8.18010021 « Pedagogy of Higher School»

2. SPECIALIST DEGREE PROGRAMS

2.1. Overview

2.2. ERI of Education and Research Institute of Plant Science, Environment and Biotechnologies

7.09010105 – «Selection and Genetics of agricultural crops»

2.3. ERI of Energetic and Automation

7.1001010103 – « Electrification and Automation of agriculture»

2.4. ERI of Land Management and Jurisprudence

7.03040101 – «Law Science»

2.5. ERI of Natural Sciences and the Humanities

7.01010401 – «Professional education»

2.6. SF NULESU «Crimean Agrotecnological University»

7.09010101 – «Agronomy»

7.09010104 – «Fruit and Vegetable Sciences and Viticulture»

7. 09010301 – «Forestry»

7.09010303 – «Park and Gardening Management»

7. 11010101 – «Veterinary Medicine»

7.10010203 – «Mechanization of Agriculture»

7.05170102 – «Technologies of fats and fat substitutes»

7.05170106 – «Technologies of products of fermentation and viticulture»

7.05170108 – «Technologies of preservation, conservation and processing of milk»

7.08010103 – «Land Management and Cadastre»

7.03050401 – «Economics of Enterprise»

7.03050801 – «Finance and Credit»

7.03050901 – «Accounting and Auditing»

7.03060101 – «Management of Organization and Administration»

2.7. SS NULESU «Berezhany Agrotechnical Institute»

7.10010203 – «Mechanization of Agriculture»

7.10010101 – «Energetics of Agricultural Production»

7. 03050401 – «Economics of Enterprise»

7.03050901 – «Accounting and Auditing»

2.8. SS of NULESU «Nizhyn Agrotechnical Institute»

7.10010203 – «Mechanization of Agriculture»

7. 10010101 – «Energetics of Agricultural Production»

7. 03050901 – «Accounting and Auditing»

7. 03060101 – «Management of Organization and Administration»

2.1. OVERVIEW

EQL «Specialist» training is provided at the faculties of the basic institutions of the University (Kyiv-4 specialties), at the Southern Filial NULESU «Crimean Agrotechnical University» (14 specialties), at the separate subdivisions of NULESU – «Berezhany Agrotechnical Institute (4 specialties) and «Nizhyn Agrotechnical Institute (4 specialties).

This section includes the following:

- the concept of training
- information on practical study
- approximate themes of diploma projects (works)
- the academic rights of graduates
- the spheres of graduates` employment

In the contents of specialists` training, according to the required standards of Higher Education of Ukraine the subjects are structured as the following:

- regulatory, according to the sphere of training:
    - humanitarian and social-economic (humanitarian for economic specialties)
    - mathematical and natural-scientific (natural-scientific and economic for economic specialties)
    - professional and practical (professional for economic specialties)
- elective, according to the university and students` choice.

For each subject in the training contents there are: the number of the semester when it is taught, total amount of hours and credits (national − 1 credit = 54 hours, European credit-transfer and accumulative system (ECTS), 1 credit = 36 hours).

2.2. EDUCATION AND RESEARCH INSTITUTE OF PLANT SCIENCE, ENVIRONMENT AND BIOTECHNOLOGIES

Director – Doctor of Agricultural Sciences, Professor
Gregory I. Demydas

tel.: (044) 527-80-77, 527-80-21
Locality: educational building № 4, room 40

FACULTY OF AGROBIOLOGY

Dean – Candidate of Agricultural Sciences, Associate professor
Igor O. Antipov
tel.: (044) 527-82-13 E-mail: atigav@rambler.ru
Locality: educational building № 4, room 39

Faculty organizes and coordinates the training of specialists in specialty:

7.09010105 «Selection and Genetics of Agricultural Crops»

Department in charge of graduate training:
Selection and Genetics
Tel.: (044) 527-86-26 E-mail: Parii@i.ua
Head of department – Candidate of Biological Sciences, Associate professor
M. F. Pariy.

Specialist training
in specialty «SELECTION AND GENETICS OF AGRICULTURAL CROPS»
field of knowledge «Agriculture and forestry»

Form of training, licensed number:	
– full-time	25 persons
Duration of training	1 year
Credits	60 ECTS
Language of training	English, Ukrainian, German
Qualification of graduates	Selection and crop genetics specialist

The concept of training

Training of specialists focuses on formation of students' knowledge and practical skills in scientific principles of genetics and breeding of field crops, organization and conduct of state of scientific and technical examination of varieties and hybrids of Ukraine, theoretical bases and organization of seed work, development technologies of preserving resources of seed for further growth and stabilization of production of crop products in Ukraine.

Practical training

Students receive practical training in training and research farms of National University of Life and Environmental Sciences of Ukraine, at research institutions of Ukraine, at station of variety testing and research centers, companies of different forms of ownership, cultivation, preparation and implementation seeds and planting material and seed.

Proposed topics for theses

1. The studying of homozygotization on frequency of homologous recombination of Arabidopsis thaliana.
2. Morpho-biological characteristics of breeding lines of Phaseolus vulgaris L. and especially their inheritance
3. Grade of samples of soybean advance variety testing on nursery garden.
4. The value of Western European genetic plasma to selection for winter wheat in Ukraine.
5. Influence of abiotic factors and micronutrients on seed production of new intense varieties of winter rape.

Academic rights of graduates - may extend training programs for masters, specialty, related to their major specialty:

8.09010105 «Selection and crop genetics»

or field of knowledge 1801 «Specific categories»:

- 8.18010010 «Quality, Standardization and Certification» master program «Quality assessment of crop production, water, soil and agricultural chemicals»
- 8.18010021 «Higher School of Pedagogy» Master's Program «Methods of teaching subjects of cycle the crop and processing of products plan»
- 8.18010018 «Administrative Management» Master Program «Management of the production market gardening, vegetable growing, open and closed ground» specialty

Spheres of graduates' employment

Admission to PhD program of NULES of Ukraine and other higher educational institutions, employment in advanced agricultural industrial enterprises, scientific-research institutions of NAAS of Ukraine. Agricultural enterprises of different ownership, regional and district administration, advanced farms, companies, holdings and corporations, scientific-research institutions of NAAS of Ukraine.

Specialist Degree Program and Curriculum in Specialty «Selection and Genetics of Agricultural Crops»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ESTC
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of professional and practical training *					
1	Computerization and mathematical modeling of agricultural technologies	1	90	1,7	2,5
2	Information and advisory support of agriculture	1	72	1,3	2,0
3	Principles of Management and Marketing in breeding and seed production	1	90	1,7	2,5
4	World agriculture, foreign economic activity	1	90	1,7	2,5
Total for the cycles			***342***	***6,4***	***9,5***
1.2. Cycle of natural science (fundamental) training *					
1	Special crop genetics	1	108	2,0	3,0
2	Plant genetic resources	1	72	1,3	2,0
3	Genetic engineering and biotechnology	1	72	1,3	2,0
4	Genetics of plant immune system	1	72	1,3	2,0
5	Special breeding and seed production of vegetables	2	72	1,3	2,0
6	Special selection of forage crops	2	72	1,3	2,0
7	Seed production of vegetable and fodder crops	2	72	1,3	2,0
8	Special breeding and seed production of field crops	2	108	2,0	3,0
9	Yield forecast	1	54	1,0	1,5
10	Management of plant products quality	1	72	1,3	2,0
11	Labor protection in industry	1	54	1,0	1,5
Total for the cycles			***828***	***15,3***	***23,0***
Regulatory part, total			**1170**	**21,7**	**32,5**
2. ELECTIVE ACADEMIC DISCIPLINES					
Specialization 1. State scientific and technical expertise of plant varieties and their legal protection					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of humanitarian, social and economic training					
1	Legal protection of plant varieties	2	90	1,7	2,5
2.1.2. Cycle of natural science (fundamental) training					
1	Inspector supervision and control	2	162	3,0	4,5
2	Environmental and adaptive breeding of field crops	2	162	3,0	4,5
Chosen by the University, total			***414***	***7,7***	***11,5***
2.2. Disciplines, chosen by the student					
2.2.1. Cycle of professional and practical training*					
1	State qualifying examination of sorts of plants	2	90	1,7	2,5
2.2.2. Cycle of natural and science (fundamental) training					
1	Post registration cultivar investigation	2	162	3,0	4,5
Chosen by students, total			**252**	**4,7**	**7,0**
Specialization 2. Seed production					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of humanitarian, social and economic training					
1	Legal protection of plant varieties	2	90	1,7	2,5
2.1.2. *Cycle of natural science (fundamental) training*					
1	Seed-growing of hybrids agricultural cultures	2	162	3,0	4,5
2	Selection and seed-growing of hybrids agricultural cultures	2	162	3,0	4,5
Chosen by the University, total			***414***	***7,7***	***11,5***

2.2. Disciplines, chosen by the students					
2.2.1. Cycle of humanitarian, social and economic training					
1	Examination of plant varieties for patentability	2	90	1,7	2,5
2.2.2. *Cycle of natural science (fundamental) training*					
1	Seed science and methods of seed quality evaluation for industrial crops	2	162	3,0	4,5
Chosen by students, total			***252***	***4,7***	***7,0***
Elective part, total			**666**	**12,3**	**18,5**
Practical training			**216**	**4,0**	**6,0**
Degree examination			**108**	**2,0**	**3,0**
Total, according to specialty			**2160**	**40,0**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Computerization and mathematical modeling of agricultural technologies. Generates knowledge patterns for constructing models production processes of crop production, plant breeding and seed operation, development of solutions for effective management of biotechnological processes. Most of the course is devoted to studying and mastering basic computer technology, which is most widely used in the processing of business information - the study and practical use of textual and tabular processes.

Information and advisory support of agriculture. Discipline promotes mastery of skills information and advice (advisory) work in agriculture. Exploring methods of working with agricultural producers to perception, development and implementation of their innovations, using methods of mass dissemination, group and individual teaching methods and counseling, psychological and ethical aspects advisory

Principles of Management and Marketing in breeding and seed production. Theoretical Foundations of Management and Marketing in plant breeding and seed production, its nature and content, functions, principles, methods. Examines methods for determining and evaluating seed processes of planning and optimization in order to justify economic decisions in the planning and selection of seed. Social foundations of marketing, organization of marketing in the selection process and in the system of seed crops.

World agriculture, foreign economic activity. Patterns, conditions, processes and characteristics and development of world agriculture. Economic system and the overall performance of countries, Ukraine's place in global agriculture. The world market for agricultural products. Legislative and legal aspects of foreign trade, barter transactions, exchange activities, international contracts and business plans.

1.2. Cycle of natural science (fundamental) training

Special crop genetics. The Special Genetics science is the genetics of individual species. It is the knowledge systematization of karyological and genomic analysis, of genetics and phylogenetics of signs, of mutagenesis, of polyploidy, of heterosis and inbreeding, of population’s genetics and other issues of genetics of separate species. This Special Genetics course was designed to show to students the basic nature of the

inheritance of quantitative and qualitative features of species. In this course are shown main questions from the Special Genetics of field crops that are grown in Ukraine: grain, legumes, cereals, oil, forage, and crops for technical purposes. This course includes the general information from biology, morphology and ecology of selected crops and information about source material and areas of genetic research of these crops.

Plant genetic resources. Genetic diversity of species, varieties and forms of plants differ in the direction of use, quality, adaptability, and other agronomic traits. This source material is one of the key factors in ensuring food security and sustained agricultural production. The rapid scientific and technological progress, environmental issues, the disappearance of many wild species, narrowing varietal diversity of cultivated plants is the need to collect and preserve genetic samples of plants. Increasing the value and role of germ plasma through the development of genetics and the use of new technology selection process. Wild species, ancient local varieties and breeding varieties in their genetic systems have many valuable genes, their genetic basis will always be a source of raw material for a new generation of varieties. For efficient use of such material is necessary to know and to use international experience to preserve genetic resources and basic genetics bank plant system for Plant Genetic Resources of Ukraine and the principles of collections of genetic resources, types of collections, the basic genetic centers of origin and shaping plants, their localization and scientific basis of plant introduction.

Genetic engineering and biotechnology. Genetics of plant immune system. Students should be familiarized with modern knowledge concerning immunity, plant immunity, types of plant diseases and pathogens as well as with molecular mechanisms of resistance to pathogens, diagnostics methods and principles of creating plants, which are resistant to pathogens.

Special breeding and seed production of vegetables. The subject matter includes two modules. The first is dedicated to breeding varieties and heterosis hybrids of vegetable crops and especially their seed and the second - the breeding of fruit crops and their rootstocks. In the first module served basis varieties and heterosis hybrids of vegetable crops and breeding processes, the doctrine of initial material, the study of signs. The special attention is given to methods of selection for heat resistance, cold resistance, drought tolerance, etc. The basis of the course selection is modern advances in breeding of cabbage, carrots, cucumbers, tomatoes and other crops. The second module is devoted to breeding varieties, clones and grape fruit crops - apples, pears, strawberries, raspberries, blackberries and other fruit and berry crops. In laboratory studies masters study varietal composition of vegetable and fruit crops and methods of their creation and reproduction in field and laboratory conditions.

Special selection of forage crops. Involves the study of methods of breeding, cultivation technology legumes and grasses for seed, the requirements for varietal and sowing qualities. Breeding and seed production of legumes and cereal grasses includes topics explore source material, biological characteristics of culture, methods and selection schemes, organizing the selection process, through the rapid multiplication of new varieties, seed production system and the scheme of red clover, alfalfa, cereal grasses. There are study techniques for inspection (testing) varietal crops, varietal and seed control in grass seeding.

Seed production of vegetable and fodder crops. Discipline involves review and consolidation of the knowledge of: vegetable seed and forage crops under current conditions, the theoretical principles and methods of selection, state qualifying examination, study basic varietal characteristics, varieties and hybrids of major agricultural cultures that are listed in the State Register of Plant Varieties of Ukraine, the organization

and technology of conducting primary and certified seed, seed concepts of ecology and ecological seed.

Special breeding and seed production of field crops. Special selection of major field crop breeding technology highlights individual cultures based on their biological and genetic characteristics, as well as the existing gene pool. At the present stage in the breeding work of many cultures are widely used polyploidy induced mutagenesis, heterosis based CMS and nuclear male sterility of biotechnology and genetic engineering. To conduct effective seeding operation necessary knowledge and ability to use different methods of selection, to grow seed crops, to conduct species and varieties of cleaning, make a plan and varietal updates, identify varieties and hybrids of major agricultural crops to prevent biological and mechanical clogging varieties and hybrids, the calculations needs seeds, execute documents on varietal and hybrid seeds to store and use this seed.

Yield forecast. Forecast and programming of yield of agricultural crops basing on principle of setting possible level of productivity, which is determined by the biological features of crops, quantitative influence of factors of growth and development of plants, establishment of supply level of these factors in concrete soil-climatic conditions and evaluation of necessity in resources to regulate abovementioned factors. Programming of soil fertility and crop production is directed to regulate organization of agrophytocenosis as system with the view of improvement of maximum its productivity. Population provision with crop production will to realize mainly decide to crop capacity increase, by virtue of scientific and technical progress introduction to agriculture and crop grown. Actions complex for to attention of objective point included programming course of soil fertility and crop production.

Management of plant products quality. The subject of Management of quality of plant products is important in formation the future specialists in the field of agrochemistry. This discipline lets students to master technological service in plant growing technologies for forming of the good quality of plant products. The students train skills in monitoring of the chemical pills and its application in technological processes for increasing of plant products quality in conditions of saving or increasing of soil fertility according to modern market conditions. The task of the course is forming of the theoretical knowledge and the practical skills in the students in the field of optimization of nutritive conditions for plants across using new agrotechnical methods and new technologies for forming high quality of plant products.

Labor protection in industry. It normatively applied discipline that on the basis of analysis of production and harmful factors, caused production processes in agriculture, offers the scientifically grounded measures organizational to prevent an accident rate, traumatism, professional diseases of workers.

2. Elective academic disciplines

Specialization 1. State scientific and technical expertise of plant varieties and their legal protection

2.1. Disciplines, chosen by the University

2.1.1. Cycle of humanitarian, social and economic disciplines

Legal protection of plant varieties. The doctrine of intellectual property. Features a variety of plants, as an object of intellectual property and its transformation into a legal entity. General and specific legislation on the legal protection of plant varieties. International regulations on intellectual property for a plant variety. Types of legal protection. Organizational and administrative enforcement of the legal protection of plant

varieties during their commercial use. Classification and characterization of plant variety rights in the software, and restore features and characteristics of plant varieties established state qualifying examination. System of protection of owners' title documents. Legal protection - the basis of market relations in plant breeding and seed production.

2.1.2. Cycle of natural science (fundamental) disciplines

Inspector supervision and control. Theoretical and practical course of discipline envisages acquisition the students of theoretical knowledge and practical abilities from a state supervision and control after inhibition of manage subjects, regardless of patterns of ownership, requirements of legislation from the guard of rights on the sorts of plants at a production, use, storage, realization and reproduction of seed and planting material of agricultural cultures in the process of recreation and commercial turnover. Students will be acquainted with modern forms and methods of inspector supervision and control, by verification of stored of sorts of agricultural cultures in the process of their commercial turnover.

Environmental and adaptive breeding of field crops. Introduction to the practice resistant to abiotic and biotic factors of the environment of the varieties is the most effective method of increasing the productivity of sorts. A lot of varieties that are resistant to certain negative factors of the environment were withdrawn without understanding the mechanisms of this stability. For increase of efficiency of creation of resistant varieties need to understand the mechanisms of resistance to stress factors. Among the means to achieve an understanding of mechanisms of stability of plants should specify: the accumulation of fundamental knowledge about the protective mechanisms of plants; the study of physiological and biochemical mechanisms, which provide the morphological stability of plants to stress and pathogens; study of existing assessment methods and the creation of the initial material of adaptive to extreme environmental conditions and their improvement and creation of new ones. The main purpose of study of discipline is acquisition by the students of knowledge of the theoretical foundations of adaptive breeding of field crops to stress and the skills of their practical application.

2.2. Disciplines, chosen by students

2.2.1. Cycle of humanitarian, social and economic disciplines

State qualifying examination of sorts of plants. Discipline envisages the study of existent types of scientific and technical examination, complex of the field and laboratory researches on results that an eventual decision is accepted in relation to state registration of sorts(hybrids) of agricultural cultures state registration of rights on them. The theoretical and practical course of discipline will give knowledge to the future specialists on the methods of authentication of sorts of plants and their application during state registration of sorts and acquisition of property right on a sort, as an object of intellectual property. The study of discipline will assist acquisition of skills from determination of indexes of fitness of sort to distribution, criteria of prohibition.

2.2.2. Cycle of natural science (fundamental) disciplines

Post registration cultivar investigation. Discipline envisages the acquaintance of students with an aim and tasks of study of sorts and hybrids of agricultural cultures, with methodical bases and methodical providing of his realization. Receipt of information on the reaction of the new registered varieties (hybrids) of agricultural cultures in relation to firmness them against the extreme factors of environment, most diseases and damages,

comparing to the results of state, financial viability of growing of newly registered varieties and influence of them on volumes and structure of sowing areas, forming of national of high quality resources are the basic divisions of given discipline.

Specialization 2. Seed production

2.1. Disciplines, chosen by University

2.1.1. Cycle of humanitarian, social and economic disciplines

Legal protection of plant varieties. The doctrine of intellectual property. Features a variety of plants, as an object of intellectual property and its transformation into a legal entity. General and specific legislation on the legal protection of plant varieties. International regulations on intellectual property for a plant variety. Types of legal protection. Organizational and administrative enforcement of the legal protection of plant varieties during their commercial use. Classification and characterization of plant variety rights in the software, and restore features and characteristics of plant varieties established state qualifying examination. System of protection of owners' title documents. Legal protection - the basis of market relations in plant breeding and seed production.

2.1.2. Cycle of natural science (fundamental) disciplines

Seed-growing of hybrids agricultural cultures. The primary purpose of discipline is to acquaintant students with scientific bases of receiving stable high harvests of seed of heterosis hybrids and synthetic sorts of the field cultures : corn, sugar beets, sorghums, sunflower, rye winter-annual, canola, alfalfa, clover and others like that, with the systems of seed-grower of these cultures in Ukraine. The discipline studies methods of production of hybrid seed on fertile basis and with the use of cytoplasmic and genic masculine sterility, on the basis of self-sterility, with the use of alarm genes, charts of growing of hybrid seed, feature of reproduction of paternal components of hybrids, realization of internal and state control and other.

Selection and seed-growing of hybrids agricultural cultures. The primary purpose of discipline is to form students theoretical knowledge of the practical plant breeding of agricultural cultures on a heterosis and seed-growing of hybrids, synthetic sorts. Discipline envisages the genetic aspects of heterosis, with the modern state, achievements, tasks to the plant breeding of the field cultures on a heterosis, with the basic stages and methods of creation of interlinear hybrids of corn, sugar beets, sorghum, sunflower, rye winter-annual, canola, and also synthetic sorts of the field cultures, with methodologies of evaluation of plant-breeding material, technology of plant-breeding process. The discipline studies seed-growing of hybrids and synthetic sorts of the field cultures: methods of production of hybrid seed with the use of cytoplasmic and genic masculine sterility, with the use of alarm genes, charts of growing of hybrid seed, feature of reproduction of paternal components of hybrids, realization of internal and state control and other.

2.2. Disciplines, chosen by students

2.2.1. Cycle of humanitarian, social and economic disciplines

Examination of plant varieties for patentability. Quality plants as intellectual property. Biological and legal criteria ability protection plant variety. Concepts and components of the examination procedures for patentability of plant varieties. Formal qualifications and expertise. Sorts of qualifications and application expertise. Varietal

collections in determining patentability grade. Methodological support of qualifying examination. Regulatory and legal framework for state registration of plant varieties. The role and importance of breeding achievements in the formation of high-grade plant resources and their use.

2.2.2. Cycle of natural science (fundamental) disciplines

Seed science and methods of seed quality evaluation for industrial crops. Discipline includes theoretical and practical grounds of inspector service, selection and genetic, seed science, crop science, yield forecast and other branches of classical and modern agronomy, essential for seed science and industrial crop seed quality evaluation. As a result of study of this educational course student should learn methods of seed and seeding material production for main industrial crops, documentation on seeds and sowing qualities of seeds. Provide calculations of supplying farm with seeds and seeding material. Evaluate quality of seed and seeding materials.

2.3. EDUCATION AND RESEARCH INSTITUTE OF ENERGETICS AND AUTOMATION

Director of the Institute – Doctor of technical sciences, Professor
Volodymyr Kozyrskyi

Phone: +38 (044) 527-85-80 E-mail: nni.elektrik@gmail.com
Location: building № 8, r. 16

FACULTY OF ENERGETICS AND AUTOMATION

Dean – Candidate of technical sciences, associate professor
Ivan Radko
Phone: (044) 527-87-81, 527-87-31, fax: (044) 2584151
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Location: building № 8, r. 11

Faculty organizes and coordinates training of specialists in specialty:

7.10010103 «Electrification and Automation of Agriculture»

Department in charge of graduate training:
Electrical supply
Tel: (044) 527-87-29 E-mail: nni.elektrik@gmail.com
Head of Department – Doctor of technical sciences, Professor
Volodymyr Kozyrskyi

Electric machinery and electric technologies
Phone: (044) 527-87-84 E-mail: azhilt@mail.ru
Head of department – Doctor of technical sciences, Professor
Andrei Zhyltsov

Automatics and robotic systems named after acad. I.I. Martynenko
Phone: (044) 527-82-82 E-mail: Lysenko@nauu.kiev.ua
Head of Department – Ph.D., Professor
Vitaliy Lysenko

Electric drives and power technologies
Phone: (044) 527-85-22 E-mail:lchervinky@gmail.com
Head of department – Ph. D. of technical sciences, Professor
Leonid Chervinskyi

Thermal Power
Phone: (044) 527-87-48 E-mail:gorobetsv@ukr.net
Head of department – Ph. D. of technical sciences, Professor
Valeryi Gorobets

Specialist training
in specialty «ELECTRIFICATION AND AUTOMATION OF AGRICULTURE»
field of knowledge «Agricultural technology and energy production»

Form of training, licensed number:	
– full-time	10 persons
– extra-mural	10 persons
Duration of training	1 year
Credits	60 ECTS
Language of training	Ukrainian
Qualification of graduates	Electrical Engineer

The concept of training

Educational activities ensure the fulfillment of state orders and other agreements with entities or individuals for higher education training in accordance with the state standards of higher education. Courses at the Department of Energetics and Automation are based on a systems approach and interdisciplinary learning principles to foster students' broadmindedness non-standard thinking, ability to solve overhead and socio-economic problems in their relationship, and according to the needs of modern production and market labor.

Practical training

Practical training is carried out in the training and research farms of the University: Separated subdivision «Velykosnitynske Education and Research Farm named after O. Muzychenko», Separated subdivision «Education and Research Farm Vorsel», Separated subdivision «Agronomic Research Station», Separated subdivision «Boyarka Forestry Research Station», poultry factories «Ukraine», «Kyyivska», «Havrylivska», greenhouse complex «Pushcha Vodytsa», Public Company «Complex «Teplychnyi», Public Company «Kyyivsilelektro», Public Company «Kyyivelektromontazh», areas of electrical networks of Kyiv, Cherkasy, Zhytomyr and Chernihiv companies «OblEnergo».

Proposed topics for theses

1. Electrification project of technological processes at the plant for processing of livestock products.
2. Electrification project of technological processes at the plant for processing of plant products.
3. The project of automated system of accounting and control of energy consumption.
4. Computer-integrated control system of packaging of dairy products.
5. Intelligent automated process control system.
6. Magnetic treatment of water and nutrient fuel solvents in greenhouses

Academic rights of graduates - applicants can continue their studies at Master degree programs in the related specialty**:**

- 8.100010103 – Electrification and Automation of Agriculture
- 8.100010103 – Energetics of Agriculture

or specialties in the branch of knowledge 1801 «Specific categories»:

- 8.18010010 – Quality, standardization and certification
- 8.18010021 – Pedagogy of Higher School
- 8.18010018 – Administrative management
- 8.18010020 – Educational Institution Management

Spheres of graduates' employment

Engineer of electric technologies. Engineer on repair, maintenance and operation of electrical equipment in animal husbandry. Engineer of electrical installation work, design and estimate work. Engineer of automation in poultry farm, engineer of automated control systems for agricultural production, maintenance engineer of automation systems in the enterprise.

Specialist Degree Program and Curriculum in Specialty «Electrification and Automation of Agriculture»

№	The name of the course, practice	Semester	Number		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1 Cycle of professional and practical training					
1	Energy supply in agriculture	1	144	2,67	4,0
2	Design of electrification, automation and power farming	1	144	2,67	4,0
3	Alternative energy in agriculture	1	108	2,00	3,0
4	Electrical technologies in agriculture	1	144	2,67	4,0
5	Technology maintenance and repair of electrical equipment and automation	1	144	2,67	4,0
6	Labour safety in industry (Electrical)	1	144	2,67	4,0
7	Information technology	2	108	2,00	3,0
8	Computer-integrated technology in electrification and automation in agriculture	2	108	2,00	3,0
9	Electric agricultural machines, units and production lines	1	108	2,00	3,0
Total for the cycles			**1152,0**	**21,33**	**32,0**
Regulatory part, total			**1152,0**	**21,33**	**32,0**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines chosen by University					
2.1.1. Cycle of professional and practical training					
Specialist's program «Automation of agricultural equipment and machinery»					
1	Information technology in control systems	2	72	1,33	2,0
2	Automated control systems in agriculture	2	72	1,33	2,0
3	Engineering in automated control system maintenance	2	72	1,33	2,0
4	Economic calculations in engineering activities	2	72	1,33	2,0
5	Typical technological objects and processes in the fields of agriculture	2	72	1,33	2,0
6	Modeling of biotechnical objects in the field of agriculture	2	72	1,33	2,0
Total for the cycles			**432**	**8**	**12**
Specialist's program «Electrified technologies in agriculture»					
1	Electric drive of actuators in automated equipment	2	108	2,0	3,0
2	Modeling of automated electric drive, machinery and lines	2	108	2,0	3,0
3	Electro technologies of agricultural products processing	2	108	2,0	3,0
4	Engineering activities for power systems maintenance	2	108	2,0	3,0
Total for the cycles			**432**	**8,0**	**12,0**
Chosen by the University, total			**432**	**8,0**	**12,0**
2.2. Disciplines, chosen by students					
Specialist's program «Automation of agricultural equipment and machinery»					
1	Methods and means of modern computer-aided process control in agriculture	2	108	2	3,0
2	Technical equipment, automation equipment and automated control systems	2	108	2	3,0
3	Microprocessor control systems	2	108	2	3,0
4	Optimum automation	2	108	2	3,0
Chosen by students, total			**216**	**4**	**6**

№	The name of the course, practice	Semester	Number		
			Hours	Credits	
				National	ECTS
Specialist's program «Electrified technologies in agriculture»					
1	Design of electrical power and networks	2	108	2	3,0
2	Electromagnetic processing of agricultural products	2	108	2	3,0
3	Design of lighting systems and networks	2	108	2	3,0
4	Optical electro technologies	2	108	2	3,0
5	Electro-ionic technologies in agriculture	2	108	2	3,0
Chosen by students, total			**216**	**4**	**6**
Elective part, total			**648**	**12**	**18**
Practical training			**216**	**4**	**6**
Degree examination			**144**	**2,67**	**4**
Total, according to specialty			**2160**	**40**	**60**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the curriculum

1. Regulatory academic disciplines

1.1. Cycle of professional and practical training

Energy supply in agriculture. External electric networks, substations and rural reserve power. Equipment for power stations and substations. Relay protection and automation. Reliability of power supply. Quality of electricity.

Design of electrification, automation and power farming. Methods of design of electrification, automation and energy in agriculture. Computer technologies in design. Requirements for the project.

Alternative energy in agriculture. Schematics and design features of heating using heat thermal and nuclear power plants, gas compressor stations of gas mains. Method of heat exchangers for heat recovery ventilation air livestock buildings. Theoretical Foundations of cogeneration - a joint production of heat and electricity. Scheme of CHP made based on gas turbines, internal combustion engines and more.

Electrical technologies in agriculture. Electro physical, electrochemical, electro biological factors in nature. The use of strong electric fields. The cultivation of electric shock. Electro and technology. Magnetic processing of materials.

Technology maintenance and repair of electrical equipment and automation. Operation of electrical equipment in agriculture. Operation of transformer substations, switchgear, power lines, motors, lighting setting, electrical and heating equipment, and communications equipment. Adjustment of sensors, controllers, actuators automatic control systems. The procedure of putting into operation mounted systems. Formation and organization of instrumentation and automation products for the agricultural business. Operation of boilers, heat generators and heaters. Operation of water supply and heating systems. Operation of gas plants. Operation of electrical equipment in agriculture.

Labour safety in industry (electrical). Protective measures during normal and emergency operation of electrical installations. Safety in the installation, repair and maintenance of electrical installations. Lightning for agricultural facilities.

Information technology. Computer technology visualization modes and parameters of technological objects and processes. Application packages for processing and transmitting of information. Means of information technology. A global network Internet.

Computer-integrated technology in electrification and automation in agriculture. Work in Windows, Word Processor Word, spreadsheet Excel, image editors, Database Management System Access, scanning and text recognition, work in a computer network system of mathematical calculations Mathcad.

Electrical agricultural machines, units and production lines. Driving characteristics of machines and mechanisms. Principles and electronic control circuit. Complete sets of equipment for automatic control. Experimental methods of driving characteristics.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1 Disciplines of professional and practical training

Information technology in control systems. Computer imaging technology modes and parameters of technological objects and processes. Application packages for processing and transmitting of information. Means of information technology. A global network Internet.

Automated control systems in agriculture. Principles of DCS. Feeds and their characteristics. Identification of facilities management. Control algorithm. Means of control system. Reliability and cost effectiveness of DCS.

Engineering in automated control system maintenance. The procedure of putting into operation of mounted systems. Formation and Organization of instrumentation and automation products for the agricultural business. Network power equipment aftermarket. Groups of activities of after-sales service. Care system as part of the image of the company - the manufacturer.

Economic calculations in engineering activities. Methods of preparation of estimates for the construction of rural energy. Methods of calculating the technical work. Methods of assessing of the cost-effectiveness of engineering solutions.

Modeling of biotechnical objects in the fields of agriculture. Analytical methods for modeling processes. Methods of identification processes. Examples of typical modeling processes. Checking the adequacy of mathematical models of technological processes.

Electric driving of actuators in automated equipment. Driving characteristics of machines and mechanisms. Principles and electronic control circuit. Complete sets of equipment for automatic control. Experimental methods of driving characteristics.

Modeling of automated electric drive, machinery and lines. Options drive. Simulation parameters occasions. Requirements regarding performance and ways to support them. Criteria for parameter optimization drives. Optimization methods. Analysis modes occasions. Management modes of the drive. Technical support**.**

Electrical technologies of agricultural products processing. Processes and electrical equipment in agriculture. Electrical installation with power and electro physical processing of agricultural materials. Basic theory of strong electric fields using seed treatment considering its features. Ozonation. Treatment of electric shock. Power equipment and technology, ultrasound and magnetic material processing.

Engineering activities for power systems maintenance. Procedure for surrender mounted systems in operation. Engineering as a separate sphere of activity. Nomenclature of engineering services. Engineering - Consulting firm. Service as a means of creating a system of relations between the company and client. Network power equipment aftermarket. Care system as part of the image of the company - the manufacturer.

2.2. Disciplines, chosen by students

2.2.1. Disciplines of professional and practical training

Methods and means of modern computerized control in agriculture. Specialized processes as management of facilities and disturbances. Principles of automatic control systems. Automation of technological processes in crop and livestock production. Principles of DCS. Feeds and their characteristics. Description of facilities management. Control algorithm. Means of control system. Reliability and cost efficiency of DCS.

Technical equipment, automation equipment and automated control systems. Principles of DCS. Feeds and their characteristics. Description facilities management. Control algorithm. Means of control system. Reliability and cost effectiveness of DCS.

Microprocessor control systems. Architecture microprocessor and microcomputer, microprocessor programming in Assembler, microprocessor hardware system. Developing and debugging microprocessor systems in agricultural production. Discrete signals, their coding. DAC and ADC. The analysis in the time and frequency domains. Handling and observation. Synthesis of digital systems. Limitations in microprocessor control systems.

Optimum automation. Optimal control Problem. Criteria for optimization of agricultural production. Methods of optimal control theory. Calculation of variations, Pontryagin maximum principle, dynamic programming. Analytical design of optimal controllers. Optimal control for random perturbations. The synthesis of stochastic systems. Optimal observer.

Design of electrical power and networks. Methods for calculating thermal-electric and electro-technological power plants, methods of calculation of electric production lines, design of electric power, characteristics of electrical power systems.

Electromagnetic processing of agricultural products. Mechanism of action of the electromagnetic field in the processing of seed potatoes and aqueous solutions. Indication of the effect of electromagnetic processing. Changing the properties of agricultural products for electromagnetic treatment. Determining of optimal electromagnetic treatment. Effect of electromagnetic processing potato plant growth and development, biometric parameters, yield, storage.

Design of lighting systems and networks. Design of lighting systems. Types of lighting systems. Rationing light levels, light levels, systems, methods of payment. Designing lighting networks. The choice of voltage and power schemes, layout of networks. Methods of selection and calculation of wirings and cables. Security lighting networks. Features of lighting livestock buildings. Methods for calculating the combined (natural and artificial) lighting. Execution of project documentation.

Optical electro technologies. Technological features for installations of radiant energy. Designing of optical energy. Designing of microwave radiation. Ultrasonic treatment plants.

Electro-ionic technologies in agriculture. Characteristics of electric fields and methods of charging particles. Electric separators. Artificial air ionization and electrical filters. Electro spray technology. Power supply units of electron-ion technology.

2.4. EDUCATION AND RESEARCH INSTITUTE OF LAND RESOURCES AND JURISPRUDENCE

Director - Doctor of Law, Professor
Volodymyr Ivanovych Kurylo

Tel.: (044) 259-97-31 E-mail: llp_nni_director@twin.nubip.edu.ua
Location: educational corps № 6, room 212

FACULTY OF JURISPRUDENCE

Dean – PhD in Law, Associate Professor
Yara Olena Serhijivna
Tel.: (044) 259-97-25 E-mail: lawyer_dean@twin.nubip.edu.ua
Location: educational corps № 6, room 231

Faculty organizes and coordinates the training process of specialists in specialties:

7.03040101 «Law Science»

Department in charge of graduate training:

Theory and History of State and Law
Tel.: (044) 259-97-25 E-mail: historylaw_chair @twin.nubip.edu.ua
Head of the Department – PhD in Law, Associate Professor
Kachur Vira Olehivna

Administrative and Finance Law
Tel.: (044) 259-97-25 E-mail: adminlaw@twin.nauu.kiev.ua
Head of the Department – Doctor of Law, Professor
Kurylo Volodymyr Ivanovych

The Department of Civil and Commercial Law
Tel.: (044) 259-97-25 E-mail: civillaw_chair@twin.nubip.edu.ua
Head of the Department– PhD in Law, Associate Professor
Pankova Lilia Oleksandrivna

V.Z. Yanchuk Department of Agricultural, Land and Environmental Law
Tel.: (044) 259-97-25 E-mail: agrolaw_chair @twin.nubip.edu.ua
Head of the Department – Doctor of Law, Professor
Yermolenko Volodymyr Mykhajlovych

International Law and Comparative Law
Tel.: (044) 259-97-25 E-mail: interlaw_chair @twin.nubip.edu.ua
Head of the Department – Doctor of Law, Professor
Ladychenko Viktor Valerijovych

Specialist training
in specialty «LAW SCIENCE»
field of knowledge «Jurisprudence»

Form of training, licensed number:	
-full-time	60 people
- extra-mural	75 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Ukrainian
Qualification of graduates	Specialist in law

The concept of training

Professional activities of specialist in the sphere of law is associated with the implementation of legislative, executive, law enforcement, research - educational and monitoring activities. Special attention is paid to the ability to realize law implementation and law enforcement powers.

Practical training

The aim of the practice is to obtain practical skills and ability to use normative legal acts, law enforcement and interpretation acts by students, to determine peculiarities of acts by their hierarchical subordination on the principles of time, area and number of subjects. This knowledge will enable lawyers - practitioner to find optimal way of solution of difficult legal problem and to achieve its implementation through the competent public authorities.

Proposed topics for theses

1. Legal principles of ensuring ecological safety of food.
2. Legal regulation of advertising.
3. Institute of adoption in the legislation of Ukraine.
4. Legal regulation of management in the sphere of land use and protection.
5. Formation and development of legislation of Ukraine during the period of Ukrainian Revolution (1917-1921).

Academic rights of graduates – they can continue education under programs of preparation of masters (in terms of contract with natural or legal persons) in specialty related to a specialty under which they studied by the program of preparation of specialists:

8.03040101 - «Jurisprudence»

or specialties of knowledge 1801 «Specific categories»:

8.18010021 – «Pedagogy of higher school» master program «Methods of teaching of the cycle of legal disciplines»;

8.18010020 – «Management of educational institution».

Spheres of graduates' employment

Graduates with a higher education qualification «Specialist» of specialty «Jurisprudence» may occupy the following positions: employee of the bodies of the Verkhovna Rada, the administration of President, the Apparat of the Cabinet of Ministers of Ukraine, the Ministry of Agrarian Policy and Food of Ukraine, the State Agency of Land Resources of Ukraine and their divisions, judge, prosecutor, investigator, notary, lawyer, legal officer of state administration, legal adviser, police officer, employee of the MIN.

Specialist Degree Program and Curriculum in Specialty «Law Science»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Problems of theory of law	1	90	1,7	2,5
2	Land procedural legal relations	1	72	1,3	2
3	Customs legislation	2	126	2,3	3,5
4	Organization of legal work in agricultural sector and environmental management	2	72	1,3	2
5	Problems of administrative legal relations in the agricultural sector of economy	2	36	0,7	1
6	Civil protection	2	36	0,7	1
7	Labor safety in the industry	2	36	0,7	1
Total for the cycle			**468**	**8,7**	**13**
1.2. Cycle of professional and practical training					
1	Commercial law	1	144	2,7	4
2	Stock exchanges law	1	144	2,7	4
3	Tax law	2	108	2,0	3
4	Administrative jurisdiction in the agricultural sector	2	108	2,0	3
5	Forensic jurisprudence and forensic psychiatry	1	72	1,3	2
Total for the cycle			**576**	**10,7**	**16**
Regulatory part, total			**1044**	**19,4**	**29**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training					
1	Judicial rhetoric	1	72	1,3	2
2	Social security law	1	162	3	4,5
3	Legal regulation of quality and safety of agricultural products	2	90	1,7	2,5
4	Legal status of non-business organizations	2	72	1,3	2
Total for the cycle			**396**	**7,3**	**11**
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training					
1	Comparative environmental and land law	1	72	1,3	2
2	International legal principles of integration processes	1	72	1,4	2
3	Registration of land	2	36	0,7	1
4	International legal ensuring of food security	1	72	1,3	2
Chosen by students, total			**256**	**4,7**	**7**
Elective part, total			**256**	**4,7**	**7**
Practical training			**648**	**12**	**18**
Degree examination			**72**	**1,3**	**2**
Total, according to specialty			**396**	**7,3**	**11**
Chosen by students, total			**2160**	**40**	**60**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the curriculum

1. Regulatory academic disciplines

1.1. Cycle of natural science (fundamental) training

Problems of theory of law. Academic discipline is intended to deepen theoretical knowledge obtained by students while studying the discipline «theory of law.» The course involves the study of contemporary approaches to the understanding of the law and their importance for practical activities, problems of legal means, the ratio of national and international law, methodological issues of legal responsibility.

Land procedural legal relations. Discipline «Land procedural legal relations» consists of 2 sections: «General Part» and «Special Part» and involves the study of the general provisions of the theory of law and legislation as for procedural form, limits of its spread in general and land procedural forms, in particular the concept, classification, object, subject, content, grounds of forming, modification and termination of land procedural legal relations.

Customs legislation. Academic discipline involves the study of the current state of the customs legislation of Ukraine, general principles of organization and carrying out of customs activities in Ukraine, provisions regulating economic, organizational, legal, human and social aspects of the Customs Service of Ukraine, powers of customs authorities, whose activities are aimed at creating favorable conditions for the development of Ukraine's economy, protection of rights and interests of subjects of entrepreneurship and citizens, and ensuring law enforcement of customs legislation of Ukraine.

Organization of legal work in agricultural sector and environmental management. Legal work in agricultural enterprises is aimed at strengthening of the rule of law in the agricultural sector. Academic discipline involves the study of the principles and specific implementation of legal services as part of the organizational and administrative activity and form of legal aid in agricultural sector, implementation of legal support by legal service in agricultural enterprises as a condition to ensure proper activities of law enforcement in general and economic courts during execution of justice.

Problems of administrative legal relations in the agricultural sector. Discipline studies problems of the system of administrative legal relations in agriculture of Ukraine. The problems of control in agriculture of Ukraine, subjects of administrative jurisdiction in agricultural sector and their powers and performed classifications are examined.

Civil protection. Discipline «Civil protection» examines issues related to the risk of negative social impacts on society, management and ensuring favorable conditions for sustainable livelihood of population in social and political, spiritual and cultural backgrounds.

Labour safety. Discipline studies the system of remedies of legal, socio - economic, organizational - technical, sanitary - hygienic and medical-preventive character, aimed at maintaining healthy and safe working environment of professionals in the brunch.

1.2. Cycle of professional and practical training

Commercial Law. Academic discipline involves the study of general provisions and legislation on entrepreneurship, notion, its attributes, entrepreneurs and procedures for its legalization, introduction to the legal principles of certain types of business and government regulation in the sphere of monopolies and unfair competition.

Stock exchange law. Infrastructure of the modern market economy, stock exchanges, including commodity exchanges perform their own important function. Functioning of commodity exchanges promotes formation of competitive environment, development of free market of goods, minimizing state intervention in the purveying and sales processes, increase efficiency of many entities. Organization of trade and exchange activities in Ukraine is objectively determined by necessity.

Tax Law. Academic discipline consists of General and Special parts. General part is studying subjects, method of tax law, content of tax law system and sources of tax law, system of legislative acts which regulate principles of taxation, types of subjects of tax legal regulations. Special part studies various types of taxes and special attention is paid to features of taxation in agricultural sector.

Administrative jurisdiction in agricultural sector. Academic discipline includes provisions regarding principles of activities of bodies of administrative jurisdiction in the agricultural sector, mechanism of administrative and legal regulation of relations in the agricultural sector, concept of subjects of administrative jurisdiction in agricultural sector, forms and methods of state executive power and usage of administrative and regulatory responsibility in the agricultural sector, questions of individual administrative jurisdiction of the agricultural sector, its structure and objectives. Special attention is paid to the functions of the Ministry of Agrarian Policy and Food of Ukraine and its departments, state control in agriculture.

Forensic jurisprudence and forensic psychiatry. Forensic jurisprudence as independent discipline occupies one of leading position among legal disciplines of legal higher education, actively promotes the establishment of truth and law enforcement, legality in criminal and civil proceedings. Increasing opportunities of forensic medical examination, implementation of practice of new, more sophisticated and informative research methods lead to the increase of the role and effectiveness of forensic medicine in the detection, investigation and prevention of crime. Therefore, knowledge of current capabilities of forensic medicine and skillful usage of its research results in practice are necessary conditions of preparation of highly qualified specialists - lawyers.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

Judicial rhetoric. Academic discipline consists of two parts. The first part studies general provisions of rhetoric, and the formation history of rhetoric as a science that is the foundation of professionalism of specialist of humanitarian profession. The second part deals with judicial rhetoric: the stages of preparation of judicial speech, judicial kinds of speech (speech of the public prosecutor, defending speech).

Social security law. Academic discipline involves the study of provisions concerning legal regulation of social security in Ukraine, provisions concerning legal status of certain categories of citizens of Ukraine who have a special status according to the law: liquidators of the Chernobyl accident, the disabled, pensioners, citizens with low income, and others.

Legal regulation of quality and safety of agricultural products. General provisions on the requirements and standards of agricultural products with peculiarities of manufacture and sale of certain types of agricultural products are studied. International experience and scientific achievements in the field of quality assurance and food safety in

agriculture are analyzed. A system of bodies of state and public control of quality and safety of products for human health, their competence and process of certification, questions of spread of usage of food and foodstuffs containing genetically modified ingredients in the world practice are studied.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Comparative environmental and land law. The study of this discipline is aimed at obtaining of knowledge on the regulation of land relations in foreign countries and history of formation and development of EU environmental law, introducing a system of environmental legislation of the European Union (in particular, acguis communautaire), main priorities of environmental policy and its implementation mechanism, legal ways of protection of environmental rights of citizens in the European Union.

International legal principles of the integration processes. Discipline involves the study and analysis of globalization and integration processes in different regions of the world. Special focus is on Europe and former Soviet Union. Since these two regions have direct influence on the foreign policy of Ukraine, Ukraine is actively included into the processes of integration in these two regions. In this course the place of Ukraine in the integration and globalization processes in the modern world are examined. Processes of integration in dynamic terms, and in the context of impact of processes of globalization, conditions of strengthening of interdependence of the world before participates of the global political interactions, a number of new problems and challenges are studied.

Registration of land. Discipline Involves the study of general provisions regarding formation of land registration systems and practical aspects of the state registration of land. Teaching of discipline is based on the previous course of land registry and is aimed at teaching students of basic principles of the legal functions of cadaster.

International legal ensuring of food security. Discipline «International legal ensuring of food security» provides knowledge about economic policy, which is aimed at ensuring sustainable food production, its availability to the population under physiological norms of consumption from own production and imports. Fighting with hunger is recognized as a priority of international economic cooperation, so food problem is classified as global, since for its solution efforts of individual states are not enough, and it requires good cooperation of the international community, regardless of social and economic development of the state.

2.5. EDUCATION AND RESEARCH INSTITUTE OF NATURAL SCIENCES AND THE HUMANITIES

Director – Doctor of Chemical sciences, professor
Kopilevych Volodymyr Abramovych

Phone.: (044) 527-84-09, 527-80-50
E-mail: natural_nni_director@twin.nauu.kiev.ua
Location: educational building №2, room 12, 23

FACULTY OF EDUCATION

Dean – candidate of technical sciences, associate professor
Tarasenko Rostyslav Oleksandrovych
Phone.: (044) 527 80 83 E-mail: pedagogy_dean@twin.nubip.edu.ua
Location: educational building № 15-a, room. 237

Faculty organizes and coordinates training of specialists in specialties:

7.01010401 « Professional education»

Department in charge of graduate training:
Pedagogy Tel.: (044) 527-83-55 E-mail: pedagogic@ukr.net
Head of Department - Doctor of pedagogical sciences, professor
Sopivnyk R.V.

Methods of teaching and managing schools
Tel.: (044) 527-83-56 E-mail: metods_chair@twin.nauu.kiev.ua
Head of Department - Doctor of pedagogical sciences, professor
Pryhodiy M.A.

Specialist training
in specialty «PROFESSIONAL EDUCATION» (according to area of study)
field of knowledge «Pedagogical Education»

Forms of training, licensed number:	Persons
– full-time	0
– extra-mural	150
Areas of stydy: - Agronomy	10
- Forestry	10
- Zootechnology	10
- Land Utilization and Cadastre	75
-Economics of Enterprise	25
-Technology of processing agricultural products	20
Duration of training: (extra-mural)	2 years
Credits	58 ECTS
Language of teaching	Ukrainian
Qualification of graduates	agronomist -educator; engineer - educator; vet-educator; zoo engineer-educator; economist-educator; forestry engineer-educator; Land Surveyor -educator;

The concept of training

Training of social educators meets the need of our state in specialists which carry out the work on organization of educational process, methodological work in vocational education, carry out various activities that promote the social development of young people who are studying.

Practical training

Practical training of future educators of vocational training is carried out directly in establishments of vocational education, where they work as a lecturer, and organize teaching and educational process and methodical work.

Academic rights of graduates – they can continue education on master programs in the field of knowledge 1801 «Specific categories»

8.18010010 - «Quality, standardization, certification «
8.18010018 - «Administrative management «
8.18010020 - «Management of educational institution»
8.18010021 - «Pedagogy of Higher School»

Ggraduates' employment

A graduate of EQL «Specialist» with qualification: agronomist - educator, teacher-educator, engineer- educator , doctor of veterinary medicine - educator, zoo engineer - educator, economist-educator, forestry engineer and Land Surveyor - educator, can work as lecturer at vocational educational establishments and higher educational institutions of I - II levels of accreditation.

Areas of training in specialty «Agronomy»

The specialty aims to train specialists, competent to work as main and leading specialists mainly at large agricultural agro-formations, regional departments of agro-policy and provision, in the system of consultative and informational services, which engaged in introduction and scientific accompaniment of perspective scientific, adaptive technologies

of field cultures grooving, resolving of problems of supplying the country's population with food products of high quality, raw material for the recycling industry, supply livestock raising with fodders; also aims to train specialists , competent to study of historical aspects of the theory and methodology of training courses of professional and practical training, laws, principles, forms, methods and means to agronomic training courses, their content , a system of monitoring and evaluation of learning outcomes, improve, design and content modeling disciplines, theory and methods of practical training, planning and organization of the educational process in vocational education theory and practice of education;

Graduates` employment

A graduate of EQL «Specialist» with qualification agronomist-educator can occupy the position of a lecturer at higher educational establishments of I-II levels of accreditation.

Specialty «Forestry»

The specialty aims to train specialists, able to work at higher vocational institutions; they study laws, principles, forms, methods, Forestry and Landscape Architecture, the content of management system and assessment; the theory and methods of practical training, planning and organization of the educational process in vocational education; and also study theory and practice of education.

Graduates` employment

A graduate of EQL «Specialist» with qualification engineer-educator can occupy the position of a lecturer at higher educational establishments of I-II levels of accreditation.

Specialty «Zootechnology»

The specialty aims to train specialists, competent to work at higher vocational establishments; they study laws, principles, forms, methods; specialists study the methods and means of teaching disciplines of technology production and processing of animal products, and veterinary sciences ; the content of management system and assessment; the theory and methods of practical training, planning and organization of the educational process in vocational education; and also study theory and practice of education.

Graduates` employment

A graduate of EQL «Specialist» with qualification zoo engineer-educator or doctor of Veterinary Medicine -educator can occupy the position of a lecturer at higher educational establishments of I-II levels of accreditation.

Specialty «Land Use and Cadastre»

The specialty aims to train specialists, competent to work at higher vocational establishments; they study laws, principles, forms, methods; specialists study the methods and means of teaching disciplines of Land Utilization and Cadastre; the content of management system and assessment; the theory and methods of practical training, planning and organization of the educational process in vocational education; and also study theory and practice of education.

Graduates` employment

A graduate of EQL «Specialist» with qualification Land Surveyor - educator can occupy the position of a lecturer at higher educational establishments of I-II levels of accreditation.

Specialty «Economics of Enterprise»

The specialty aims to train specialists, competent to work at higher vocational establishments; they study laws, principles, forms, methods; specialists study the methods and means of teaching economic disciplines; the content of management system and assessment; the theory and methods of practical training, planning and organization of the educational process in vocational education; and also study theory and practice of education.

Graduates` employment

A graduate of EQL «Specialist» with qualification economist - educator can occupy the position of a lecturer at higher educational establishments of I-II levels of accreditation.

Specialty «Technology of processing agricultural products»

The specialty aims to train specialists, competent to work at higher vocational establishments; they study laws, principles, forms, methods; specialists study methods and means of teaching disciplines of agricultural mechanization, electrification and automation of agricultural production ; the content of management system and assessment; the theory and methods of practical training, planning and organization of the educational process in vocational education; and also study theory and practice of education.

Graduates` employment

A graduate of EQL «Specialist» with qualification engineer - educator can occupy the position of a lecturer at higher educational establishments of I-II levels of accreditation.

Proposed topics for theses

1. Teaching technique of a discipline «Organization of production in institutions of restaurant economy» to the future technologists (using the problem training).
2. Methods of preparing and conducting gaming classes during studying of economic subjects by students of separated subdivision of Slavonic college of Lugansk National Agricultural University.
3. The organization of practical training of technician students on the example of a discipline «Repair of machinery and equipment.»
4. Using the test method of control of educational achievements in the professional training of students (on the example of the discipline «Forest Culture and melioration»).
5. Organization of course design of a discipline «Technical service in agriculture» using computer technologies (for example, specialty 5.10010201 «Maintenance and repair of machinery and equipment of agroindustrial complex»).
6. Methods of workshops on the subject «Plant Protection» for future agronomists on the example of Petrovskyi State Agricultural College.
7. Formation of economic culture of students when studying the subject «Business Economics».
8. The use of pedagogical heritage of A.S. Makarenko in the educational process in «Zalischyky Agricultural College named after E. Khraplyvyi» of NULES of Ukraine.

Specialist Degree Program and Curriculum in Specialty «Professional Education»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Forms of economic development in a market economy	2	54	1,0	1,5
2	Contemporary problems in the field	4	54	1,0	1,5
Total for the cycle			***108***	***2,0***	***3***
1.2. Cycle of professional and practical training					
1	General and vocational pedagogy	1	180	3,3	5
2	General and Professional Psychology	1	180	3,3	5
3	Technical training tools and methods of their use	1	162	3,0	4,5
4	The history of pedagogy and education in Ukraine	1	90	1,7	2,5
5	Basic research in pedagogy	4	54	1	1,5
6	Theory and methodology of vocational training	2	198	3,7	5,5
7	Basics of pedagogical mastery	3	72	1,3	2
The total number of cycles			***936***	***17,3***	***26***
Regulatory part, total			***1044***	***19,3***	***29***
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of Professional and Practical Training					
1	The organization of educational work at the university	4	72	1,3	2
2	Didactic and software computerization of education	2	126	2,3	3,5
3	Ecological Culture of Personality	2	72	1,3	2
Specialty «Agronomy»					
Specialization «Agrochemistry»					
4	Methods of teaching subject «General Agriculture»	3	162	3,0	4,5
Specialization «Agronomy»					
4	Methods of teaching subject «Plant Growing»	3	162	3,0	4,5
Specialty «Technology of processing agricultural products»					
Specialization «Mechanization of animal husbandry»					
4	Methods of teaching subject «Machines and equipment for animal husbandry»	3	162	3,0	4,5
Specialization «Mechanization of plant growing»					
4	Methods of teaching subject «The use of machinery in the agroindustrial complex»	3	162	3,0	4,5
Specialization «Agricultural Electrification and Automation production «					
4	Methods of teaching subject «Theoretical Foundations of Automation»	3	162	3,0	4,5
Specialty «Zootechnology»					
Specialization «Technology of production and processing of livestock products»					
4	Methods of teaching subject «Breeding of Agricultural animals»	3	162	3,0	4,5
Specialization «Veterinary Medicine»					
4	Methods of study of clinical subjects of non-contagious etiology	3	162	3,0	4,5
Specialty « **Economics*»***					
Specialization «Economics and planning of agricultural production»					
4	Methods of teaching subject «Economics *of Enterprise»*	3	162	3,0	4,5
Specialization «Accounting and analysis in Agriculture «					

4	Methods of teaching subject « Accounting»	3	162	3,0	4,5
Specialization «Management and Marketing»					
4	Methods of teaching subject «Management»	3	162	3,0	4,5
Specialty «Forestry»					
4	Methods of teaching subject « Silviculture»	3	162	3,0	4,5
Specialty «Forestry»					
4	Methods of teaching subject « Land Cadastre»	3	162	3,0	4,5
Chosen by the University, total			***165***	***8,0***	***169,5***
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training					
Specialty «Agronomy»					
Specialization «Agrochemistry»					
1	Methods of teaching subject « Plant Protection»	4	126	2,3	3,5
2	Methods of teaching subject « Agrochemistry»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***6***
Specialization «Agronomy»					
1	Methods of teaching subject «Production of forage»	4	126	2,3	3,5
2	Methods of teaching subject «Technology of storage and processing of crop production»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***6***
Specialty «The technology of processing agricaltural products»					
Specialization «Mechanization of animal husbandry»					
1	Methods of teaching subject «Agricultural Machinery and Tools»	4	126	2,3	3,5
2	Methods of teaching subject «Machines and equipment for processing and storage of agriculture products»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***6***
Specialization «Mechanization of plant growing»					
1	Methods of teaching subject «Tractors and cars»	4	126	2,3	3,5
2	Methods of teaching subject «Repair of machinery and equipment»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***216***
Specialization «Agricultural Electrification and Automation production «					
1	Methods of teaching subject «Operation of electrical equipment»	4	126	2,3	3,5
2	Methods of teaching subject «The electric drive and electric equipment»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***216***
Specialty «Zootechnology»					
Specialization «Technology of processing of agricultural products»					
1	Methods of teaching subject «Feeding of agricultural animals»	4	126	2,3	3,5
2	Methods of teaching subject «Technology of livestock production»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***216***
Specialization «Veterinary Medicine»					
1	Methods of study of clinical subjects of non-contagious etiology	4	126	2,3	3,5
2	Teaching Methods of morphological and pathomorphological subjects	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***216***
Specialty «Economics»					
Specialization «Economics and planning of agricultural production»					

1	Methods of teaching subject «Economic Analysis»	4	126	2,3	3,5
2	Methods of teaching subject «Money and credit»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***216***
Specialization «Accounting and analysis in Agriculture»					
1	Methods of teaching subject «Finances»	4	126	2,3	3,5
2	Methods of teaching subject «Audit»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***216***
Specialization «Management and Marketing»					
1	Methods of teaching subject «Marketing»	4	126	2,3	3,5
2	Methods of teaching subject «Finances»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***216***
Specialty «Forestry»					
1	Methods of teaching subject « Forest planting and melioration «	4	126	2,3	3,5
2	Methods of teaching subject « Forest taxation»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***216***
***Specialty* «Land Use and Cadastre»**					
1	Methods of teaching subject « Geodesy»	4	126	2,3	3,5
2	Methods of teaching subject « Regulation Land Relations»	3	90	1,7	2,5
Chosen by students, total			***216***	***4***	***6***
Elective part, total			***648***	***12***	***18***
Practical training			**36**	**0,7**	**1**
Degree examination			**360**	**6,7**	**10**
Total, according to specialty			**2088**	**38,7**	**58**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic disciplines

Forms of economic development in a market economy. Agricultural Complex of Ukraine. The means of production and the organization of their usage; the reproduction in different organizational units.

Contemporary problems in the field. Current status of problem formation and development of industry in Ukraine and abroad. Organizational-economic bases of formation and development of industry, forms of organization in the industry. Calculation of economic efficiency.

1.2. Cycle of professional and practical training

General and vocational pedagogy. Problems in the theory and practice of teaching (pedagogy) profession, training future specialists and management of educational processes.

General and Professional Psychology. Common questions of psychology, especially mental development in phylo-and ontogenesis, the driving forces of mind, mental processes, mental states and properties of the individual features of professional.

Technical training tools and methods of their use. The essence of modern teaching aids and didactic purpose, the basic methods of using teaching aids.

The history of pedagogy and education in Ukraine. Development of the theory and practice of education, education and education from ancient times to the present, in different historical periods, in different socio-economic formations.

Basic research in pedagogy. Pedagogical research methods, organization of scientific research, processing of results of research, teaching experiment.

Theory and methodology of vocational training. Theoretical and methodological foundations of the educational process, the structure of teaching methods, selection and structuring the content of teaching material, organization of training sessions.

Basics of pedagogical proficiency. Content of professional and pedagogical activity of university teacher, component of his pedagogical skills, conditions and means of forming educational technology, development of pedagogical abilities and skills**.**

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

The organization of educational work at the university. Theoretical and methodological foundations of the educational process, the structure of education methods, selection and content of education, organization of educational work in high school.

Didactic and software computerization of education. The place and role of didactic and software training, organizational principles, and didactic application software in the organization of distance learning.

Ecological Culture of Personality. Environmental culture as an adaptive mechanism for sustainable development. The concept of environmental education in Ukraine. Environmental activities as a factor in environmental cultural identity

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Specialty «Agronomy»
Specialization «Agrochemistry»

Methods of teaching subject « General agriculture «. The objectives, content, principles of teaching discipline «General Agriculture», methods, techniques and forms of education, educational planning process.

Specialization «Agronomy»

Methods of teaching subject « Plant Growing». The objectives, content, principles of teaching discipline «Plant Growing», methods, techniques and forms of education, educational planning process. Specialty «Technology of processing of agricultural products».

Specialization «Mechanization of animal husbandry»

Methods of teaching subject «Machines and equipment for animal husbandry». The objectives, content, principles of teaching discipline «Machines and equipment for animal husbandry**»**, methods, techniques and forms of education, educational planning process.

Specialization «Mechanization of plant growing»

Methods of teaching subject «The use of machinery in the agroindustrial complex». The objectives, content, principles of teaching discipline « The use of machinery in the agroindustrial complex **«**, methods, techniques and forms of education, educational planning process.

Specialization «Agricultural Electrification and Automation production»

Methods of teaching subject «Theoretical Foundations of Automation». The objectives, content, principles of teaching discipline « Theoretical Foundations of Automation **«**, methods, techniques and forms of education, educational planning process.

Specialty «Zootechnology»
Specialization «Technology of production and processing of livestock products»

Methods of teaching subject «Breeding of Agricultural animals». The objectives, content, principles of teaching discipline « Breeding of Agricultural animals **«**, methods, techniques and forms of education, educational planning process.

Specialization «Veterinary Medicine»

Methods of study of clinical subjects of non-contagious etiology. The objectives, content, principles of teaching non-contagious etiology discipline, methods, techniques and forms of education, educational planning process.

Specialty «* Economics*»
Specialization «Economics and planning of agricultural production»

Methods of teaching subject «Economics *of Enterprise*». The objectives, content, principles of teaching discipline «Economics *of Enterprise***»**, methods, techniques and forms of education, educational planning process.

Specialization «Accounting and analysis in Agriculture»

Methods of teaching subject «Accounting*».* The objectives, content, principles of teaching discipline «Accounting**»**, methods, techniques and forms of education, educational planning process.

Specialization «Management and Marketing»

Methods of teaching subject «Management». The objectives, content, principles of teaching discipline «Management**»**, methods, techniques and forms of education, educational planning process.

Specialty «Forestry»

Methods of teaching subject «Silviculture». The objectives, content, principles of teaching discipline «Silviculture», methods, techniques and forms of education, educational planning process.

Profile «Agronomy»
Specialization «Agrochemistry»

Methods of teaching subject «Plant Protection». The objectives, content, principles of teaching discipline **«**Plant Protection**»**, methods, techniques and forms of education, educational planning process.

Methods of teaching subject «*Agrochemistry*». The objectives, content, principles of teaching discipline «Agrochemistry», methods, techniques and forms of education, educational planning process.

Specialization «Agronomy»

Methods of teaching subject «Production of forage». The objectives, content, principles of teaching discipline « Production of forage», methods, techniques and forms of education, educational planning process.

Methods of teaching subject «Technology of storage and processing of crop production». The objectives, content, principles of teaching discipline « Technology of storage and processing of crop production», methods, techniques and forms of education, educational planning process.

Specialty «The technology of processing agricultural products»
Specialization «Mechanization of animal husbandry»

Methods of teaching subject «Agricultural Machinery and Tools». The objectives, content, principles of teaching discipline « Agricultural Machinery and Tools», methods, techniques and forms of education, educational planning process.

Methods of teaching subject « Machines and equipment for processing and storage of agriculture products «. The objectives, content, principles of teaching discipline « Machines and equipment for processing and storage of agriculture products», methods, techniques and forms of education, educational planning process.

Specialization «Mechanization of plant growing»

Methods of teaching subject «Tractors and cars». The objectives, content, principles of teaching discipline « Tractors and cars», methods, techniques and forms of education, educational planning process.

Methods of teaching subject «Repair of machinery and equipment». The objectives, content, principles of teaching discipline « Repair of machinery and equipment», methods, techniques and forms of education, educational planning process.

Specialization «Agricultural Electrification and Automation production»

Methods of teaching subject «Operation of electrical equipment». The objectives, content, principles of teaching discipline « Operation of electrical equipment», methods, techniques and forms of education, educational planning process.

Methods of teaching subject «The electric drive and electric equipment». The objectives, content, principles of teaching discipline « The electric drive and electric equipment», methods, techniques and forms of education, educational planning process.

Specialty «Zootechnology»
Specialization «Technology of processing of agricultural products»

Methods of teaching subject «Feeding of agricultural animals». The objectives, content, principles of teaching discipline « Feeding of agricultural animals», methods, techniques and forms of education, educational planning process.

Methods of teaching subject «Technology of livestock production». The objectives, content, principles of teaching discipline « Technology of livestock production», methods, techniques and forms of education, educational planning process.

Specialization «Veterinary Medicine»

Methods of study of clinical subjects of non-contagious etiology. The objectives, content, principles of teaching non-contagious etiology discipline, methods, techniques and forms of education, educational planning process.

Teaching methods of morphological and pathomorphological subjects. The objectives, content, principles of teaching morphological and pathomorphological discipline, methods, techniques and forms of education, educational planning process.

Specialty «Economics»

Specialization «Economics and planning of agricultural production»

Methods of teaching subject «Economic Analysis». The objectives, content, principles of teaching discipline «Economic Analysis», methods, techniques and forms of education, educational planning process.

Methods of teaching subject «Money and credit». The objectives, content, principles of teaching discipline «Money and credit», methods, techniques and forms of education, educational planning process.

Specialization «Accounting and analysis in Agriculture»

Methods of teaching subject «Finances». The objectives, content, principles of teaching discipline «Finances», methods, techniques and forms of education, educational planning process.

Methods of teaching subject «Audit». The objectives, content, principles of teaching discipline «Audit», methods, techniques and forms of education, educational planning process.

Specialization «Management and Marketing»

Methods of teaching subject «Marketing». The objectives, content, principles of teaching discipline «Marketing», methods, techniques and forms of education, educational planning process.

Methods of teaching subject «Finances». The objectives, content, principles of teaching discipline «Finances», methods, techniques and forms of education, educational planning process.

Specialty «Forestry»

Methods of teaching subject «Forest planting and melioration». The objectives, content, principles of teaching discipline « Forest planting and melioration», methods, techniques and forms of education, educational planning process.

Methods of teaching subject «Forest taxation». The objectives, content, principles of teaching discipline «Forest taxation», methods, techniques and forms of education, educational planning process.

Specialty «Land Utilization and Cadastre»

Methods of teaching subject «Geodesy». The objectives, content, principles of teaching discipline «Geodesy», methods, techniques and forms of education, educational planning process.

Methods of teaching subject «Regulation Land Relations». The objectives, content, principles of teaching discipline « Regulation Land Relations», methods, techniques and forms of education, educational planning process.

2.6. SOUTHERN FILIAL OF NULESU «CRIMEAN AGRO TECHNOLOGICAL UNIVERSITY»

Director – Candidate of sciences in Agriculture, Professor
M. Melnykov
Telephone: (0652) 22-72-67 E-mail: rectorat@csau.crimea-ua.com
Educational building №1

FACULTY OF AGRONOMY

Dean – Candidate of sciences in Agriculture, Associate Professor
M. Melnykov
Tel.: (0652) 26-33-46 E-mail: dec_agro@mail.ru
Educational building №1, 221 room

Faculty organizes and coordinates the training process of specialists in specialties:

7.09010101 «Agronomy»

Department of graduate training:
Plant, selection, storing and processing of agricultural products
Tel.: (0652) 26-35-31 e-mail: nikolaevewgen@ukr.net
Head of the chair – Doctor of science in Agriculture, Professor
Ye. Nikolayev

Agriculture, general and agricultural chemistry
Tel.: (0652) 26-33-79 e-mail: osenniyng@ukr.net
Head of the chair – Candidate of sciences in Agriculture, Professor
M. Osinniy

7.09010104 «Fruit and Vegetable Science and Viticulture»

Department in charge of graduate training:
Technology of production, storing and processing of fruits
Tel.: (0652) 26-33-35 e-mail: vi.kopilov@mail.ru
Head of the chair – Doctor of sciences in Agriculture, Professor
V. Kopylov

Technology of production, storing and processing products of vegetable-growing and standardization
Tel.: (0652) 26-33-38 e-mail: viktor_turbin@mail.ru
Head of the chair – Doctor of sciences in Agriculture, Professor
V. Turbin

Viticulture
Tel.: (0652) 26-33-35 e-mail: dikan_vitis@ukr.net
Head of the chair – Doctor of sciences in Agriculture, Professor
O. Dikan

FACULTY OF FORESTRY AND PARK-GARDENING

Dean - Candidate of Agricultural Science, Associated Professor
O. Bagatska
Phone: (0652) 26-36-31 E-mail: obagackaya@yandex.ru
Location: building № 2 room. 416

Faculty organizes and coordinates the training process of specialists in specialties:

7.09010301 «Forestry»

Department in charge of graduate training:
Hunting, forestry and forest ecology
Phone: (095) 0409212 e-mail: vilysenk@rambler.ru
Head of chairs – Doctor of Sciences, Professor
V. Lysenko

7.09010303 «Park and Gardening Management»

Department in charge of graduate training:
Fitodesign and botany
Phone: (0652) 26-35-58 e-mail: an.yena@agmail.com
Head of chairs – Doctor of Sciences, Associated Professor
A. Yena

FACULTY OF VETERINARY MEDICINE

Dean – Candidate of Veterinary Sciences, associate professor
V. Skrypnyk
Tel.: (0652) 26-34-33 E-mail: vetmedksau@mail.ru
Location: educational building No. 1, room 210

Faculty organizes and coordinates the training process of specialists in specialty:

7.11010101 «Veterinary Medicine»

Department in charge of graduate training:
Noncontagious Pathology and Parasitology
tel.: (0652) 26-36-79 E-mail: vetmedksau@mail.ru
Head of the chair - Doctor of Veterinary Sciences, Associate Professor
H. Lukyanova

Anatomy and Physiology of Domestic Animals
tel.: (0652) 26-35-32 E-mail: vetmedksau@mail.ru
Head of the chair - Doctor of Veterinary Sciences, Professor
B. Kryshtoforova

Microbiology, Epizootology and Veterinary Sanitary Inspections
tel.: (0652) 26-31-42 E-mail: vetmedksau@mail.ru
Head of the chair - Doctor of Veterinary Sciences, Professor V. Kovaliov

FACULTY OF PRODUCTION MECHANIZATION AND TECHNOLOGIES OF AGRICULTURAL PRODUCTS PROCESSING

Dean - Doctor of sciences, Associate Professor
Yu. Herber
Phone: (0652) 26-34-89; 26-31-78 E-mail: tehfac@mail.ru;
Educational building № 2, room 2/314

Faculty organizes and coordinates the training process of specialists in specialties:

7.10010203 «Mechanization of agriculture»

Department in charge of graduate training:
Agricultural machinery
Tel.: (0652) 26-35-98 E-mail: men-nauka@mail.ru
Head of the chair – Doctor of sciences, Professor
I. Berenshtein

Mechanization, energy and technical services
Tel.: (0652) 26-38-23 E-mail: kaf.meh @ rambler.ru
Head of the chair – Doctor of sciences, Professor
L. Babytskyi

7.05170102 «Technologies of fats and fat substitutes»

Department in charge of graduate training:
Technologies and equipment of fats and essential oils
Tel.: (0652) 26-34-89 E-mail: tehfac@mail.ru
Head of the chair – Doctor of sciences, Professor
V. Shlyapnikov

7.05170106 «Technologies of products of fermentation and viticulture»

Department in charge of graduate training:
Winemaking and fermentative production
Phone.: (0652) 26-34-12 E-mail: tehfac@mail.ru
Head of the chair – Doctor of sciences, Professor
Ye. Sholz-Kulikov

7.05170108 «Technologies of milk preservation, conservation and processing»

Department in charge of graduate training:
Technology and equipment production and processing of livestock products
Phone: (0652) 26-31-78 E-mail: tehfac@mail.ru
Head of the chair – Doctor of sciences, Associate Professor
Yu. Herber

FACULTY OF LAND MANAGEMENT AND GEODESY

Dean – Candidate of Agricultural Science, Associated Professor
M. Krainiuk
Tel.: (0652) 26-38-75 E-mail: dekankms@ukr.net
Educational building № 2, room 218

Faculty organizes and coordinates the training process of specialists in specialty:

7.08010103 «Land management and Cadastre»

Department in charge of graduate training:
Land management and Cadastre
Tel.: (0652) 26-38-75 E-mail: mkv_1382@mail.ru
Head of the chair: – Doctor of sciences, Professor
V. Salomatin

FACULTY OF ECONOMICS

Dean - Doctor of Economic Sciences, Associate Professor
V. Safonova
Tel.: (044) 26-34-41 E-mail: econom_catu@ukr.net
Location: education building No 1, room 208

Faculty organizes and coordinates the training process of specialists in specialties:

7.03050401 «Economics of enterprise»

Department in charge of graduate training:
Economics and organization of agricultural enterprises
Tel.: (0652) 26-37-21 E-mail: qwerty20003@rambler.ru
Head of the chair - Doctor of Economics, Associate Professor
K. Lebediev

7.03050801 «Finance and Credit»

Department in charge of graduate training:
Finance and Credit
Tel.: (0652) 26-37-24 e-mail: akjallal@mail.ru
Head of the chair - Doctor of Economic Sciences, Professor
Jallal Abdul Kaum

7.03050901 «Accounting and Auditing»

Department in charge of graduate training:
Accounting and Audit
Tel.: (0652) 26-37-38 E-mail: tatyana-lisovaya@ukr.net
Head of the chair - Doctor of Economic Sciences, Associate Professor
P. Maidanevych

7.03060101 « Management of Organization and Administration»

Department in charge of graduate training:
Management and Law
Tel.: (0652) 26-36-59 E-mail: econom_catu@ukr.net
Head of the chair - Doctor of Sociology, Professor
P. Hriyenko

Specialist training
in specialty «AGRONOMY»
field of knowledge «Agriculture and Forestry»

Forms of training, licensed study amount:	
– full-time	40 people
– extra-mural	40 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Ukrainian, Russian
Qualification of graduates	Agronomist

The concept of training

Specialists at the Faculty of Agronomy Southern Branch of the National University of Life and Environmental Sciences of Ukraine «Crimean Agricultural University» conducted in 2002. Faculty organizes and coordinates the educational process aimed at training professionals with knowledge of modern production technologies, storage and initial processing of crop production, horticulture and viticulture, the cultivation of fruit, berries and grapes, plant protection system of modern agricultural chemistry and process technology in crop production, horticulture, horticulture and viticulture and carries cultural and educational work among the students. The organization of the educational process for student's Educational qualification «Specialist» series includes courses for each specialty. This allows graduates to have sufficient theoretical and practical training to work in agricultural enterprises specializing in the production, storage and processing of plant production, production horticulture and viticulture, or continue their education at master and post graduation course**.**

Practical course

Bases practical training of students in «Agriculture» is an experimental field: SB NUL&ES of Ukraine «Crimean Agritechnological University» total area of 110 hectares, educational and scientific plant growing Technology Center (ESPTC), SE Frunze SB NUL&ES of Ukraine, «Crimean Institute of Agriculture of NAAS of Ukraine, JSC Agro № 49, № 55, № 62, № 66, LLC them. Krupskaya of Nijnegorskiy district, JSC Plemzavod «Crimea» of Sakskiy district, ALLC «Shturm Perekopa» of Krasnoperekopskiy district, SPK «Georgia» and LLC « SVP «Agro technology» of Pervomaiskiy district, LLC AF «Friendship of people» and SKhP «Boris-agro» of Krasnogvardeiskiy district, PC «Pobeda» OF Nijnegorskiy district, PSP «Dream» of Sakskiy district, CJSC «Crimean fruit company», TA «Simferopol» of Simferopolskiy district, LLC «Lobanovo-agro» of Dzhankoyskiy district, «Priozernoye-agro» of Sakskiy district, «Primorye-agro», «Bilyaus-agro», «Tarkhankut-agro» of the Black sea region, CJSC «Kakhovsky» of Kakhovskiy district, Kherson region, LLC «Agrolux» of Yakimovskiy district, SE «Revival» of Zaporojskiy region.

Proposed topics for theses

1. Effect of different tillage systems combined with a system of mineral fertilizers in crop rotation on the productivity of crop rotation link busy couples - winter wheat.
2. Effect of different tillage systems in combination with the system of organic fertilizers in crop rotation on yield of spring barley.
3. Scientifically based cropping improvement in LLC «Home» Chornomorsk region of Crimea.
4. Development of fodder PE «Dnepr-Agro» Kahovsky district, Kherson region.

5. Performance of new varieties of winter barley in foothill Crimea.

6. Biological features of Echinacea purpurea and basic techniques of cultivation in the foothills of the Crimea.

7. Ways to improve productivity of crops Salvia officinalis in Agroceh number 3 SE «Ilyich-Agro Zaporozhye» Berdyansk district of Zaporozhye region.

8. Estimation of breeding pairs of sorghum hybrids for sudankovyh-breeding for heterocyst.

Academic rights of graduates - In addition to the specialty «Agronomy» applicants with a bachelor's degree in the direction of «Agriculture» can continue studying the field of knowledge «Agriculture and Forestry»:

8.09010101 - Agronomy;
8.09010102 - Chemistry and soil science;
8.09010103 - Expert appraisal of soil;
8.09010104 - Horticulture and viticulture;
8.09010105 - Breeding and genetics agricultural crops;
8.09010107 - Technology greenhouses;
8.09010108 - Seed and Seed;
8.09010111 - Technology storage and handling of crop production

Spheres of graduates' employment

According to the obtained qualification Bachelor graduates «Specialist» specialty «Agronomy» can occupy the following positions: Chief Agronomist, Head of subsistence agriculture, the head of the brigade, Director (Head) of small agricultural enterprises, agronomist, agronomist aerodrome of seed agronomist, agronomist, plant protection, Agronomist-inspector, agricultural advisers, agricultural expert advisor. Employment of graduates going on in agriculture different enterprises, the State Veterinary and Phytosanitary service, regional and district AIC, leading agricultural state-holds and more.

Specialist Degree Program and Curriculum in Specialty «Agronomy»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Business in agrarian formations	1	90	1,7	2,5
2	Stock market	1	72	1,3	2,0
3	Information and guidance to agriculture	1	90	1,7	2,5
Total for the cycle			***252***	***5***	***7***
1.2 Disciplines, chosen by the University					
1	Agricultural and environmental law	2	72	1,3	2
Chosen by the University, total			**324**	**6**	**9**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. ***Cycle of professional and practical training****					
1	Ecological problems of agriculture	1	108	2	3
2	Ecological and biological plant	1	108	2	3
3	Integrated plant protection	1	108	2	3
4	Phytosanitary monitoring	2	90	1,7	2,5
5	The use of machinery in plant	1	72	1,3	2
6	Safety in the industry	2	54	1	1,5
7	World agriculture and foreign trade	2	72	1,3	2
8	Civil protection	2	36	0,7	1
Total for the cycle			***648***	***12***	***18***
2.2. Disciplines, chosen by the University					
1	Global agricultural technologies	1	108	2	3
2	Adaptive systems of agriculture	2	108	2	3
3	Mechanization of Storage and processing of crop production	2	90	2	2,5
4	Adaptation processes in plant breeding	1	108	2	3
5	GIS technology	2	90	2	2,5
Chosen by the University, total			***504***	***9***	***14***
2.3. Disciplines, chosen by students					
1	Mathematical modeling of agricultural technologies.	1	90	1	2,5
2	Biotechnology in crop production	2	108	2	3
Chosen by students, total			**774**	**14,3**	**21,5**
Elective part, total			**576**	**10,6**	**16**
Practical training			**198**	**3,6**	**5,5**
Degree examination			**270**	**5**	**7,5**
Total, according to specialty			**2160**	**40**	**60**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Business in agrarian formations. The subject studies specific forms of economic laws and the mechanisms of their actions in the specific conditions of agricultural production in order to obtain the greatest number of products the unit land area at the lowest level of effort and cost per unit of output.

Stock market. Economic and administrative matters arising in the course of pre-sales and sales of commodities on the exchange of using the exchange intermediaries.

Information and guidance to agriculture. Theory and Methodology of extension services, development history and current status Agro consulting in the world and in Ukraine. Methods and techniques for transferring people (clients, students, subordinates) their knowledge, skills and experience in using agro consulting application of information technology, elements of information transfer via communication channels.

1.2. Disciplines, chosen by the University

Agricultural and environmental law. Subject agricultural and environmental law, their principles and systems, sources of agricultural and environmental law, its concepts and classification, agrarian relations (concepts, types, characteristics, classification) state regulation of agriculture (content, form, system of government, etc.); Legal Status of Agricultural different actors (farmers, agricultural cooperatives, private farms), especially the reform of agriculture policy.

2. Elective academic disciplines

2.1. Cycle of professional and practical training

Ecological problems of agriculture. The history and development of the main causes of ecological imbalance agriculture. Features of rational structure of land use in Ukraine and its environmental assessment. Content and status of organic matter in the soil as a function of ecological agriculture and its prediction in the rotation. Environmental concerns of pesticides, including herbicides in agriculture. Complex environmentally sound measures to protect crops from weeds. Environmentally sound measures and mechanical tillage systems and their role in agro physical and physical and chemical degradation, protection against erosion and deflation. Fundamentals of Environmental monitoring of agricultural landscapes and use its results in practice agriculture.

Ecological and biological plant. The subject is a field crops and their varieties, features of their biology, eco - biological cultivation technology of high sustainable yields at best quality, relevant set of environmental standards at least cost of labor, equipment, rational expenditure of material and energy resources.

Integrated plant protection. Subject discipline is the integrated application of methods for long-term regulation of the development and spread of harmful organisms to intangible economic level based on forecast economic thresholds of harmfulness, of beneficial organisms, energy and environmental technologies that provide protection for plants and ecological balance of the environment

Phytosanitary monitoring. The subject is to build knowledge and skills of phyto-sanitary control and monitoring agrocenosis, crops and agricultural products.

The use of machinery in plant. Technical support performance engines. The theoretical basis of the production operation of machines and assemblies. Operation of machinery in crop production. Planning and use of machine-tractor fleet (ICC). Transport and loading products in agriculture. Engineering service to agricultural enterprises.

Industry safety. Safety theory in agriculture. Organizational principles of health and safety in agriculture. Current methods for determining the parameters of industrial hygiene factors in agriculture. Arrangements and hardware security in the performance of industrial processes in agriculture. Assessing the impact of safety measures for the environment. Preventive measures to avoid injuries and accidents.

World agriculture and foreign trade. During the course is to acquire specialist knowledge of modern agricultural development as a distinct social economic system, an idea of the place of agriculture in the economy, to get some idea of the level of availability of food (in economic system and for individual countries). The successful formation of the economic outlook of future specialists agricultural market infrastructure and social sectors to ensure its effective functioning is impossible without a thorough study of «World agriculture and foreign trade,» without knowledge of weapons which have reached advanced countries in these areas.

Civil protection. This branch of scientific activity aimed at studying the general laws of danger, their properties, their effects on the human body, basic protection of health and life of man and his environment from hazards, as well as the development and implementation of appropriate means and measures to create and maintain healthy and safe living conditions and human activities.

2.2. Disciplines, chosen by the University

Global agricultural technologies. Trends in agricultural technologies in the world. International experience farming. Ways of integrating agriculture into the global economy Ukraine.

Adaptive systems of agriculture. Historical development of agriculture, the current contents of their components, scientific basis and method of construction

adaptive regulation of agriculture.

Mechanization of Storage and processing of crop production. The subject is the study of technical equipment processing unit farms manning technical equipment lines for processing of grains and oilseeds.

Adaptation processes in plant breeding. The essence and basis of adapting the parameters of agronomic techniques to weather and economic conditions, methods and how to determine reasonable conditions for these parameters of elements of technology of cultivation of major crops.

GIS technology. Is to explore the foundations, methods and structure of geographic information systems agronomic purposes, their use as a base of accurate information technologies in crop production. It discusses issues associated with the collection, storage and analysis of spatially distributed agronomical important data, their use in the development and maintenance of accurate technology growing field crops.

2.3. Disciplines, chosen by students

Mathematical modeling of agricultural technologies. Building models of production processes patterns and crop production development solutions for effective management of biotechnological processes.

Biotechnology in crop production. Theoretical and practical problems of biotechnology crops. Cultivation of isolated cells and tissues. Morphogenesis and regeneration in cultured cells and tissues of plants. Introduction of tissues and cells in culture in vitro. Optimization of culture media. Use microclonal reproduction, cell selection, embryo culture, anther, seed germs to build new plant forms. Genetic Engineering.

Specialist training
in specialty «FRUIT AND VEGETABLE SCIENCE AND VITICULTURE» field of knowledge «Agriculture and Forestry»

Forms of training, licensed study amount:	
– full-time	40 people
– extra-mural	40 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Ukrainian, Russian
Qualification of graduates	Professional of Horticulture and Viticulture

The concept of training

Specialists at the Faculty of Agronomy Southern Branch of the National University of Life and Environmental Sciences of Ukraine «Crimean Agricultural University» conducted in 2002. Faculty organizes and coordinates the educational process aimed at training professionals with knowledge of modern production technologies, storage and initial processing of crop production, horticulture and viticulture, the cultivation of fruit, berries and grapes, plant protection system of modern agricultural chemistry and process technology in crop production, horticulture, horticulture and viticulture and carries cultural and educational work among the students. The organization of the educational process for students Educational qualification «Specialist» series includes courses for each specialty. This allows graduates to have sufficient theoretical and practical training to work in agricultural enterprises specializing in the production, storage and processing of crop production, horticulture and viticulture products or continue their education at master and postgraduate studies.

Practical training

Bases practical training students majoring in «Horticulture and viticulture» is educational and scientific plant growing Technology Center (NNTRTS) and business entities: the Bakhchisaray region - agents «Chernomo-REC» TDG «Magarach» PJSC «Burliuk», LLC «Gardens Tauris», in Dzhankojsky region - LNG Izumrudniy «PCG» Zarya «DHC» Djankoi, in Simferopol region – JV «Krimteplytsa», LLC Agricultural Firm suburban «ATOV» Soviet Ukraine, in the area of Sevastopol - SE «P-with them. P. Osipenko «SE» P-with them. S. Perovskoy «SEC» Kaczynski «FGD» Gardener «SPrAT» Sevastopol, in Krasnogvardejskiy region - VCA them. Kalinin, JSC «Crimean Fruit com-pany», in Nizhnegorsky region - JSC «Pobeda», JSC «Spring» Nizhnogirskiy region, near the southern coast of Crimea - SE «Alushta» SE «Pike» DP «Tauris», SE «Solar Valley» Educational research Station rock-garden in Foros.

Proposed topics for theses

1. Agro biological evaluation of varieties and hybrids of cabbage in Brussels foothill Crimea.
2. Agro biological evaluation of early potato varieties in the foothill zone of the Crimea.
3. Study of feeding area on the yield of tomatoes in glass greenhouses that are not heated in the foothills of the Crimea.
4. Effect of a method of growth grapes Aliquot to yield and quality.
5. Comparative characteristics of stimulants for root cultivation of grafted grape

plants.

6. Study of growth and reproductive processes Peach in different designs intensive plantations in the foothills of the Crimea.

7. Growth and fruiting peach depending on the formation of crown density and planting trees in foothill Crimea.

8. Agrobiological characteristics of growth and reproductive processes of peach varieties in foothill Crimea.

Academic rights of graduates - In addition to the specialty «Horticulture and viticulture» applicants field of study «Agriculture» can continue learning to master the field of knowledge «Agriculture and Forestry»: 8.09010105 - Breeding and Genetics crops; 8.09010102 - Agricultural Chemistry and Soil Science, 8.09010101 - Agronomy.

Spheres of graduates' employment

According gain qualifications graduates educational qualification «Specialist» specialty «Horticulture and viticulture» can take on-foot positions: Chief Agronomist, Head of subsistence agriculture, crew chief, director (manager) of small agricultural enterprises, agronomist, agronomist with seed plant protection agronomist, agronomist-inspector professional with horticulture and viticulture, agricultural advisers, agricultural expert advisor.

Employment of graduates going on in agricultural enterprises different ownership, the State Veterinary department and Phytosanitary service, regional and district management of agriculture, advanced agricultural farms and so on.

Specialist Degree Program and Curriculum in Specialty «Fruit and vegetable science and viticulture»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Psychology of Management.	1	108	2	3
2	Agribusiness and Marketing in gardening horticulture and viticulture.	1	108	2	3
3	Fundamentals of Agricultural Consulting.	2	72	1,3	2
4	Stock exchanges.	1	72	1,3	2
5	Computer technology in gardening, horticulture and viticulture.	2	108	2	3
Total for the cycle			***468***	***8,6***	***13***
1.2. Cycle of natural science (fundamental) training *					
1	Agrarian Law	2	72	1,3	2
Total for the cycle			***540***	***10***	***15***
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Cycle of natural science (fundamental) training *					
1	Applied Genetics Cytology of the basics	2	108	2	3
2	Biochemistry of fruit, vegetables and grapes	2	108	1,5	3
3	Methods of Research in Horticulture case using PC	1	72	1,3	2
4	Global agricultural technologies in horticulture, horticulture and viticulture	1-2	180	3	5
5	Safety in the industry	1	54	1	1,5
6	Biotechnology	1	90	1,5	2,5
7	Civil protection	2	36	1	1
Total for the cycle			***648***	***12***	***18***
2.2. Disciplines, chosen by the University					
1	Winery	1	108	2	3
2	Mechanization of processing fruits, vegetables and grapes.	1	108	2	3
3	Mathematical modeling in gardening, horticulture and viticulture	2	72	1,3	2
4	Commodity fruits, vegetables and grapes.	2	72	1,3	2
Chosen by the University, total			***360***	***7***	***10***
2.3. Disciplines, chosen by students					
1	Special fruit	1	108	2	3
2	Ecological expertise	2	72	1,5	2
Chosen by students, total			**612**	**11,3**	**17**
Elective part, total			**432**	**8**	**12**
Practical training			**180**	**3,3**	**5**
Degree examination			**216**	**4**	**6**
Total, according to specialty			**2160**	**40**	**60**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Psychology of Management. Gaining knowledge and skills to analyze psychological conditions and characteristics of management and their application in modern practice management. Complex psychological problems of human interactions and relationships within their shared social and purposeful activity.

Agribusiness and Marketing in gardening horticulture and viticulture. The study of the theoretical foundations and practical skills of agribusiness and marketing in gardening, horticulture and viticulture. Economic and administrative matters arising in the agribusiness, and implementation of market research.

Fundamentals of Agricultural Consulting. Organization and trends in information and consultation services, communication process and modern information technology in the advisory services. Methods of consulting activities, ethics, aesthetics in the work of consultants, types of information and consultancy services.

Stock exchange. Status and trends of the stock market, the features of exchange operations and specific features of the exchange of goods, economic and administrative matters arising in the course of pre-sales and sales of commodities on the stock exchange with the use of intermediaries.

Computer technology in gardening, horticulture and viticulture. Modern computer technology and its tools. How computer technology with information systems. Types of information systems. Methods of storing and using large amounts of structured information. Database monitoring and examination findings. Using a spreadsheet to solve professional problems. Methodology and technology to analyze data. Using different methods of forecasting for the industry, methods of decision making.

1.2. Cycle of natural science (fundamental) training

Agrarian Law. Subject agrarian law, its principles and systems, sources of agricultural and environmental law, its concepts and classification, agrarian relations (concepts, types, characteristics, classification) state regulation of agriculture (content, form, system of government, etc.), the legal status Agrarian different actors (farmers, agricultural cooperatives, private farms), especially the reform of agriculture policy.

2. Elective academic disciplines

2.1. Cycle of natural science (fundamental) training

Applied Genetics Cytology of the basics. Discipline enables students to broaden knowledge and practical skills in basic and applied fields of genetics and cytology. Key topics include studies studying both general aspects molecular, population genetics and genetics of development and the organization and function of cellular structures and specialized aspects - and Antimutagenesis mutagenesis, aging, mating systems in plants, double fertilization in angiosperms, self-incompatibility, self-fertilization, apomixes in plants, polyploidy, heterocyst major genetic systems, modern genetic techniques used in agriculture, scientific research and genetic engineering.

Biochemistry of fruit, vegetables and grapes. Biochemistry includes general and special parts. General characteristics of the introduced protein, carbohydrates, fats, vitamins, minerals, enzymes and basic biochemical processes occurring in fruits and vegetables. Special parts include material on basic biochemical composition of fruits and vegetables, and changing it during storage and processing.

Methods of Research in Horticulture case using PC. Planning research methods for conducting experiments and processing of results, applications of computer technology in spent the whole complex scientific process of planning the experiment to prepare recommendations or techniques of growing fruits and vegetables, it storage and processing.

Global agricultural technologies in horticulture, horticulture and viticulture. The study of the condition and prospects of the global vegetable and fruit growing in Ukraine and abroad, their trends and directions. Modern science-based technology for growing high-quality planting material. Growing high-quality commercial harvest fruit and vegetable crops to produce environmentally safe products with minimal labor inputs in different soil-climatic zones of Ukraine.

Industry safety. Safety theory in agriculture. Organizational principles of health and safety in agriculture. Current methods for determining the parameters of industrial hygiene factors in agriculture. Arrangements and hardware security in the performance of production processes in agriculture. Assessing the impact of safety measures for the environment. Preventive measures to avoid injuries and accidents.

Biotechnology. Theoretical and practical problems of biotechnology agricultural plants. Cultivation of isolated cells and tissues. Morphogenesis and regeneration in cell culture and plant tissues. The concept of plant cell. Introduction of tissues and cells in culture in vitro. Optimization of nutrient environment. Use microclonal reproduction, cell selection, embryo culture, anther, seed germs to build new plant forms. Genetic Engineering.

Civil protection. Implemented theoretical and practical training of students on the protection of workers in the economy, study ways and means of improving the organization and rescue and other emergency operations while managing accidents, natural disasters.

2.2. Disciplines, chosen by the University

Winery. Based on a study of scientific principles winemaking practical use of technical equipment wineries, rules processing grape processing and wine stabilization, assessment of the quality and characteristics of the finished product, acquiring knowledge on the special technology of different types of wines and brandies.

Mechanization of processing fruits, vegetables and grapes. The subject is the study of the device manufacturing equipment processing farms, manning, equipment facilities for the processing of various agricultural products.

Mathematical modeling in gardening, horticulture and viticulture. Subject discipline is to explore the scientific principles and practical uses of mathematical modeling as a basis for information technology to optimize network elements Horticulture, Viticulture and Vegetables and operational control technology of growing crops in accordance with the actual weather, water regime, soil availability of mineral nutrients and current plantations.

Commodity fruits, vegetables and grapes. The subject is to explore the scientific and methodological foundations of quality produce as object commodity at all stages of the life cycle. The problems of chemical composition and physical properties of food, technical

requirements for quality of fruits, vegetables and grapes. We study the classification of fruits and vegetables by appointment, for a term of storage and quality control methods.

2.3. Disciplines, chosen by students

Special fruit. The subject is to explore the value and prospects of development of certain fruit crops, biological characteristics of seeding, stone fruit and berry crops, new technologies grow high yields of organic fruits and berries in different soil-climatic zones, and observed the ways to improve the quality and measures for its maintenance; methods reducing labor costs and inputs during cultivation.

Ecological expertise. Subject to lay the scientific foundations of conservation and sustainable use of natural resources, the formation of highly stable agro ecosystems.

Specialist training
in specialty «FORESTRY»
field of knowledge «Agriculture and forestry»

Forms of training, licensed study amount:	
– full-time	30 people
– extra-mural	30 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Russian
Qualification of graduates	Master of Forestry

The concept of training

To ensure proper operation of timber at present necessary specialists are able to solve some specific problems of industrial areas. The basis of the formation of the content of training programs forestry engineers put matching the current needs of forestry, ensure a high level of training for their adaptation to the requirements of national and international labor markets, and the relationship of training programs EQL «Specialist» in training programs EQL «Bachelor». The program provides training on a deep understanding of natural forests and forest multivariate relationships with the environment, cultivation and use of forests, ensuring the successful adaptation of graduates at work.

Practical training

By the bases of practical training include: CT «Crimea-aroma», JSC «Agro-firm» Chernomorets, PJSC Burliuk «PSPR» AF «Zelenogorskoe», LLC «Hermes ARC» of PJSC «Crimean Fruit Company», LLC «Agricultural Farm named after NK Krupskaya», JSC «Poultry South», LLC «Osaviahim» and other works, as well as the structural units of the Ministry of Agrarian Policy and Food of the Autonomous Republic of Crimea.

Proposed topics for theses

1. Improving the quality of woodland thinning of forest enterprises.
2. Increased productivity of forest plantations forestry methods.
3. Rehabilitation of shelter forest belts.
4. Natural regeneration of major forest species in forest enterprises.
5. Ways of improving the cultivation of plantations in forest enterprises.
6. Improving the protection of forests from fires in forest enterprises.
7. Sanitary state of forest stands: cell pathogens and insect pests.
8. Current status and characteristics hunting economy in Ukraine.
9. Effect of forest management on hunting economy.
10. Organizing recreational forest in the forest sector.
11. Features establishment of clone plantations in forest management.

Academic rights of graduates - In addition to the specialty «Forestry» applicants with a degree bachelor in the direction of «Forestry and Horticulture» can continue training in the field of knowledge 0901 «Agriculture and Forestry»:

• 7.09010301 and 8.09010301 - «Forestry»;
• 7.09010303 and 8.09010302 - «Landscape Gardening»;
• 8.09010302 - «Hunting»

field of knowledge 1801 «Specific categories»:

• 8.18010010 «Quality, standardization and certification», Master's Program «Management Quality, standardization and certification on the enterprises and

organizations of forestry»;

• 8.1801002 «Higher School of Pedagogy» Master's Program «The aim of the wild-cycle training courses on forestry»;

• 8.18010018 «Administrative Management» Master's Program «Management of Forestry organizations (companies)»;

• 8.18010020 « Institution Management ».

Spheres of graduates' employment

After training at the level «Specialist» graduates can be employed in such companies: State forestry, forestry and hunting and hunting enterprises of the State Agency of forest resources of Ukraine (ranger, chief ranger, forestry engineer, forestry engineer, engineer plantations) Ukrainian center for training, retraining and advanced training of forestry «Ukrtsentrkadrylis» related universities I-IV accreditation levels, the Nature Reserve fund, Ukrainian State Design Institute of Forestry «Ukrdiprolis», Ministry of Ecology and Natural Resources of Ukraine (Researcher).

Specialist Degree Program and Curriculum in Specialty «Forestry»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Business foreign language	1	72	1,3	2,0
2	Forestry management of production	2	72	1,3	2,0
Total for the cycle			**144**	**2,6**	**4,0**
1.2. Cycle of professional and practical training*					
1	Labor Protection	2	72	1,3	2,0
2	Civil protection	1	72	1,3	2,0
3	Management of forest resources	1	72	1,3	2,0
Total for the cycle			***216***	***3,9***	***6,0***
Regulatory part, total			**360**	**19,7**	**29,5**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Cycle of professional and practical training*					
2.1.1 Disciplines, chosen by students					
1	Regulation of forest productivity	2	216	4,0	6,0
2	Forest policy	2	144	2,7	4,0
3	Recreational forest	1	108	2,0	3,0
4	Forest tapping.	2	144	2,7	4,0
5	Hunting	2	180	3,3	5,0
6	Forest-agricultural landscapes	2	144	2,7	4,0
7	Architectonics plants	2	72	1,3	2,0
8	Protective plantations in the ways vehicles	1	108	2,0	3,0
9	Wildness protection	2	144	2,7	4,0
10	Forest Ecology and typology	2	108	2,0	3,0
11	Erosion science	1	72	1,3	2,0
12	Methods of research	1	72	1,3	2,0
Chosen by students, total			***1512***	***28,0***	***42,0***
Elective part, total			**144**	**2,7**	**4,0**
Practical training			**72**	**1,3**	**2,0**
Degree examination			**72**	**1,3**	**2,0**
Total, according to specialty			**2160**	**40,0**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Business foreign language. Speech Etiquette communication: language-model calls rtannya, courtesy, apology, coordination and more. Linguistic and cultural aspects of international exhibitions.Lexico-grammatical and a minimum of linguistic communicative level presentations.Professionally-oriented in-shomovni source.Methods of finding new information in the foreign-language sources.Lin hvistychni methods for analytical processing of foreign sources. Investigation of pre-forged foreign language original

literature and expand vocabulary and grammatical skills. Methods and linguistic features of annotation and summarization inshomov-governmental sources.Electronic foreign-language sources.Finding information on the Internet by using keywords. Fundamentals of Translation professionally oriented inshomov-governmental sources. Machine translation of large volumes of foreign language information.Lek-sychnyy minimum computer (information) technology.

Forestry management of producing. Provides a systematic approach to the study of production management, mastery of organizational, func-tional and official regulation on forest enterprises hospodarst Island, evaluation of personal and professional qualities of workers, develop creative sub-course to study and decision-making, especially in view rectification and specific forestry production.

1.2. Cycle of professional and practical training

Safety in the industry. Legislation on health.Fundamentals of occupational health and industrial hygiene.Providing first to medical care.Provision of healthy working conditions in forestry.

Civil protection. The discipline that studies the theoretical, scientific, technical, technological, economic, environmental, social and political problems that disrupt normal life and activity of people in a specific area (basin) or objects on it (the objects on the sea) due to accidents, natural disasters or dangerous event that led or may lead to the inability to communities living on this territory or facility, conducting an economic activity, loss of life or significant property damage.

Management of forest resources. Description and main features of management of forest resources and forestry businesses. Methods inform decisions in the management of forest resources. The economic risks associated with the management of forest resources and foresting ryyemnytstvom. Management of forest resources in crisis situations.Management of forest resources on the basis of sustainable development.Management of forest resources in the natural reserve fund. Conflicts in lisovykorystanni: Theory and Management. Strategic management in forestry: theoretical foundations and features of the business of forestry.

2. Elective academic disciplines

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Regulation of forest productivity. Discipline is studied after opratsyu-ing software issues with forestry, forest inventory, forest plantations, forest and river reclamation, forest genetics and plant breeding, which can solve the problem of forest productivity and improve their quality comprehensively. Detailed distribution hlyadayutsya-performance concept, its types, nature wood productivity and ways to improve how lisivnytskymy and silvicultural methods in or-blind and breeding and genetic basis.

Forest policy. Basic concepts of the discipline. Subject, purpose and concept of forest-term policy. Levels of forest policy. Basic principles of forest policy. Components of forest policy. Aims and objectives of forest policy.Terms of goals and objectives in Ukraine. Legislation in the field of social, financial and environmental law as instruments of forest policy. Forestry legislation. Forest Code of Ukraine. Analysis of Ro-zpodilu public functions in the forest sector in Ukraine and ways of its reforming. The main functions of the state.

Strategic priorities of forest policy in Ukraine. Environmentalists, CSSR, economic and social aspects of sustainable development. Criteria and indicators of sustainable forest management. The concept of sustainable development in Ukraine. The principles of sustainable forest management. Basic concepts and definitions of certification and forest certification. Features forest policies of European countries.

Recreational forest. The use of forest resources in order to re-kreatsiyi. Subject, tasks recreational forest. Forests for recreation-value characteristic of recreational lands. Impact on forest recreation NASA-tion. Types of forest landscapes.Functional areas in recreational forests. You are the values and setting standards recreational pressures on natural forest complex. Standards recreational activity, their use. Performance-tion of forest recreation in the mountain resort areas. The system of forest management in recreational forests. The organization conducting recreational forest farms by catchment basis, its performance.

Forest tapping. Knowledge of the: anatomic structure of resinaceous system, properties of resin and processed products, stimulants for improving receiving of resin, tools and accessories for tapping work, tapping techniques and technology, technology of chemical processing of wood, resin and pine needles.

Hunting. The history of hunting and hunting.Systematics and biology of game species.Biotehniya.Hunting ordering, inventory and appraisal hunting grounds.Ways and means of extracting wildlife.Types of hunting products.dychynorozvedennya. Fur farming and merchandising.Hunting dog breeding.Hunting legislation. Conservation and protected right. World practice, economics, organization and planning of hunting.

Forest-agricultural landscapes. Crop rotations and farming systems.Land Management and agroforestry ordering.Organization of erosion area.Agroforestry plantations in the structure of FAL - types, placement, efficiency.Forest area.Principles of creation of FAL. The criterion of optimality, optimization model FAL. System of normative reference data for assessing environmental and economic efficiency of FAL.

Architectonics plants. Introduction to the architecture of plants.Building and mechanical design of plants.Plant organs as bending springs.Biological basis architectonic plants.Architectural model of gymnosperms.Architectural fashion-li angiosperms.

Protective planting by the ways of vehicles. Experience the protective afforestation by the ways of vehicles. Types of protective forest planting, their properties and accommodation. Forms of snow accumulation . Categories of snow accumulation bythe ways of transport. Design of protective forest plantations by the ways of transport.Effectiveness of afforestation by the ways of vehicles.

Wildness protection. Principles for Protected Areas and current legislation of Ukraine in the field.List of nature reserves and national parks Ukraine's. Species of plants and animals listed in the Red Book of Ukraine and international agreements and conventions signed by Ukraine, their classification according to the degree of protection. Features of the conditions of existence, distribution, diurnal and seasonal cycles, trophic relationships and interspecific relationships, characteristics of reproduction of rare species of animals and plants of Ukraine and Crimea.Biology and ecological features of protected species.The role of contemporary influence of anthropogenic factors on rare species and the role of environmental and biotechnical measures in their preservation.Features of the role of individual members of rare flora and fauna in the commercial sector, in particular agriculture, forest and Hunting, epidemiology and other fields.

Forest Ecology and typology. The study of forest ecology the necessary theoretical knowledge of forest ecology and skills for management and restoration of forest ecosystems has formed. The basic concept autecology synecology and the impact of environmental factors on forest ecosystems are studied. The need for ecological

approaches to studying the nature of the forest is reveals. Ecological principles approach to the study the processes of formation of forests, forest care outlined the concept of forest typology, its development and use for the purposes of science and practice are emphasizes.

Erosion science. The concept, classification and categories of soil erosion. Water erosion: ancient and modern, factors of development, physical properties and erosion of rain, runoff energy structure. Wind erosion (deflation) dust storms. Prediction of erosion modeling of deflation.Research.Erosive zoning.Methods and properties of eroded soils.Justification zone of erosion.

Methods of research. Scientific topics of research schemes of their conduct.Making scientific documentation.Selection of animals for experiments and their distribution in groups.Development of methodology and organization of research.Settlements area of hunting grounds, food supply, land productivity, species and quantities of game animals.Math (biometric) data processing.Justification of the research results and conclusions.Literary execution of scientific work (qualifying master thesis, scientific articles, abstracts, etc.). Expand the concept of scientific knowledge, science, classification and basic science concepts to the content of research. Set out general information about the methodology and classification research, especially research in the forest and methods used for this purpose. The questions on planning and consistency of research students and young researchers working on the scientific literature.

Specialist training
in specialty «PARK AND GARDENING MANAGEMENT»
field of knowledge «Agriculture and Forestry»

Forms of training, licensed amount:	
– full-time	40 people
– extra-mural	20 people
Year of training	1 year
Credits	60 ECTS
Language of training	Russian
Qualification of graduates	Engineer of gardening farms

The concept of training

Training is focused on the formation of students' knowledge and practical skills in scientific bases of formation and vegetation of different functions, their maintenance and exploitation-ted, reconstruction and restoration of the garden and park facilities development projects current and future plans work on the landscaping and maintenance of green spaces in towns, the use of decorative and hygienic properties of plants to ensure optimal conditions of human life, as well as improving the monitoring of plantations for biodiversity conservation plantings general and restricted use. Provides for the development of students' theoretical knowledge and practical skills in the design of landscape objects of different purpose, economic management, and construction activities at the sites of landscape management, care and planting of ornamental plants, acquiring advanced engineering technologies to create objects of Landscape Architecture , the study of machines and devices that are required during creation, installation and maintenance of garden and park facilities, justification of decision-making and implementation of the operation, reconstruction and restoration of garden and park facilities in accordance with modern requirements management landscape Architecture in Ukraine.

Practical training

Bases practical training is training laboratory faculty, Yalta NSC biology and ecology of Subtropical Plants and Landscape NULESU of Ukraine (Yalta, Crimea), CE «Simzelenbud» plant improvement Bakhchisarai, ME «Belogorskoe public utilities company»; sanatorium «Dream», Evpatoria, ME «Zhytlovoekspluatatsiyne Networks» Krasnoperekopskoyi city Council district management to maintain green spaces, regional and district of communal and green economy.

Proposed topics for theses

1. Project landscaping and planting areas of different functions.
2. Reconstruction Project and Landscape Territorial landscape object.
3. Experience planting area school facilities south of Ukraine.
4. Arboretum assessment of the existing range of gymnosperms (angiosperms) and the prospects of updating collections of decorative forms botanical gardens.
5. Technological features distillation varieties of flowering plants.
6. Features propagation of woody plants.
7. Project vertical planting area.
8. Creating a small garden.
9. Current state and prospects of linear spaces.
10. Interior landscaping project.

Academic rights of graduates - In addition to the specialty «Landscape Gardening» Applicants with a bachelor's degree with a specialty «Forestry and Horticulture» can continue studying the field of knowledge 0901 «agriculture and forestry»:

• 7.09010301 and 8.09010301 - «Forestry»;

• 7.09010303 and 8.09010302 - «Landscape Gardening»;

field of knowledge 1801 «Specific categories»:

• 8.18010010? «Quality, standardization and certification of» Master Program «Management Quality, standardization and certification of enterprises and organizations of forestry»;

• 8.18010021? «Higher School of Pedagogy» Master's Program «Methods of teaching subjects cycle of Landscape Architecture»;

• 8.18010018 «Administrative Management» Master Program «Management of organizations (enterprises) Landscape Architecture»;

• 8.18010020 «Management of the institution»

Spheres of graduates' employment

The graduates of program «Landscape architecture» will be able to work as: junior research worker, planning and organization of public services engineeror specialist, landscape design specialist, park-gardening worker.

Specialist Degree Program and Curriculum in Specialty «Park and Gardening management»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Business foreign language	1	72	1,3	2,0
2	Organization and planning of landscape production	1	108	2,0	3,0
3	Civil protection	1	72	1,3	2,0
Total for the cycle			***252***	***4,6***	***7,0***
1.2. Cycle of professional and practical training					
1	Occupational safety and health	2	72	1,3	2,0
2	Forested farm	1	72	1,3	2,0
3	Ornamental crops and nurseries	2	126	2,4	3,5
4	Fitodesign in closed environment	2	108	2,0	3,0
5	Conservation, rehabilitation and restoration of garden and park facilities	2	144	2,7	4,0
6	Dendrological design	2	108	2,0	3,0
7	Maintenance of garden and park facilities	2	126	2,4	3,5
8	Greenhouse	1	108	2,0	3,0
9	Computer design of garden and park facilities	1	72	1,3	2,0
Total for the cycle			***936***	***17,4***	***26,0***
Regulatory part, total			**1188**	**22,0**	**33,0**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Cycle of professional and practical training					
2.1.1. Disciplines, chosen by the university					
1	Planning and Building Act	1	72	1,3	2,0
2	Farming Green Building	1	72	1,3	2,0
3	Architectonics plants	2	72	1,3	2,0
Chosen by the University, total			***216***	***3,9***	***6,0***
2.1.2. Disciplines, chosen by students					
1	GIS in Landscape gardening	2	144	2,7	4,0
2	Environmental impact assessment	2	108	2,0	3,0
3	Wildness protection	2	144	2,7	4,0
4	Accounting in Landscape gardening	1	72	1,3	2,0
Chosen by students, total			**684**	**12,7**	**19,0**
Elective part, total			**144**	**2,7**	**4,0**
Practical training			**72**	**1,3**	**2,0**
Degree examination			**72**	**1,3**	**2,0**
Total, according to specialty			**2160**	**40,0**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Business foreign language. Studying foreign language to know it within the specialty.Professional vocabulary and grammar minimum.Written business communication, compositing accounts and reports.Speech-communicative peculiarities of verbal presentations.

Organization and planning of landscape production. Types of enterprises Landscape Architecture.Organizational Forms Management of Landscape Architecture.Organization of construction in landscaping cities and towns.Planning as management functions, tasks and planning principles.Fundamentals of Planning in Horticulture.Description of plans and regulations.Planning costs and other economic indicators in Horticulture.Economic management techniques.Legal basis of management.The organization of labor and management labor-governmental groups.Job descriptions.Socio-psychological methods of management.

Civil protection. The discipline that studies the theoretical, scientific and technical, the-hnolohichni, economic, environmental, social and political problems that disrupt normal life and activity of people in a specific area (Ac-vatoriyi) or objects on it (objects The Sea), as a result of accidents, disasters, natural disasters or the first harmful event that resulted or may result in the impossibility-ties in communities living on this territory or facility, conducting an economic activity, loss of life or significant property damage.

1.2. Cycle of professional and practical training

Labour protection. Legislation in the labor protection.Labour hygiene and professional sanitary. First aid. Providing healthy work conditions in park-gardening management

Forest park management. Modern farm woodland park aimed at understanding the biological bases of substance forest laws of its growth and development, ovo-lodinnya methods forest typology, knowledge of various types of timber harvesting, including recreational, learning the basics and techniques of farming in lisopar-tuples and green areas of cities. Using the learned principles and methods of formation of the forest park plantings coming Specialist Landscape Architecture has purposefully environmentally correctly generate forest park landscape with regard to characteristics of growth and development of trees, shrubs and grassland plant communities that are resistant to anthropogenic stress and adverse environmental factors.

Ornamental crops and nurseries. Activity ornamental develop-sadnykiv Anatomical and biochemical tests assessing the quality of seeds and seed selection. Ecological bases of seed ornamentals. Form-ing zones of optimal organization of seed and seed farms. Be-hetatyvne reproduction of flowering plants.Viability, germination and economic suitability of seeds.The method of determining sowing qualities of seeds.The work of seed inspections.State standards for quality seed.

Inner phytodesign. The «Inner phytodesign» subject gives theoretical and practical knowledge about the phytodesign of the specific Earth regions plants, forming of the longlasting groupings of a leafy-decorative and flowering subtropical and tropical plants to the future specialists, acquaints with the rules of their keeping. It studies the rules of creating compositions and combination plants according to ecological, decorative and

functional principles in different types and styles of interior, opens specifics of keeping plants in this type of compositions.

Reconstruction and restoration of landscape-gardening objects. Forming of professional approach to the accomplishment of reconstruction, concervation, adaptation, and protection of existing landscape architecture objects is the main task for landscaping specialist. Discipline takes the leading part in the landscaping cycle disciplines, because the bigger part of town's complex green zone objects are the objects of reconstruction and restoration.

Dendrological design. The subject observes the main principles of projecting green plantations systems, specifics of landscape-dimensional and landscape-planning composition, peculiarities of woody plants assortment selection during the creating of main plantations elements of composition. When studying the subject students consider physionomical types of woody plants according to L.I. Rubtsov.

Landscape gardening objects exploitation. Landscape gardening objects exploitation is an important part of town planning and city economy complex. It includes a number of different complicacy problems, connected with the building of landscape gardening objects, creating, forming, and keeping their important part – green plantings. Landscape gardening objects exploitation is a complicated complex of measures, which provide the solution of different tasks of law, agrotechnical, aesthetic, organizational, economical-exploitational, economical character, directed to creation, forming and keeping landscape gardening objects of different functional purposes.

Greenhouse farming. Detailed studying of the technologies of blooming plants on the industrial base; acquainting with the main types of pests and measures of pest control expects deeper studying of technological processes, detailed familiarization with technologies of growing different flower production, accounting of industrial space requirement, organization of the manufacturing process and as a result – organization of greenhouse facility with taking into account specifics of its work.

Computer design technologies. Designing of park-gardening objects using computer programs. Students perform the course project within such programs as ArhiCAD, REALTIME, Photo Land Designer, SIERRALANDDESIGNER 3D, etc.

2. Elective academic disciplines

2.1. Disciplines, chosen by the university

2.1.1. Cycle of professional and practical training

Planning and building. The main provisions of the law of Ukraine «On the regulation of urban development» Composition of urban planning.Principles of planning of urban areas.Features of land relations in urban planning.The legislative framework of legal regulation of vegetation communities.

Farming green building. Terms of drafting and documentation at the facilityof landscaping.Use of composition of basic soil-mixtures in green building. Standards of quality planting materials of trees, shrubs, flowers, lawns, basic principles of training trees, shrubs, flowers and lawns to transplantation. Basic rules for landing operations. Rules seem-ingobject for use.

Architectonics plants. Introduction to the architecture of plants.Builders and mechanical designs of plants.Plant organs as bending springs.Biological basis-architect of nicknames plants.Architectural model of gymnosperms. Architectural models coated tonasinnyh plants.

2.1.2. Disciplines, chosen by students

GIS in Landscape gardening. Technologies-CNU structure of geographic information systems. Methods for the analysis of spatially organized their raster data. Methods for analyzing spatial vector data organized. Methods of processing and attribute data.Spatial modeling.Implementation of spatial queries on the surface.Basic GIS software.Types of information in the garden - Gardening and features of their organization. GIS - Technologies in Horticulture.

Environmental impact assessment. Course of discipline «Ecological examination» studies the estimation of possible influence of the envisaged or pre-arranged activity on the state of environment, its accordance to the requirements of ecological legislation

Wildness protection. Principles for Protected Areas and current legislation of Ukraine in the field.List of nature reserves and national parks Ukraine. Species of plants and animals listed in the Red Book of Ukraine and international agreements and conventions signed by Ukraine, their classification according to the degree of protection. Features of the conditions of existence, distribution, diurnal and seasonal cycles, trophy-scopic relationships and interspecific relationships, characteristics of reproduction of rare species of animals and plants of Ukraine and Crimea.Biology and ecological features of species-Ochoronyayutsya.The role of contemporary influence of anthropogenic factors on rare species and the role of environmental and biotechnical measures in their preservation.Features of the role of individual members of rare flora and fauna in the commercial sector, in particular its agriculture, Lesnoi and Hunting, epidemiology and other fields.

Accounting in Landscape gardening. Main concepts of the accounting.Accounting balance. Documents, inventory and organization forms of accounting. Audit and audit activities

Specialist training
in specialty «VETERINARY MEDICINE»
field of knowledge «Veterinary Medicine»

Forms of training, licensed amount:	
– full-time	30 people
Years of training	5 years 6 months
Credits	292 ECTS
Language of training	Ukrainian, Russian
Qualification of graduates	The doctor of veterinary medicine

The concept of training

Training of specialists focused on providing agricultural Crimea and southern Ukraine competitive doctors of veterinary medicine who have professional competencies and qualities required in medical practice for the implementation of preventive measures to prevent infectious, parasitic and noninfectious diseases, general of the measures of healthy livestock animals to evaluate the effectiveness of clinical supervision for healthy and sick animals, to be able to properly use medical - technical and veterinary equipment, tools and equipment in the laboratory, diagnostic and therapeutic purposes, as well as understanding of techniques of clinical research animals, appointment required treatment according to diagnosis, and implement prevention, diagnosis and treatment of animals.

Practical training

Specialists carried out in teaching - scientific technological livestock center, regional state veterinary laboratory Autonomous Republic of Crimea, advanced economies, regional and municipal enterprises of Veterinary Medicine, regional veterinary laboratories, laboratories, veterinary and sanitary examination of commercial mortgages, slaughterhouses, dairies and other businesses to processing of livestock products and poultry.

Proposed topics for theses

1. Effect of preparation «Batsell plus» on condition rumen digestion in ewes
2. Diagnosis and treatment of gastroenteritis calves.
3. Epizootological features and treatment and preventive measures for horsesanoplotsefalyaes.
4. Diagnosis and treatment of dyspepsia calves.
5. Etiology, diagnosis and treatment of liver in dogs.
6. Etiology, diagnosis and treatment of hyperthermia cows.
7. Study of various methods of diagnosis and treatment ollulanoz pigs.
8. Etiology, diagnosis, treatment and prevention of nutritional anemia lactating goats.
9. Treatment of nutritional anemia pigs using suiferovit and vitamin D.
10. Etiology and clinical and pathologic diagnosis of diabetes in dogs

Academic rights of graduates - Applicants with a degree from a specialist can continue their studies in the Master Programme in «Veterinary Medicine» (by) the field of knowledge 1101 «Veterinary» qualification «Doctor of Veterinary Medicine»

Spheres of graduates' employment

According to the obtained qualification «Doctor of Veterinary Medicine» graduates specialists are able to hold the posts of doctor of veterinary medicine small animal clinics, physician-microbiologist, physician - epizootologist, the doctor - parasitologist, physician, immunologist, a doctor - patomorfolohist.

Specialist Degree Program and Curriculum in Specialty «Veterinary Medicine»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Cultural	1	81	1,5	2,25
2	Ukrainian language	1	81	1,5	2,25
3	Latin language (terminology)	1	108	2	3
4	Foreign Language	2,3	216	4	6
5	Physical Education	2,4	216	4	6
6	Philosophy	2	108	2	3
7	History of Ukraine	1,3	189	3,5	5,25
8	Sociology	10	81	1,5	2,25
9	Politics	5	54	1	1,5
10	Law	10	81	1,5	2,25
Total for the cycle			***1215***	***22,5***	***33,75***
1.2. Cycle of natural science (fundamental) training					
1	Bioinorganic Chemistry	1	135	2,5	3,75
2	Biophysics	1	108	2	3
3	Zoology	1	45	0,8	1,25
4	Botany	1	45	0,8	1,25
5	Genetics	1	45	0,8	1,25
6	Organic Chemistry	2	81	1,5	2,25
7	Biochemistry of the basics of physical and colloid chemistry	2,3	216	4	6
8	Safety		54	1	1,5
Total for the cycle			***729***	***13,4***	***20,25***
1.3. Cycle of professional and practical training *					
1	Anatomy	1,2,3	351	6,5	9,75
2	Genetics in Veterinary Medicine	2	108	2	3
3	Eco in Veterinary Medicine	2	81	1,5	2,25
4	Cytology, histology and embryology	2,3	216	4	6
5	Animal physiology	3,4	258	4,8	7,17
6	Feeding of animals	4	144	2,7	4
7	Basics of breeding	4	108	2	3
8	Veterinary Microbiology	4	108	2	3
9	Veterinary Immunology		81	1,5	2,25
10	Physiopathology	4,5	216	4	6
11	Veterinary virology	5	162	3	4,5
12	Zoo hygiene	5	150	2,8	4,17
13	Pharmacology.	5,6	216	4	6
14	Biotechnology in veterinary medicine	6	108	2	3
15	Veterinary radiobiology	6	108	2	3
Total for the cycle			***2415***	***44,8***	***67,1***
	1.4. Cycle of professional and practical training				
1	Professional Ethics	5	45	0,8	1,25
2	Clinical diagnostics	5,6	216	4,4	6
3	Operative surgery and topographic anatomy	6,7	162	3	4,5
4	Obstetrics, Gynecology and Reproduction Biotechnology	6,7,8	270	5	7,5
5	Pathological anatomy, autopsy and forensic veterinary	6,7,9,11	270	5	7,5
6	Clinical biochemistry	7	96	1,8	2,67

7	Toxicology (medicinal and poisonous plants)	7,8	144	2,7	4
8	Management in the vet. medicine	7	243	4,5	6,75
9	General and special. surgery	7,8,9	270	5	7,5
10	Veterinary-sanitary examination	8,9	216	4	6
11	Parasitology and invasive disease	8,9,11	270	5	7,5
12	Epizootology and infectious diseases	8,9,10	378	7	10,5
13	Domestic animal diseases	8,9,10	378	7	10,5
14	The organization and economics of veterinary affairs	10	135	2,5	3,75
Total for the cycle			***3093***	***57,7***	***85,92***
Regulatory part, total			***4248***	***79***	***118***
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the university					
2.1.1. Cycle of natural science (fundamental) training *					
1	Physical Education	1,2	72	1,3	2
2	Anatomical features of domestic animals	1	144	2,7	4
3	Botany	1	90	1,7	1,5
4	Zoology	1	90	1,7	1,5
5	Feeding of animals	4	90	1,7	1,5
6	Basics of breeding	3	90	1,7	1,5
7	History of Veterinary Medicine	1	72	1,3	2
2.1.2. Cycle of professional and practical training					
1	Veterinary-sanitary examination	8	72	1,3	2
2	Veterinary radiobiology	4	72	1,3	2
3	Obstetrics, Gynecology and Animal Reproduction Biotechnology	6	108	2	3
4	Epizootology and infectious diseases	6,7,8	108	2	3
5	General and Special Surgery	6,7	108	2	3
6	Parasitology and invasive disease	6,7	108	2	3
7	Pathological anatomy and dissection	7,89	108	2	3
8	Clinical diagnostics	4,5	108	2	3
9	Domestic animal diseases	6,8	108	2	3
10	Veterinary Pharmacology	5,6	108	2	3
11	Veterinary toxicology	7	72	1,3	2
12	The organization and economics of veterinary affairs	6	72	1,3	2
13	Herbs	2	72	1,3	2
14	Professional Ethics	5	72	1,3	2
15	Genetics in Veterinary Medicine	3	72	1,3	2
16	Management and Marketing in Veterinary Medicine	5	72	1,3	2
Chosen by the University, total			**2088**	**38,5**	**54**
2.2. Disciplines, chosen by students					
2.2.1. Cycle of natural science (fundamental) training					
1	Psychology and Education	2	72	1,3	2
2	Cultural	2	72	1,3	2
3	Fundamentals of business and scientific language	2	72	1,3	2
4	Science in Veterinary Medicine	8	72	1,3	2
5	Fundamentals of Veterinary Sanitation, Microbiology and Virology	3	180	3,3	5
6	Methods for microbiological testing	3	180	3,3	5
7	Grassland	4	72	1,3	2
2.2.2. Cycle of professional and practical training					
1	Infectious diseases of farm animals	8	108	2	3
2	Infectious diseases of small animals	8	108	2	3

3	Veterinary ophthalmology	6	144	2,7	4
4	Veterinary traumatology and orthopedics	6	144	2,7	4
5	Surgical diseases of small animals	8	144	2,7	4
6	Parasitic diseases of small animals	8	108	2	3
7	Parasitic diseases of fish	8	72	1,3	2
8	Fundamentals of forensic veterinary	8	144	2,7	4
9	Diagnosis and treatment of internal diseases of small animals	8	144	2,7	4
10	Diseases of birds	8	144	2,7	4
11	Military training	6,7,8,9	648	12	18
Chosen by students, total			***2628***	***37***	***55***
Elective part, total			***4716***	***75***	***113***
Practical training			**1476**	**6**	**9**
Degree examination			**72**	**1.3**	**36**
Total, according to specialty			**10512**	**194,7**	**292**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Ukrainian language (for professional purposes). Using the principles of professional communication at the level of the modern Ukrainian language to communicate with members of the labor process.

History of Ukraine. To determine the periods of the formation and development of ethno-political processes in Ukraine, identify features of modern social and political development of Ukrainian society and its future.

The history of Ukrainian culture. To acquaint students with the peculiarities of Ukrainian culture in the different stages of the history of Ukraine

Foreign Language. Shapes knowledge of phonetics, linguistics, geography, grammar, but also reinforces and improves the skills of reading, writing, listening, translation and summarization of texts for future specialty.

Philosophy. General history of foreign and domestic philosophies.Basic forms and dialectics of life.The life creativity human being.The problem of consciousness in philosophy.Ways and means of cognitive development world.Methodology and methods of scientific knowledge.The philosophical concept of culture.The future of humanity and direction of human history.

Political Science. The science of the laws of development and functioning of political life, the mechanisms of political power, political control processes. Political parties, civil society organizations and movements in the social and political life of society.Personality and politics.The political culture.World political process.

1.2. Cycle of natural science (fundamental) training

Anatomy of domestic animals. The main body of the structure of animals for organ systems: the skeleton, the compound bone, muscle, organ systems, skin, aids digestion, respiration, urination and reproduction organs, cardiovascular system, nervous system, and senses, the structure of organs or systems in terms onto - and phylogeny in comparative terms, the structural features of the body poultry.

Biochemistry of animals with the basics of physical and colloid chemistry. The formation of future professionals in the agricultural sector current knowledge of organic, biological and chemical physical and colloid chemistry that enable students to acquire deep theoretical knowledge necessary for the study and application of related disciplines, you can understand the chemical processes occurring in animals.

Cytology, histology, embryology. Examines the subtle and delicate structure, development and functioning of the structures of an animal and human histological studies various methods allow to study the body at different levels - subcellular, cellular, tissue, individual organs and the whole organism.

Bioinorganic Chemistry. The study of bioinorganic chemistry provides insight detecting inorganic compounds involved in various biological processes including observed biological role of certain inorganic compounds.

Organic Chemistry. The formation of future professionals with knowledge of organic chemistry necessary for further study of subjects with a degree

Biophysics. Examines the physical and physical and chemical phenomena in living organisms, structure and properties of biopolymers influence of various physical factors on living systems.

Physiology of Animals. Examines the mechanisms and patterns of all forms of life of the body, its organs, tissues, cells and subcellular structures, through study and explanation of these expressions methods and concepts of physics, chemistry, mathematics and computer science, as well as the patterns of interaction of living organisms with the surrounding environment, their behavior under different conditions of existence, and at different stages of growth and development, the origin and development of physiological processes in the evolution and individual development.

Principles of biosafety, bioethics and Veterinary Ecology. Examines aspects of the profession of veterinary medicine specialists to ensure biosafety countries, international norms and laws of Ukraine concerning the regulation of bioethics and biosafety, bioethics issues in the activities of a doctor of veterinary medicine.

1.3. Cycle of professional and practical training

Veterinary Sanitation and Hygiene. Examines mandatory hygiene requirements for technology for the processing of animal products, including basic raw materials, food additives, auxiliary materials for their production, sanitary requirements in the process of production, storage and transportation, health and safety requirements food and food raw materials in their production, storage, packaging, transport and sale.

Veterinary Microbiology and Immunology. Examines the theoretical and practical basis for understanding the nature of the origin and course of infectious diseases, the creation of methods, techniques and tools of diagnosis, prevention and treatment technologies of diagnostics and prevention of infectious diseases, to provide veterinary and animal welfare prevent the spread of diseases common to animals and humans.

Veterinary Virology. Examines the nature and origin, morphology and chemical composition, mechanism of reproduction, genetics and ecology of viruses, pathogenesis of viral infections, especially antiviral immunity, specific prophylaxis and chemotherapy of viral infections, laboratory diagnosis of viral diseases of animals.

Biotechnology in Veterinary Medicine. An interdisciplinary field that examines how the use of living organisms and biological processes in production.

Pathological physiology. Examines the general patterns of emergence, development and completion of the disease. It is the science of vital functions of the patient body.

Obstetrics, Gynecology and Animal Reproduction Biotechnology. Creates a doctor of veterinary medicine. Study subjects allows students to learn the essence of animal, its physiological and pathological manifestations of rejection, their relationship to the terms of feeding, housing, care and use of animals, the action of endogenous and exogenous factors.

Veterinary-sanitary examination.A set of diagnostic studies and special studies to assess the quality and safety of raw materials of animal and plant origin food products intended for human nutrition, processing and animal feed.

Epizootology and infectious diseases. Examines the causes, conditions and fading spread of communicable diseases, and methods of prevention and fight against them.

General and special surgery. The study of the discipline, students gain skills and organization of effective science-based prevention and treatment of surgical diseases in small farms and in livestock complexes.

Operative surgery, anesthesiology and topographic anatomy. Examines the concept of surgery, methods of fixation animals, prevention of surgical infection, anesthesia, surgical operations elements, separation and joining tissue surgery, novocaine blockade of nerve complications after major surgical operation.

Parasitology and invasive disease. As a result of the discipline future professionals can identify invasive animal diseases spread and economic losses, morphology and biology of the pathogen; epizootological data, pathogenesis, symptoms, Pathological changes diagnosis (for life, posthumous), treatment prevention (general activities, special events).

Pathological anatomy and dissection. Of postmortem autopsy, along with clinical examination or even yourself, enables diagnose most diseases, but of particular importance for the diagnosis of infectious diseases. With the opening monitored diagnostic and therapeutic activities of veterinary professionals and institutions.

Internal diseases. Examines the methods of diagnosis of internal noncontagious diseases of farm animals, their prevention and treatment, clinical manifestations of diseases of internal organs, methods of capture and restraint of animals.

Veterinary Pharmacology. The purpose of discipline is to provide pharmacy students with the necessary knowledge of the properties, effects and use of various drugs for therapeutic and prophylactic purposes for stimulation and pharmacological regulation of physiological processes in animals. Pharmacology is the basis for the study of all clinical disciplines.

Veterinary clinical biochemistry. Is the basis for understanding pathological processes that occur both in non-infectious and infectious and parasitic diseases, it contributes to the formation of medical thinking. Mastering the discipline, students must learn to receive various biological substrates, choose the required list of diagnostic techniques, learn methods of biochemical laboratory techniques, to give an interpretation derived data, correlate them with symptoms of the disease, know the changes of metabolism in various diseases, including able to a large number of parameters to select the most informative .

Clinical diagnostics. Examines the clinical, instrumental and laboratory methods sick animals, technology and the sequence of their application in the study of individual organs and systems identified with symptoms and signs and basic ways of recognizing disease develops ability to summarize obtained in the study of sick animals symptoms, grouped by reasons, to determine the relationship between them and on this basis to conclude that called diagnosis.

The organization and economics of veterinary affairs. Examines and improves the theoretical and practical basis for the organization, planning, finance, economics and management of veterinary medicine.

Veterinary Toxicology. The science that studies the toxic substances that have clinical significance: the sources of clinical signs, toxicity, mechanism of action, diagnosis, and widely used in practice treatments for poisoning animals.

Latin. Examines the use of the Latin language to form veterinary - medical clinical terminology. It combines the names in veterinary science, symptoms, diseases, syndromes, functional responses, reflexes, morphological abnormalities and research methods.

Safety – examines. The characteristics of the human body, the impact on his natural environment (climate, atmosphere, hydrosphere, electromagnetic radiation, etc.)., Practical skills on protection, first aid in case of accident vehicles, fire, earthquake, chemical or radioactive contamination, etc..

Basics of labor protection. Examines the legal and organizational basis of labor, basic security industry base fire and electrical safety, hygiene and sanitation.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.2.1. Cycle of natural science (fundamental) training

Physical education. The basis of physical education. Hygienic bases of physical education and sport. Building a healthy lifestyle. Basics of fitness and sports training. Professional physical training. Ecological bases of physical education. Physical education as one of the important means to eliminate shortcomings in the health of citizens.

Anatomical features of animals. Studying the structure of the body, the skeleton, muscular system, digestive and respiratory devices, structure and location of the cardiovascular, nervous and endocrine systems of animals.

Botany. Examines data on the distribution and chemical composition of plants are needed to identify medicinal and poisonous plants, and rational feeding of farm animals.

Zoology. Teaches determine the species composition of protozoa, insects, arthropods and other animals

Feeding the Animals. Examines the characteristics of the chemical composition of feed that determine their nutritional properties, mechanisms and methods of feed intake animals of different species, acquiring skills to monitor the usefulness of animal nutrition and predict its impact on the quality of animal products.

Principles of breeding animals. Examines the general rules for assessing animals for exterior and constitution breeds of farm animals in the direction of performance

The history of veterinary medicine. Examines the history of the formation and development of veterinary medicine in Ukraine.

2.1.2. Cycle of professional and practical training

Veterinary-sanitary examination. A set of diagnostic studies and special studies to assess the quality and safety of raw materials of animal and plant origin food products intended for human nutrition, processing and animal feed.

Veterinary radiobiology. Examines the origins of nuclear radiation, basic radiation safety, methods and means of protection when working with radioactive substances, Pathological changes in radiation sickness.

Obstetrics, Gynecology and Animal Reproduction Biotechnology. Creates a doctor of veterinary medicine. Study subjects allows students to learn the essence of animal,

its physiological and pathological manifestations of rejection, their relationship to the terms of feeding, housing, care and use of animals, the action of endogenous and exogenous factors.

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General and special surgery. The study of the discipline, students gain skills and organization of effective science-based prevention and treatment of surgical diseases in small farms and in livestock complexes.

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Pathological anatomy and dissection. Of postmortem autopsy, along with clinical examination or even yourself, enables diagnose most diseases, but of particular importance for the diagnosis of infectious diseases. With the opening monitored diagnostic and therapeutic activities of veterinary professionals and institutions.

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Internal diseases. Examines the methods of diagnosis of internal noncontagious diseases of farm animals, their prevention and treatment, clinical manifestations of diseases of internal organs, methods of capture and restraint of animals.

Veterinary Pharmacology. The science that studies the toxic substances that have clinical significance: the sources of clinical signs, toxicity, mechanism of action, diagnosis, and widely used in practice treatments for poisoning animals.

Veterinary Toxicology. The science that studies the toxic substances that have clinical significance: the sources of clinical signs, toxicity, mechanism of action, diagnosis, and widely used in practice treatments for poisoning animals.

The organization and economics of veterinary affairs. Examines and improves the theoretical and practical basis for the organization, planning, finance, economics and management of veterinary medicine.

Medicinal Plants. Examines information about the planet and the flora of the country, data about medicinal and poisonous flora, rules collecting plants and medicinal plant harvesting, processing technology and processing

Professional Ethics. Examines the moral and ethical and psychological aspects of business communication.

Genetics in Veterinary Medicine. Examines the cytological basis of heredity, the patterns of inheritance of traits through sexual reproduction, molecular basis of heredity, variability of animal genetic basis of immunity, methods of preventing the spread of genetic abnormalities and increased resistance of animals to disease.

Management and Marketing in Veterinary Medicine. Provides scientific and legal foundations of entrepreneurship in veterinary medicine, teaches basic forms of business, studying the regulation of licensing in the field of veterinary medicine, management, marketing and pricing practices.

2.2. Disciplines, chosen by students

2.2.1. Cycle of natural science (fundamental) training

Psychology and pedagogy. Provides psychological and pedagogical training of future specialists that will help to: improve overall psychological and pedagogical culture, forming a holistic view of the psychological characteristics of the human factors of the success of its operations, the ability to think independently and to anticipate the consequences of their own actions, their own learn and to adequately assess their capabilities, their own to find optimal ways to achieve goals and to overcome life's difficulties.

Cultural Studies. Examines techniques for monitoring human activities, teaches integrate their activities in a cultural environment

Fundamentals of business and scientific language. Creates the concept of literary language, the criteria for the classification of documents, rules and guidelines for writing a resume, especially declination male and female names in the Ukrainian language, the order of compilation of receipts, translating text on economic issues.

Science in Veterinary Medicine. In the course study tools and techniques of modern information technology (IT) and information systems (IS) that are used in the fields of scientific research. In particular, structural features and specifications of modern PCs and peripherals, purpose, structure and functions of the PC software. Mastery of practical skills using the computer with extended range of software and network technologies.

Fundamentals of Veterinary Sanitation, Microbiology and Virology. Teaches evaluate the germs that are in the environment, studies the microbiological parameters hygienic standardization, methods of monitoring the effectiveness of disinfection facilities of the environment and identification of infectious animal diseases bacterial and viral etiology, which are in the environment.

Methods of microbiological research. Teaches research methods pathogenic and opportunistic microbes - infectious agents productive and small pets.

Grassland. Examines the scientific basis of food.

2.2.2. Cycle of professional and practical training

Infectious diseases farm animals. Provides future physicians deep theoretical and practical knowledge on the following: a comprehensive diagnosis based on clinical signs, pathological changes and laboratory research to develop comprehensive measures of treatment and prevention of infectious diseases of animals.

Infectious diseases of small animals. Provides students with the theoretical knowledge of the diagnosis, differential diagnosis, immunity, treatment and prevention of infectious diseases of small animals, practical laboratory skills with the case, and the diagnosis and prepare it for practical work.

Veterinary Ophthalmology. Teaches conduct the clinical study of the eye and its protective devices, to determine the visual ability of the eye and its individual structures to provide treatment for diseases of the eye using special techniques to conduct anesthesia of the eye using Novocain blockade, perform surgery for cure of diseases in the area eye.

Veterinary Traumatology and Orthopedics. Surgery department that studies the prevention, diagnosis and treatment of deformities and disorders of the musculoskeletal system that result from trauma, congenital defects and diseases.

Surgical diseases of small animals. Teaches the principles and means recognition of surgical disease (diagnosis) Biological and clinical patterns of recovery and regenerative processes, endogenous and exogenous conditions that accelerate the

healing process, principles of treatment of trauma, surgical infections, metabolic disorders, organizational technological principles of surgery, specific surgical diseases in different parts of the animal, its organs and systems

Parasitic diseases of small animals. Examines the localization of pathogens in animals, distribution, routes of infection and transmission of pathogens factors, pathogenesis and immunity in parasitic diseases of small animals, principles of laboratory diagnosis and control and prevention of parasitic diseases of small animals.

Parasitic diseases of fish. Examines the localization of pathogens in the body of fish distribution, ways of infection and factors of transmission of pathogens, pathogenesis and immunity in parasitic diseases of fish, the principles of laboratory diagnosis and control and prevention of parasitic diseases of fish.

Fundamentals of forensic veterinary medicine. Teaches evaluate morphological changes in organs and tissues of animals, to establish the degree of culpability of persons in death of the animals, especially the judgments of veterinary professionals

Diagnosis and treatment of internal diseases of small animals. Has profound theoretical and practical knowledge of the features of the methodology of early diagnosis of diseases of small animals, teaches methods of treatment and prevention.

Diseases of Birds. Provides students with in-depth knowledge of a number of major non-contagious disease of poultry diseases, teach methods of preventing avitaminosis A, D, E, urine acid diathesis, alimentary dystrophy, cannibalism, liver, diagnosis, treatment and prevention of diseases of the digestive system and egg-laying in birds.

Specialist training
in specialty «MECHANIZATION OF AGRICULTURE»
field of knowledge «Agricultural Technology and Energy Production»

Forms of training, licensed study amount:	
– full-time	30 people
– extra-mural	30 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Russian
Qualification of graduates	Mechanical engineer

The concept of training

Getting on the basis of educational qualification «Bachelor» complete higher education, special skills and knowledge sufficient to perform professional tasks and responsibilities (work) a certain level of professional activity that provided for primary office technical workers of agriculture, forestry, processing plants. The training students receive in-depth knowledge and skills to improve techniques and solving urgent problems of complex mechanization of agricultural production, efficient use of resources and management of production processes, design of operational and technical regulations subject to the conditions of different organizational forms. The main objective of training is to provide professionals of theoretical knowledge and practical skills required to address the creation of modern machines and equipment for agriculture, development of concepts of effective use of agricultural machinery, introduction and implementation of proposals for the implementation of energy-saving technologies, and the creation and use of technology for renewable energy, development of information technology in business management, organization of technical services in agricultural production. Specialists who graduated in this specialty have extensive knowledge of contemporary issues in ahroinzheneriyi and effective use of modern advances in agricultural engineering, information technology for agricultural enterprises.

Practical training

Curriculum provides pre-diploma practice. It aims to explore the main areas of engineering. During the practical training future specialist familiar with the responsibilities, scope and content of the core activities of management and accountability of employees, workplace organization, forms, reports, documents, issues of accountability of employees. Bases practical training students are: agricultural research and production enterprise «Science», LLC « Agrofirm named in the honor of Krupskaya, «Teaching and experimental machine-technological station Agritechnological University, Ukraine», «Educational research and production complex crop Agritechnological University, Ukraine», «Educational research and production complex animal breeding, Agritechnological University, Ukraine».

Proposed topics for theses

1. Design process of growing crops.
2. Optimization of complex machines for cultivation of a particular crop.
3. Design processes in animal husbandry.
4. Optimization of complex machines for livestock farms.
5. Design and optimization of complex machinery and special equipment for processing and storage of agricultural products.
6. Development of safety management in agriculture.

7. Justification parameters of technical security measures to improve working conditions.
8. Organization of technical service points of modern machines.
9. Optimization of technical service of machinery and equipment.
10. Assessment and reliability of agricultural machinery.
11. Development of systems for public supervision in agriculture.

Academic rights of graduates – In addition to training in «Agricultural engineering» Applicants with a bachelor's degree with a specialty «processes, machines and equipment of agroindustrial production» can continue their studies at the Master in «Agricultural engineering».

Spheres of graduates' employment

Graduating students of educationally qualifying level are a «specialist» after specialty «Mechanization of agriculture» can be employed engineers-mechanics for exploitations of machine park, repair of agricultural technique, redoing and stock-raising equipment; by the main engineers of agroindustrial enterprises of all of patterns of ownership; by managers by central repair shops, machine parkas; by the engineers of state technical supervision, on accident prevention; by engineers and managers of departments of mechanization of research organizations; by the engineers-mechanics of the irrigatory systems; by the chiefs of management of ministries AIC for mechanizations, labour, technical supervision protection; by the chiefs of departments of mechanization of district managements of agriculture.

Specialist Degree Program and Curriculum in Specialty «Mechanization of agriculture»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Ecology labor	1	72	1,3	2,0
2	Legislation and Law in agriculture	1	72	1,3	2,0
3	World agricultural production	1	72	1,3	2,0
4	Stock market	1	72	1,3	2,0
5	Engineering psychology	1	72	1,3	2,0
The total for cycle			***360***	***6,5***	***10,0***
1.2. Cycle of professional training					
1	Civil protection	1	72	1,3	2,0
2	Agricultural land reclamation	1	72	1,3	2,0
3	Transport processes in agriculture	1	72	1,3	2,0
4	Theory and technology of restoration of operability of machines	1	72	1,3	2,0
5	Reliability technological systems	1	72	1,3	2,0
6	Engineering management	1	72	1,3	2,0
7	Safety in the industry	1	72	1,3	2,0
8	Prediploma practice	2	54	1,0	1,5
The total for cycle			***504***	***9,1***	***15,5***
Regulatory part, total			**864**	**15,6**	**25,5**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training*					
1	Applied and Computer Technology	2	72	1,3	2,0
2	Precision Agriculture	2	72	1,3	2,0
3	Power supply APC	2	72	1,3	2,0
4	Bionic areas of development of agricultural machinery	2	72	1,3	2,0
5	Alternative energy sources south Ukraine	2	72	1,3	2,0
6	Test technology of agricultural machinery	2	72	1,3	2,0
7	Mechanics and mathematical methods of solution of engineering problems	2	72	1,3	2,0
8	Modeling of processes and systems	2	72	1,3	2,0
Chosen by the University, total			***576***	***10,4***	***16,0***
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training*					
1	Design of mechanisms and machines with the basics of CAD	1	72	1,3	2,0
Chosen by students, total			***72***	***1,3***	***2,0***
Elective part, total			***648***	***11,7***	***18,0***
Practical training			**180**	**3,3**	**3,5**
Degree examination			**180**	**3,3**	**5,0**
Total, according to specialty			**288**	**5,3**	**8,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Ecology of the labor. The acquaintance of the students with the fundamental thesis's of theoretical ecology, especially the relationship of the biosphere and technosphere, regional to global environmental problems, the problems of resource-ecological-economic nature, as well as with modern principles and strategies for sustainable development, and by means of harmonization of economic development of society and secure development environment.

Legislation and Law in agriculture. Forming of the students' knowledge and understanding of the laws of Ukraine, assurance in the effectiveness of law as a means of regulating social relations, raising the general level of education, the formation of legal thinking, the development of legal consciousness and legal culture.

World agricultural production. To give systematic and generalized knowledge about agricultural economics of individual countries and regions in the context of global trends in agricultural production and international relations on the basis of systematic knowledge about the relations of production in agriculture of individual countries, key areas of social and economic integration forms of international economic, social and technological cooperation, advanced foreign practices and experiences.

Stock market. To give students knowledge exchange activities, fundamentals of futures and options trading. Prepare students for the practical application of knowledge: the basics of futures trading, commodity exchange, the basic theory of futures markets, stock prices pricing concepts, fundamentals of futures and options trading basics stock speculation, price risk, constitute forward contract basis to calculate , to be able to conduct technical analysis of futures prices of various financial calculations.

Engineering psychology. Learn to identify the role of humans in the workplace in terms of technological progress and analyze the system «man - machine». Students must identify the major concepts in engineering psychology subject and tasks of engineering psychology, engineering psychology place in the sciences; major categories of psychology, industrial psychology and cognitive processes, psychological aspects of human activity in the control system; physiological requirements to technical requirements of «man- machine».

1.2. Cycle of professional and practical training

Civil protection. To teach students methods of population and improve the sustainability of agricultural production facilities in case of emergency, the basics of organizing and conducting rescue and other emergency operations while managing accidents, the consequences of natural disasters, prepare students for practical implementation of the civil defense facilities of agricultural production in emergency circumstances as chief of staff of civil defense facility.

Agricultural land reclamation. To form the understanding of land reclamation as the primary means for obtaining high and stable yields of crops, regardless of the vagaries of nature, the development of literacy of techniques irrigation and drainage of agricultural land and an understanding that water can bring not only good, but harm to use it badly.

Transport processes in agriculture. Acquisition by future masters of Agricultural Mechanization scientific principles of engineering efficient use of theoretical knowledge and

skills on the use of transport processes in agriculture, disclosure and methods of developing a set of rules take full advantage of vehicle-specific in the soil and climatic conditions, determine the need for these vehicles to achieve planned outcomes.

Theory and technology of restoration of operability of machines. Study of methods and techniques of repair and rehabilitation of agricultural machinery and technological equipment by the most effective way according to existing specifications, getting deep theoretical and practical knowledge to machinery, detection and elimination of failures.

Reliability of technological systems. Developing skills of practical knowledge of methods and techniques to ensure the safety of the reliability and operational performance machines for the set time at optimum cost of material and labor resources, study methods and ways to maintain and restore performance and resource agricultural machinery and technological equipment in the most effective way according to existing technical requirements.

Engineering management. Learning content of management process of the engineering and technical service farm, a theoretical and practical knowledge and skills of students in engineering science management of agricultural enterprises of different ownership forms, mastering the theoretical principles of management skills and applying this knowledge in practice in mechanization of agricultural production, the study of organizational management structure and its optimization problems in terms of market relations, mastering techniques of modern management, learning content management process engineering and technical service farms.

Safety in the industry. Theoretical and practical training to the creation and ongoing support of regulatory conditions, prevention of accidents and injuries in agricultural production, preparation for implementation of the principles of the state policy of Ukraine on legal safe working conditions for agricultural enterprises.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

Applied and computer technology. Master computer systems and software applications that provide a solution of engineering problems, design of mechanisms and machines, gain knowledge of the principles of operation and information-processing (IYIS) and computing (IEC) for measuring systems.

Precision agriculture. To introduce students to the general principles and elements of precision agriculture, to teach students Consideration of processing technologies of major crops in the system of precision farming using computer programs.

Power Supply APC. The development of students' basic knowledge of the theory, structure and principles of the system power supply APC. If you studied this course students should be given deep theoretical and practical knowledge organization principles of electrical and structural agricultural production; know state level and prospects of agricultural supply, the concept of surge in electrical, physical nature of atmospheric overvoltages, the concept of electric contacts of the electric arc The device and operation of high-voltage and air circuit breakers, load switches, disconnectors, korotkozamykatelyah and separators, and principle of operation of instrumentation, drives switching equipment, construction fuses, protective equipment and the requirements for it.

Bionic areas of development of agricultural machinery. The development of creative thinking of the future professionals, preparing them to develop theoretical assumptions, learning methods to find new technical solutions based on bionic comparisons of constructive mathematical models of biological prototypes features, a systematic approach in creating work of agricultural machines, study the current state of the problem of mechanical action of working groups on agricultural materials and improvement of agricultural machinery, knowledge of the role of bionics in the improvement of existing and creation of new agricultural machinery, the study of the principles of biosystem approach to the creation of new jobs of agricultural machines, mastering the techniques of bionic study parameters and principles of work of agricultural machinery.

Alternative energy sources in the south of Ukraine. Theoretical and practical teaching of future specialists in the classification, technology and design, in the theory of designing systems for the use of alternative energy sources, the study of plants to convert solar, wind energy, waste heat milk, manure and air emissions, the study of the theoretical foundations of the workflow settings for converting alternative energy sources (Sun), development of major technological calculations for use in heating systems and energy, development of energy-saving technological foundations of design processes in agriculture using Sun.

Test technology of agricultural machinery. To teach master's degree students engineers with the theoretical knowledge and practical skills in testing of agricultural machinery under field and laboratory conditions, to give an idea of the main tasks facing a test, scientific test content, provide methodological foundations of evaluation machines, information on the different types of tests (factory, departmental , state) stages of a new agricultural techniques and significance testing in the development of agricultural machinery and tools, and explore methods and means of improving the quality of testing.

Mechanics and mathematical methods for solving engineering problems. Mastering the latest knowledge in the field of mechanics of materials and structures used in agricultural production. Students must learn to choose the optimal scheme for the calculation of real mechanical structures and assemblies of machines and improved methods of calculating the strength, stiffness, resistance and vibration. Examining issues of mathematical modeling mechanical objects agricultural production, modern methods of calculations of strength, stiffness, stability and vibration of machines, components and structures used in agricultural production using computer technology, the use of experimental research stresses and strains in agricultural parts and components machines and units.

Modeling of processes and systems. Develop in students the knowledge and skills necessary to formalize and model construction engineering tasks, selection methods and analysis tools of modern software applications for PC, running the operating system Windows, examine methods of management models - solving optimization problems, methods of descriptive models - solving durability and heat.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Design of mechanisms and machines with the basics of CAD. Students must master the methods of processing experimental data using universal and specialized computer software; see the type and purpose CAD, give knowledge of the principles and techniques of 3D solid modeling tools and machines and methods of engineering analysis designed structures using specialized software application.

Specialist training
in specialty «TECHNOLOGY OF FATS AND FAT SUBSTITUTES»
field of knowledge «Food and agricultural products»

Form of education the licensed volume:	
- full-time study	25 students
- extra-mural education	20 students
Term of training	1 year
Credits	60 ECTS
Language of teaching	Russian
Qualification of graduates	engineer with the technology of fats and fat substitutes

The concept of training

Getting on the basis of educational qualification «Bachelor» complete higher education, special skills and knowledge sufficient to perform professional tasks and responsibilities (work) a certain level of professional activity that provided for primary positions in the food industry. Specialists as a result of training in the specialty «Technology of fats and fat substitutes» acquire knowledge and skills in the field of food fatty foods and essential oils. Training of this area includes the study of trends in butter fat production in Ukraine and abroad; natural sources of getting fat oil products, raw materials market for butter fat production, development of basic processes and equipment to prepare material for oil extraction plant oils, the development of technological bases storing oil raw materials, the study of flow diagrams and equipment for the production of butter fat products (vegetable oils and animal fats). We study the logistics of production and purification of vegetable oils and animal fats, production of margarine and mayonnaise production and technological bases of technical fats, surfactants, fatty acids, higher fatty alcohols.

Practical training

Provides the following practice areas: engineering and production. Engineering practice focused on learning the basic areas of engineering. During the practical training future specialist familiar with the responsibilities, scope and content of the core activities of management and accountability of employees, workplace organization, forms, reports, documents, issues of accountability of employees. Practical contributes to future professionals practical skills, familiarization with the advanced achievements of science and practice in the field of food fatty foods, essential oils and perfumes and cosmetics industries. Enterprises of practice: Institute of Crimean Agriculture, the factory «Эfir», industrial complex «The Crimean Rose», Bakhchisarai aromatic Co., Ltd. «Istaroma».

Proposed topics for theses

1. Project of production line citral from lemon catnip for seasonal businesses some capacity.
2. Project workshop complex processing of raw materials lavender certain seasonal capacity.
3. Project production line processing of sesame seeds for some enterprises seasonal capacity.
4. Project workshop to produce canola oil companies for some seasonal capacity.
5. Project processing production line for the company sage tarragon some seasonal capacity.
6. Improving the process temperature and sequential extraction of rose essential oil.

7. Improving the process of allocating absolute oils from concrete.

8. Justification settings distillation technology in aromatic hydrocarbon mistsell production.

9. Adsorption technology is the selection of essential oil distillation with water.

10. Improving the technology of dynamic sorption floral materials.

Academic rights of graduates - In addition to the specialty 7.05170102 «Technology of fats and fat substitutes» applicants with a bachelor of arts in the direction of «Food technology and engineering» can continue their studies at the level «master» - 8.05170102 «Technology of fats and fat substitutes», and on the level «specialist» all specialties «Food technology and engineering».

Spheres of graduates' employment

Qualifying graduates specialists in employment according to the state qualifier professions Ukraine - «engineer of technology of fats and fat substitutes.» According to their newfound skills graduates can occupy the following positions: heads of businesses, chief specialist head units with technical preparation of production: soap, microbiological departments, perfumes, merchandise, technical leadership, analytical chemical research laboratory head of the central enterprises, production foreman, chemist analyst, chemical engineer, assistant engineer, engineer, design engineer mechanized development engineer with the introduction of new techniques and technologies.

Specialist Degree Program and Curriculum in Specialty «Technology of Fats and Fat Substitutes»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Management and marketing	1	90	1,7	2,5
Total for the cycle			***90***	***1,7***	***2,5***
1.2. Cycle of natural science (fundamental) training *					
1	Civil protection	1	72	1,3	2,0
2	Technology of perfumery-cosmetic production	1	126	2,3	3,5
3	Exploitation and repair of technological equipment	1	90	1,7	2,5
4	Technological calculations, accounting and reporting of industry	1	72	1,3	2,0
5	Occupational health in the industry	1	72	1,3	2,0
	Practical	1	180	3,3	5,0
Total for the cycle			***612***	***11,2***	***17,0***
Regulatory part, total			***702***	***12,9***	***19,5***
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training					
1	Fundamentals of industrial construction and plumbing	1	72	1,3	2,0
2	Reliability of the equipment processing enterprises	1	72	1,3	2,0
3	Designing of the enterprises with the basics of CAD	1	72	1,3	2,0
4	Optimization of technological processes in the perfume and cosmetic manufacture	1	90	1,6	2,5
	Prediploma practice	2	108	2,0	3,0
Chosen by the University, total			***414***	***7,5***	***11,5***
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training					
1	Technological quality of raw materials perfume and cosmetic industries	1	72	1,3	2,0
2	Optimization of technological processes in the production of aromatic	1	108	2,0	3,0
Chosen by students, total			***180***	***3,3***	***5,0***
Elective part, total			***594***	***10,8***	***16,5***
Practical training			**684**	**12,4**	**19,0**
Degree examination			**180**	**3,3**	**5,0**
Total, according to specialty			**2160**	**40**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Management and marketing. Learning content management process engineering and technical service processing enterprises, a theoretical and practical knowledge and skills of students in the scientific management of engineering enterprises of different ownership forms, mastering the theoretical principles of management and marketing skills and application of knowledge in the practice of specialists in the field: food technology and engineering, the study of organizational management structure and its optimization problems in terms of market relations, mastering techniques of modern management.

1.2. Cycle of natural science (fundamental) training

Civil protection. To teach students methods of population and improve the sustainability of agricultural production facilities in case of emergency, the basics of organizing and conducting rescue and other emergency operations while managing accidents, the consequences of natural disasters, prepare students for practical implementation of the civil defense facilities of agricultural production in emergency circumstances as chief of staff of civil defense facility.

Technology of perfumery and cosmetic industries. The subject of the study is a classification and range of international and domestic markets perfumes and cosmetic products, the main processes of perfumery and cosmetic industries, the main directions of modern principles of the fragrance and perfume recipes, modern technology and equipment, manufacture of perfumes and cosmetics, the basic requirements for their quality and methods of control.

Exploitation and repair of technological equipment. Study of methods and techniques of repair and restoration of agricultural machinery and technological equipment most effective way according to existing specifications, a student of deep theoretical and practical knowledge to machinery, detection and elimination of failures.

Technological calculations, accounting and reporting of industry. Discipline has the aim of forming a systematic approach to accounting and reporting during the processes of volatile oil industry, technology of blended vegetable oils. Future professionals acquire knowledge as to calculation of raw materials, auxiliary materials, as well as the basics of accounting in the industry.

Occupational health in the industry. Theoretical and practical training to the creation and ongoing support of regulatory conditions, prevention of accidents and injuries in the agricultural production, preparation for implementation of the principles of the state policy of Ukraine on legal safe working conditions for agricultural enterprises.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.2.1. Cycle of natural science (fundamental) training

Fundamentals of industrial construction and plumbing. Give students the concept of industrial construction. Provide training in the field of food technology. Know the basics of industrial construction, basic building construction, industrial design principles, methodology of designing master plans of enterprises. Work with regulatory documentation. To be able to execute design solutions graphically manufacturing plant for

the processing of agricultural products, to calculate production equipment. Develop creativity in designing industrial processing s / s products and sanitary systems.

Reliability of equipment of processing enterprises. Developing of the skills of practical knowledge of methods and techniques to ensure the safety of the reliability and operational performance machines for the set time at optimum cost of material and labor resources, study methods and ways to maintain and restore performance and resource agricultural machinery and technological equipment most effective way according to existing technical requirements.

Designing of the enterprises with the basics of CAD. To learn the computer systems and software applications that provide a solution to engineering and scientific problems, design tools and machines to acquire knowledge about the principles of operation and information-processing and computing for measuring complexes, learn methods of processing experimental data using universal and specialized computer programs to introduce the type and purpose CAD, give knowledge of the principles and techniques of 3D solid modeling tools and machines and methods of engineering analysis of designed structures using specialized software application.

Optimization of technological processes in the perfume and cosmetic manufacture. The object of study is the modern processes of perfumes and cosmetics and the main directions of optimization, advanced process equipment for the manufacture and packaging of perfumes and cosmetics, new fragrance and cosmetic products, which are made by using modern technology and are presented on the global market of perfume and cosmetics products.

2.2. Disciplines, chosen by students

2.2.1. Cycle of natural science (fundamental) training

Technological quality of raw materials of perfumery and cosmetic industries. Discipline creates skills in the latest techniques for determining the quality of raw materials for the production of blended vegetable oils and a milk fat substitutes, especially the introduction of new technologies into production in order to expand the range and improve competitiveness. Students learn the procedures of technochemical control, advanced technology refining, modification and processing of vegetable oils and animal fats, technology and equipment of oil and fat products of food and non-food goods, technology of using substitutes, the basic requirements for their quality and how they control the rules of the technological calculations.

Optimization of technological processes in the production of essential oil. For masters of specialty «Technology of fats and fat substitutes» the subject of study is contemporary processes of aromatic products and the main directions of optimization immersed theoretical aspects of the production of volatile oil production, the main improvement of manufacturing equipment, new essential oil products represented leading companies in the global and domestic markets, essential oil production.

Specialist training in specialty «TECHNOLOGIES OF PRODUCT OF FERMENTATION AND VITICULTURE» field of knowledge «Food and agricultural products»

Forms of training, licensed study amount:	
– full-time	30 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Russian
Qualification of graduates	engineer with the technology of fermentative production and winemaking

The concept of training

Getting on the basis of educational qualification «Bachelor» complete higher education, special skills and knowledge sufficient to perform professional tasks and responsibilities (work) a certain level of professional activity that provided for primary positions in the food industry.

Practical training

Provides the following practice areas: engineering and production. Engineering practice focused on learning the basic areas of engineering. During the practical training future specialist familiar with the responsibilities, scope and content of the core activities of management and accountability of employees, workplace organization, forms, reports, documents, issues of accountability of employees. Practical contributes to future professionals practical skills, familiarization with the advanced achievements of science and practice in the field of food fatty foods, fermentation and wine production.

The bases of practical training of students graduate in winemaking and fermentation technology industries are: factory «Alushta», «Burliuk» the farm «Maharach» «Emerald», «Evpatoria Wine Plant», «Pervomaiskyi wine plant», «Zolotaja Balka», «Saki winery», «Winery association «Koblevo» Nikolaev region.

Proposed topics for theses

1. The reconstruction project vyntsehu to produce table wines in the system «Beg in Box».
2. The reconstruction project vyntsehu processing grapes seasonal capacity to produce red varietal dry wines.
3. The reconstruction project workshop for the production of sparkling wine sparkling wine «Chardonnay».
4. The reconstruction project workshop production of dry white varietal wine.
5. Reconstruction Project wine shop factory for the production of sparkling wine with the latest equipment.
6. Vyntsehu reconstruction project for the production of red table wine.
7. The reconstruction project workshop for the production of ordinary brandies.
8. The reconstruction project workshop to produce ordinary dessert wine.
9. The reconstruction project workshop production of wine and brandy shop brandy spirits distilling.
10. Plant reconstruction project of semi-sweet white table wine.

Academic rights of graduates - In addition to the specialty 7.05170106 «Technology of fermentative production and winemaking» applicants with a bachelor of

arts in the direction of «Food technology and engineering» can continue their studies at the level «master» - 8.05170106 «Technology of fermentative production and winemaking», and on the level «specialist» all specialties «Food technology and engineering».

Spheres of graduates' employment

Graduates of «Technology of fermentative production and winemaking» get qualified «engineer technology of fermentative production and winemaking» While employment may hold the following positions: engineer, assistant engineer, an agricultural expert advisor, head (head) design department, head of department (bureau) design project materials, production laboratory manager, head of the production department, chief engineer of the project.

Specialist Degree Program and Curriculum in Specialty «Technologies of product of fermentation and viticulture»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Management and marketing	1	90	1,7	2,5
Total for the cycle			***90***	***1,7***	***2,5***
1.2. Cycle of natural science (fundamental) training *					
1	Civil protection	1	72	1,3	2,0
2	Specific of winemaking	1	144	2,7	4,0
3	Exploitation and repair of technological equipment	1	90	1,7	2,5
4	Technological calculations, accounting and reporting of industry	1	72	1,3	2,0
5	Occupational health in the industry	1	72	1,3	2,0
	Practical	1	180	3,3	5,0
Total for the cycle			***630***	***11,6***	***17,5***
Regulatory part, total			***720***	***13,3***	***20,0***
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training *					
1	Fundamentals of industrial construction and plumbing	1	72	1,3	2,0
2	Reliability of the equipment processing enterprises	1	72	1,3	2,0
3	Designing of the enterprises with the basics of CAD	1	72	1,3	2,0
4	Optimization of fermentation processes productions	1	90	1,7	2,5
	Prediploma practice	2	108	2,0	3,0
Chosen by the University, total			***414***	***7,5***	***11,5***
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training *					
1	Technological quality raw alcoholic beverage production	1	72	1,3	2,0
2	Regulatory and technical documentation in winemaking	1	90	1,7	2,5
Chosen by students, total			***162***	***3,0***	***4,5***
Elective part, total			***576***	***10,5***	***16,0***
Practical training			**684**	**12,4**	**19,0**
Degree examination			**180**	**3,3**	**5,0**
Total, according to specialty			**2160**	**40**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Management and marketing. Learning of the content management process of an engineering and technical service processing enterprises, a theoretical and practical knowledge and skills of students in the scientific management of engineering enterprises of different ownership forms, mastering the theoretical principles of management and marketing skills and application of knowledge in the practice of specialists in the field: food technology and engineering, the study of organizational management structure and its optimization problems in terms of market relations, mastering techniques of modern management.

1.2. Cycle of natural science (fundamental) training

Civil protection. To teach students methods of population and improve the sustainability of agricultural production facilities in case of emergency, the basics of organizing and conducting rescue and other emergency operations while managing accidents, the consequences of natural disasters, prepare students for practical implementation of the civil defense facilities of agricultural production in emergency circumstances as chief of staff of civil defense facility.

Specific of winemaking. Discipline aims at the acquisition of knowledge by students with special technology for various types of wine and brandy, with characteristics of blending, processing blends of wines and brandies before releasing the rules of ripening vintage and ordinary wine products, standard requirements for raw materials and finished products.

Exploitation and repair of technological equipment. Study of methods and techniques of repair and restoration of agricultural machinery and technological equipment most effective way according to existing specifications, a student of deep theoretical and practical knowledge to machinery, detection and elimination of failures.

Technological calculations, accounting and reporting of industry. Discipline has the aim of forming a systematic approach to accounting and reporting during the processes of volatile oil industry, technology of blended vegetable oils. Future professionals acquire knowledge as to calculation of raw materials, auxiliary materials, as well as the basics of accounting in the industry.

Occupational health in the industry. Theoretical and practical training to the creation and ongoing support of regulatory conditions, prevention of accidents and injuries in the agricultural production, preparation for implementation of the principles of the state policy of Ukraine on legal safe working conditions for agricultural enterprises.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

Fundamentals of industrial construction and plumbing. Give students the concept of industrial construction. Provide training in the field of food technology. Know the basics of industrial construction, basic building construction, industrial design principles,

methodology of designing master plans of enterprises. Work with regulatory documentation. To be able to execute design solutions graphically manufacturing plant for the processing of agricultural products, to calculate production equipment. Develop creativity in designing industrial processing s / s products and sanitary systems.

Reliability of equipment of processing enterprises. Developing of the skills of practical knowledge of methods and techniques to ensure the safety of the reliability and operational performance machines for the set time at optimum cost of material and labor resources, study methods and ways to maintain and restore performance and resource agricultural machinery and technological equipment most effective way according to existing technical requirements.

Designing of the enterprises with the basics of CAD. To learn the computer systems and software applications that provide a solution to engineering and scientific problems, design tools and machines to acquire knowledge about the principles of operation and information-processing and computing for measuring complexes, learn methods of processing experimental data using universal and specialized computer programs to introduce the type and purpose CAD, give knowledge of the principles and techniques of 3D solid modeling tools and machines and methods of engineering analysis of designed structures using specialized software application.

Optimization of fermentation processes productions. In the course of the discipline undergraduates studying particular methods of experimentation, systematization, analysis and evaluation of research, design research work, copyright and patent documents in wine. The main areas of study: technology of dry and semi-sweet table wine, grape alcohol and getting production from its use fortified wines.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Technological quality raw alcoholic beverage production. Discipline creates a future specialists skills in the latest techniques for determining the quality of raw materials for the production of food and alcohol, technical, and material for making liqueurs, cordials. Students learn the procedures for technochemical control raw grain, potatoes, molasses and sugar beet plant material for the production of liqueurs and cordials, rules of technical calculations.

Regulatory and technical documentation in winemaking. In the study of this subject student receives theoretical and practical knowledge on standardization, metrology software and organization of technochemical control at the winery. Particular attention is paid to the requirements and application standards series ISO, requirements management system of food safety requirements of the laws of Ukraine.

Specialist training in specialty «TECHNOOGIES OF PRESERVATION, CONSERVATION AND PROCESSING OF MILK» field of knowledge «Food and agricultural products»

Forms of training, licensed study amount:	
– full-time	30 people
– extra-mural	15 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Russian
Qualification of graduates	engineer with the technology storage, preservation and processing of milk

The concept of training

Getting on the basis of educational qualification «Bachelor» complete higher education, special skills and knowledge sufficient to perform professional tasks and responsibilities (work) a certain level of professional activity that provided for primary positions in the food industry.

Practical training

Provides the following practice areas: engineering and production. Engineering practice focused on learning the basic areas of engineering. During the practical training future specialist familiar with the responsibilities, scope and content of the core activities of management and accountability of employees, workplace organization, forms, reports, documents, issues of accountability of employees. Practical contributes to future professionals practical skills, familiarization with the advanced achievements of science and practice milk in the field.

Proposed topics for theses

1. The reconstruction project workshop for the production of dairy products increased range.
2. The reconstruction project workshop for the production of drinking milk with increased range.
3. The reconstruction project workshop to produce dairy products and improving manufacturing equipment.
4. The reconstruction project workshop to produce dietary dairy products increased range.
5. The reconstruction project workshop for the production of whole milk products with increased range.
6. The reconstruction project workshop for the production of butter with the extension range.
7. The reconstruction project workshop for the production of whole milk products with increased range.
8. The reconstruction project workshop for the production of canned milk with increased range.

Academic rights of graduates – In addition to the specialty 7.05170108 «Technology storage, preservation and processing of milk» applicants with a bachelor of arts in the direction of «Food technology and engineering» can continue their studies at the level «master» - 8.05170108 «Technology storage, preservation and processing of milk», and on the level «specialist» all specialties «Food technology and engineering».

Spheres of graduates' employment

Graduates «Technology storage, preservation and processing of milk» get qualified «engineer of technology storage, preservation and processing of milk». While employment may hold the following positions: engineer, assistant engineer, an agricultural expert advisor, head (head) design department, head of department (bureau) design project materials, head of the Laboratory of pre-production, production department chief, chief engineer of the project.

Specialist Degree Program and Curriculum in Specialty «Technologies of preservation, conservation and processing of milk»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Management and marketing	1	90	1,7	2,5
Total for the cycle			***90***	***1,7***	***2,5***
1.2. Cycle of natural science (fundamental) training *					
1	Civil protection	1	72	1,3	2,0
2	Technology of production of quality milk	1	126	2,3	3,5
3	Exploitation and repair of technological equipment	1	90	1,7	2,5
4	Technological calculations, accounting and reporting of industry	1	72	1,3	2,0
5	Occupational health in the industry	1	72	1,3	2,0
	Practical	1	180	3,3	5,0
Total for the cycle			***612***	***11,2***	***17,0***
Regulatory part, total			***702***	***12,9***	***19,5***
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training					
1	Fundamentals of industrial construction and plumbing	1	72	1,3	2,0
2	Reliability of the equipment processing enterprises	1	72	1,3	2,0
3	Designing of the enterprises with the basics of CAD	1	72	1,3	2,0
4	Optimization processes milk production	1	90	1,6	2,5
	Prediploma practice	2	108	2,0	3,0
Total the choice of the university			***414***	***7,5***	***11,5***
2.2. Disciplines chosen by students					
2.2.1. Cycle of professional and practical training					
1	Chemical control milk industry	1	90	1,6	2,5
2	Current affairs technology of milk and milk products	1	90	1,6	2,5
Chosen by students, total			***180***	***3,3***	***5,0***
Elective part, total			***594***	***10,8***	***16,5***
Practical training			**684**	**12,4**	**19,0**
Degree examination			**180**	**3,3**	**5,0**
Total, according to specialty			**2160**	**40**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Management and marketing. Learning content management process engineering and technical service processing enterprises, a theoretical and practical knowledge and

skills of students in the scientific management of engineering enterprises of different ownership forms, mastering the theoretical principles of management and marketing skills and application of knowledge in the practice of specialists in the field: food technology and engineering, the study of organizational management structure and its optimization problems in terms of market relations, mastering techniques of modern management.

1.2. Cycle of natural science (fundamental) training

Civil protection. To teach students methods of population and improve the sustainability of agricultural production facilities in case of emergency, the basics of organizing and conducting rescue and other emergency operations while managing accidents, the consequences of natural disasters, prepare students for practical implementation of the civil defense facilities of agricultural production in emergency circumstances as chief of staff of civil defense facility.

Technology of production of quality milk. Teach students to organize manufacturing milk production, control its quality, rational use of the main components of milk for dairy products. To evaluate the use of a technological method for obtaining milk. Finding the most effective technology solutions. Gaining knowledge and practical skills that are required of students as future professionals for processing of milk and dairy produce quality products.

Exploitation and repair of technological equipment. Study of methods and techniques of repair and restoration of agricultural machinery and technological equipment most effective way according to existing specifications, a student of deep theoretical and practical knowledge to machinery, detection and elimination of failures.

Technological calculations, accounting and reporting of industry. Discipline has the aim of forming a systematic approach to accounting and reporting during the processes of volatile oil industry, technology of blended vegetable oils. Future professionals acquire knowledge as to calculation of raw materials, auxiliary materials, as well as the basics of accounting in the industry.

Occupational health in the industry. Theoretical and practical training to the creation and ongoing support of regulatory conditions, prevention of accidents and injuries in the agricultural production, preparation for implementation of the principles of the state policy of Ukraine on legal safe working conditions for agricultural enterprises.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1. *Cycle of professional and practical training*

Fundamentals of industrial construction and plumbing. Give students the concept of industrial construction. Provide training in the field of food technology. Know the basics of industrial construction, basic building construction, industrial design principles, methodology of designing master plans of enterprises. Work with regulatory documentation. To be able to execute design solutions graphically manufacturing plant for the processing of agricultural products, to calculate production equipment. Develop creativity in designing industrial processing s / s products and sanitary systems.

Reliability of equipment of processing enterprises. Developing of the skills of practical knowledge of methods and techniques to ensure the safety of the reliability and operational performance machines for the set time at optimum cost of material and labor resources, study methods and ways to maintain and restore performance and resource agricultural machinery and technological equipment most effective way according to existing technical requirements.

Designing of the enterprises with the basics of CAD. To learn the computer systems and software applications that provide a solution to engineering and scientific problems, design tools and machines to acquire knowledge about the principles of operation and information-processing and computing for measuring complexes, learn methods of processing experimental data using universal and specialized computer programs to introduce the type and purpose CAD, give knowledge of the principles and techniques of 3D solid modeling tools and machines and methods of engineering analysis of designed structures using specialized software application.

Optimization processes milk production. Forming knowledge of system analysis technology industry, optimization methods, their application for modeling and optimization of manufacturing processes milk production. Learning processes of manufacturing dairy products; system analysis technology industry and its application to solve practical problems, mathematical modeling of technological processes, optimization techniques, forming and solving the optimization of parameters of technological processes, quality and nutritional value of products, marketing activity.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Chemical control milk industry. Formation of students' knowledge of the control of technological processes of production of dairy products, determining the quality of finished products required in industrial and engineering works specialist. Fundamentals of control systems technochemical dairy industry, cost control schemes in the course of the process of production of dairy products, quality control of products in accordance with regulatory and technical documentation. Learning the basic categories and concepts of Chemical Control over industry, systems analysis technology industry and its use to determine control parameters technochemical, modern methods of control of raw materials, process technology, production, mathematical modeling of control systems.

Current affairs technology of milk and milk products. Training of highly qualified professionals who have deep theoretical knowledge and are able to correctly solve the current problems facing the dairy industry in market conditions. To solve actual problems of modern dairy production, develop new raw materials, food additives, sweeteners, quality improvers. Analyze the modern methods of production intensification methods and techniques to increase quality, nutritional value, increase shelf life of foods, trends in the industry in market conditions. Ways of intensification of technological processes. Solving the problem of preservation of dairy products. Creating sustainable technology products dietary purposes. The use of alternative raw materials. Intensification of dairy desserts and negotiate their recipes. Improving processes and flowsheets dairy products. Improving the nutritional value of canned milk, warranty terms of storage. The use of natural and synthetic dyes in the production of dairy products.

Specialist training
in specialty «LAND MANAGEMENT AND CADASTRE»
field of knowledge «Geodesy, cartography and land management»

Forms of training, licensed study amount:	
– full-time	60 people
– extra-mural	60 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Ukrainian, Russian
Qualification of graduates	Land management Engineer

The concept of training

During the training students acquire knowledge and skills, that are relevant in the field of land management and cadastre. Educational process is aimed at training of specialists in advanced technologies of geodesy, land management, land cadastre, GIS and land market. The study of disciplines of the specialty is accompanied by the use of computer systems, new electronic total stations and dumpy levels, receiving station of space data. After graduating from the specified specialty, students gain specialized knowledge in automation and organization of land management workflow; land management expertise; land use prediction and expert land evaluation; economics of land use and land management; evaluation, analysis and forecasting of development of land and real estate market; its legislative support.

Practical training

The bases of practical courses of students in «Land management and Cadastre» specialty are the Republican Committee on Land Resources of the AR of Crimea and its departments in cities and districts, the State Enterprise «Crimean Scientific, Research and Design Institute of Land Management», Crimean Branch of State Enterprise «Center of State Land Cadastre», State Enterprise «Ukrainian State Institute for Design of Gardens and Vineyards «Ukrdiprosad», industrial and scientific enterprises of different ownership of the Crimea.

Proposed topics for theses

1. Analysis of the status and directions of improving the efficiency of land administration.
2. Contouring and reclamative organization of territories based on the analysis of soils conditions using the Earth remote sensing data (RSE).
3. Design of projects of the organization of territories (agricultural enterprise) of certain district of the Crimea (either other region) taking into account bio-source potential of lands.
4. Prediction of changes in qualitative composition of soils based on the analysis of dynamics of their degradation.
5. Improvement of the cadastral surveys technologies on the certain example.
6. Cost-effectiveness and evaluation of the reorganization of agricultural lands of the territory (agricultural enterprise) of certain district of the Crimea (either other region).
7. Justification of the organization of ecological-safety land use (agricultural enterprise) on the territory of Village Council of certain district of the Crimea (either other region).
8. Geoinformation support of territorial planning of rural settlements of certain district of the Crimea (either other region) with creation the model of a village.

9. Improvement of the organization of the territory (agricultural enterprise) of the certain district of the Crimea (either other region) based on ecological and economic evaluation of agricultural lands.

Academic rights of graduates – Students can continue their education by Master's Programmer by training direction 8.08010103 «Land management and Cadastre», or whether to continue their education in graduate school. In addition to the specialty «Land management and Cadastre», entrants with a Bachelor's Degree on training direction of «Geodesy, Cartography and Land Management» can continue their education in the field of knowledge 1801 «Specific categories»:

• 8.18010021 - «Pedagogy of High School « Master's Program «Methods of teaching of land management's subject's cycle»

• 8.18010020 - «Educational Institution Management».

Spheres of graduates' employment

After graduation in specialty «Land management and Cadastre» graduates are prepared to practical work in the field of land management and cadastre, or scientific institutions specialized in dealing with scientific issues of geoinformation technologies and systems, land management and cadastre issues as an land management engineer, specialist, senior specialist in district and municipal departments of Land Resources, district and municipal departments (centers) of Land Cadastre, design institutes of land management, design industrial research institutes, service of geodesy and cartography department, regional and municipal Bureau of Technical Inventory, private enterprises, related to the topographic and geodetic and land management works; an engineer on cadastre and land management, land evaluator, real estate evaluator, agent for sale of land and real estate, expert in land relations, registrar of land and real estate, municipal cadastre engineer, land cadastre engineer, forest cadastre engineer, water cadastre engineer.

Specialist Degree Program and Curriculum in Specialty «Land management and Cadastre»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Business Foreign Language	1	54	1,0	1,5
2	Arbitration and Labor Law	1	36	0,7	1,0
3	Physical Training	1	36	0,7	1,0
Total for cycle			***90***	***1,7***	***2,5***
1.2. Cycle of natural and science (fundamental) training					
1	Civil Protection	2	36	0,7	1,0
2	Labor Protection in Industry	1	36	0,7	1,0
Total for cycle			***72***	***1,4***	***2,0***
1.3. Cycle of professional and practical training					
1	GIS in Cadastral Systems	2	216	4,0	6,0
2	Legislative Support of Real Estate Cadastre	2	180	3,3	5,0
3	Land Monitoring and Protection	2	180	3,3	5,0
4	Land Administration	2	216	4,0	6,0
5	Automation in Land Management	1	90	1,7	2,5
Total for cycle			***882***	***16,3***	***24,5***
Regulatory part, total			**1044**	**19,4**	**29**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training					
1	Organization of Land Management Workflow	1	108	2,0	3,0
2	Land Use Prediction	1	108	2,0	3,0
3	Economics of Land Use and Land Management	1	108	2,0	3,0
Chosen by the University, total			**324**	**6**	**9**
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training					
1	Digital Mapping Land and Real Estate Market	1	108	2,0	3,0
2	Land Management Expertise	2	108	2,0	3,0
3	Registration of Land Ownership Rights Expert Land Evaluation	3	108	2,0	3,0
Chosen by students, total			**324**	**6,0**	**9,0**
Elective part, total			**648**	**12,0**	**18,0**
Practical training			**396**	**7,3**	**11**
Degree examination			**72**	**1,3**	**2,0**
Total, according to specialty			**2160**	**40,0**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Business Foreign Language. Comprehensive teaching the linguistic professional activity. Types of linguistic activities: reading, audition, speaking. Forming of skills of dialogue and monologue speech and preparing students for professional communication in oral and written form in a foreign language. Learning how to translate specialized texts as a mean of adequately presentation of the content of scientific information. Communicative ability in professional communication. Ability to participate in the conference and make a scientific report, hold a business meeting or negotiations with foreign colleagues and partners.

Arbitration and Labor Law. Subject of regulation of arbitration law. Business legal relationship, their characteristics and types. Methods of arbitration law. Basic principles of labor law in Ukraine. Sources of labor law. Subjects of labor law. Collective agreement. Employment relationship. Legal organization of citizens employment.

Physical Training. Basics of a healthy lifestyle. Methods of definition of physical health condition and physical fitness of students. Preparatory and renewable forms of physical activity. Methods of improving of functional abilities, level of physical condition of the body. Fundamentals of chosen complex of physical exercises' technique.

1.2. Cycle of natural and science (fundamental) training

Civil Protection. Emergencies, evaluation of environment, protection of populations, stability, elimination of consequences. Legal basis of civil protection. Rules of Conduct in emergency situations. Management basics of people, agricultural animals and property evacuation.

Labor Protection in Industry. Fundamentals of the theory of labor safety. Legal and institutional framework of labor protection. Protective measures in land management. Providing safe working conditions during field and office land management works. Providing first aid to victims.

1.3. Cycle of professional and practical training

GIS in Cadastral Systems. Theoretical possibilities and practical application of GIS technologies in cadastral and registration systems. Modeling types and species of land use. Using GIS packages and software tools of processing of remote sensing data to conduct the sections of the State Land Cadastre. Levels of processing of cadastral data. Using GIS technologies and systems in modern land management and land cadastre production. Using GIS tools and methods in creating of cadastral systems for land administration.

Legislative Support of Real Estate Cadastre. Value of real estate cadastre for the economy of Ukraine in the context of the European experience. State registration of ownership rights to immovable property and their limitations. Mortgage of lands. Legislative framework for the conduct of real estate cadastre for effective conducting of the State Land Cadastre.

Land Monitoring and Protection. Methods of land resources remote sensing. Use of satellite imagery for land monitoring. Classification of images. Digital cartographical database.

Methodology and procedures for predicting and monitoring of land management, mapping and land cadastral activity. Creation of thematic maps of soil cover, quality and fertility indicators of soils, development of erosive and other degradation processes.

Land Administration. Methodological foundations of management of land use and protection and patterns of their development. Dynamics of changes in land policy and its impact on the organization of land use and protection. Tools and methods of land administration. Elements of regulation of land relations at the national, regional and local levels. Powers of state and local governments in the field of land administration.

Automation in Land Management. Application of electronic geodetic instruments and mechanisms, modern computer technologies. Types and kinds of electronic computers. Application of GIS as a spatial framework for the design. Automation of land management works. Saving the information, it's updating and re-using in land management design.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

Organization of Land Management Workflow. Essence and basis of management: systems, functions and methods of management, organizational structure of management, organization of labor and quality management of activities. Management, organization, planning. Financing, accounting and reporting in design land management organizations of different ownerships. Control and evaluation of the quality of labor.

Land Use Prediction. Theoretical basis of prognostic activity. Prediction: terms and definitions; logical flow chart of forecasting. Classification of forecasts. Principles and methods of forecasting. Features of forecasting of land conditions and use. Land use planning at national, regional and local levels in land administration' system. Development of technological scheme of land use prediction. Selection of criteria and methods, evaluation of land condition. Statistical methods of predicting land condition. Development of the land use plan.

Economics of Land Use and Land Management. Theoretical bases of economics of land management. Economic theories and concepts that form the backbone of economics of land management. Basic theories of economic efficiency of land management. Methodology of assessing the economic efficiency of land management and land use. Methods of justification of land management solutions. Method of determining the land management efficiency with use of methods of mathematical analysis. Economics of territorial and intercompany land management. Assessment of investment land management projects.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Digital Mapping. Digital mapping. General technology of digital maps creation. Requirements for the process of digital terrain maps' creating and updating and rules of digital writing of map information. Correcting of digital terrain maps, control and evaluation of their quality. Spatial (3D) imagination of digital terrain maps and features of their creation. Creation of digital terrain maps using the software package «Panorama».

Land and Real Estate Market. Economic and legal foundation for real estate markets in a market economy conditions. Theoretical foundations of forming the market

mechanisms. Interaction of supply and demand. Classification of property. Methods of market segmentation. Market value of real estate and land. Principles of cost forming. Risks and their quantitative analysis on the real estate market. Methods of determining the market value of land and real estate.

Land Management Expertise. Land management expertise of land management projects. Classification of expertise. Types of state expertise. Expert methods of solutions acceptance. Concept, objectives and principles of scientific and scientifically-technical expertise. Subjects and objects of expertise. Forms and types of scientific and scientifically-technical expertise. Rights and obligations of the customer and expert. Conclusions of scientific and scientifically-technical expertise. Implementation of state land management expertise. State ecological expertise. Construction documents expertize. Comprehensive state examination.

Registration of Land Ownership Rights. History of origin and development of land ownership and land use registration. Fundamentals of registration of land ownership and land use. Modern land relations in Ukraine and registration of land rights. Principles and methods of land registration. Legal framework and organizational support of land registration. Organization of data base during the registration of land ownership and land use. Role of registration of land ownership and land use in land administration system.

Expert Land Evaluation. Fundamentals of registration of land ownership and land use. History of origin and development of the land evaluation. Modern land markets in Ukraine and expert land evaluation. Legal framework and organizational support of land registration. Principles and methods of expert land evaluation. Methodological approaches of expert land evaluation. Expert land evaluation of the land parcel.

Specialist training
in specialty «ECONOMICS OF ENTERPRISE»
field of knowledge «Economics and Entrepreneurship»

Forms of training, licensed study amount:	
– full-time	40 people
– extra-mural	40 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Ukrainian, Russian
Qualification of graduates	Specialist in «Economy of the enterprise»

The concept of training

Training on specialty «Economics of enterprise» provides the formation of knowledge and skills to identify patterns and trends in the operation of modern enterprises in the market economy to increase of enterprises` socio-economic efficiency. An Economist - a person engaged in planning and pre-production, revision and consultation on economic issues, financial and economic security and management of projects and programs in the field of production. Economists collect not only the necessary statistical data, reduce it to the table, group, think, plan but themselves are organizers of production. In carrying out the plan in the event of unforeseen variations into account and give them the leadership necessary recommendations.

Practical training

Volume of practical training on specialty «Economy of the enterprise» is 6 weeks of practice. Production practice of the profession provides practical skills in economic diagnosis and management of projects in agricultural enterprises and organizations.

Proposed topics for theses

1. Economic efficiency of production and ways to improve it (on the example of enterprise).
2. Organization and prospects of production`s development (on the example of enterprise).
3. Productivity and ways of its improvement (on the example of enterprise).
4. The cost of production (crop, stockbreeding) and ways of its reduction (on the example of enterprise).
5. Intensification of production and ways of its improvement (in the crop and stockbreeding) on the example of enterprise.
6. The land resources` efficiency and the ways of its improvement (on the example of enterprise).
7. Labor resources` using and ways of its improvement (on the example of enterprise).
8. Optimization of the resource potential`s using of the enterprise.

Academic rights of graduates – Students can continue their training on the program of the Master`s preparation on specialty 8.03050401 «Economy of the enterprise» and on specialties of knowledge`s fields 1801 «Specific category».

Spheres of graduates' employment

It`s intended for professionals` training in the economic sphere, economists-analysts, experts and consultants in organization of economic work at the enterprises. The level of training and graduates` qualifications provides them the opportunity to work on the mentioned positions in the various entities in the agro-industrial sector, public authorities, local governments, relevant departments and offices carry out the powers on the state agrarian policy`s realization.

Specialist Degree Program and Curriculum in Specialty «Economics of enterprise»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Financial management	1	108	2	3
2	Strategic management of enterprise	2	144	2,7	4
3	Economics and enterprises` associations` organization	2	144	2,7	4
4	Management of projects	1	144	2,7	4
5	Management enterprise`s potential	1	144	2,7	4
6	Economic diagnostics	1	108	2	3
Total for the cycle			**792**	**14,8**	**22**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training					
1	Labour protection	2	36	0,7	1
2	Civil protection	2	36	0,7	1
3	The bases of administration	2	108	2	3
4	Staff management	2	108	2	3
5	Information technology decisions` substantiation	2	108	2	3
6	Modeling of economic dynamics	1	108	2	3
Chosen by the University, total			***504***	***9,4***	***14***
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training					
1	Management of risks	1	72	1,3	2
2	Regulation of labor	1	72	1,3	2
3	Macroeconomic analysis	2	72	1,3	2
4	Bases of customs and currency legislation	1	72	1,3	2
5	Financial law	1	72	1,3	2
6	Marketing researches	2	72	1,3	2
Chosen by students, total			***216***	***3,9***	***6***
Elective part, total			**720**	**13,3**	**20**
Practical training			**324**	**6,0**	**9,0**
Degree examination			**324**	**6,0**	**9,0**
Total, according to specialty			**2160**	**40,0**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Strategic management of enterprise. The self of strategic planning. The purpose of management. The essence of strategy and «strategic set». Strategic plans, projects and programmers. Strategic management as the implementation of a targeted approach. Organizational support. Strategic management and institutional changes of control (SCC). Financial-economic mechanism of strategic management. Information and analytical support for strategic management.

Financial management. Concepts of financial management and financial policy of the enterprise. Organizational and informational support for financial management. Analysis of the financial management`s system. Control in the financial management`s system. Cash-flow management. Enterprise asset management. Capital management of the enterprise and the enterprise's profit. Investment management. Management of financial risks. Management of Taxes at the enterprise. Anti-crisis enterprise`s financial management.

Economics and enterprises` associations` organization. Includes the study of the enterprises` associations` organization, specialization and cooperation of enterprises, associations, corporations and their activities, the holding organization of associations of enterprises, the characteristics of the industrial-financial groups, state regulation of the enterprises` associations` activity, organizational and management structures of associations of enterprises, economic regulation, financing, markets globalization and transnational corporations.

Management of projects. History and general bases of projects` management. System approach to project management. Project analysis. Investment researches and project`s financing. Business planning of the project. Software-technical maintenance of project`s management. Integration management of project and content. Management of time. Management of project`s cost. Management of project`s risk.

**Management of enterprise`s material-technical potential.** The system of management and the formation of enterprise`s labour potential. The system of crisis management of enterprise`s potential. Management of competitiveness potential. Mechanisms and counteraction to crisis processes. Engineering the system of enterprise`s potential. Peculiarities of innovative reproduction enterprise`s potential. Organizational and economic support of management`s systems` improvement and introduction of enterprise`s potential.

Economic diagnostics. Object and tasks of the course. Competitive environment enterprise`s diagnostics. Diagnosis of enterprise`s competitiveness. Estimation of production`s competitiveness. Evaluation of the enterprise as an integrated property complex. Diagnostics of enterprise`s potential. Management diagnostics. Financial diagnostics. Diagnostics of enterprise`s economic security. Diagnostics of enterprise`s economic culture.

2. Elective disciplines

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

Labor protection. Injuries and diseases among workers. Traumatic factors. Dynamics of traumatism and the analysis of its indicators. The labour code. Control and responsibility for ensuring the health at the enterprise, plots object. The structure of labor and acts of the state inspection for labor protection. Labor protection at the enterprise. The concept and definition of occupational health. Industrial sanitation and injuries, and occupational diseases. Harmful and dangerous production factors at the workplaces and working areas. Working conditions. Safety of agricultural machines, aggregates, combine harvesters and etc. Training employees on labor protection.

The principles of administration. Study of the discipline gives teach the students to work with documents – to know their structure and correctly place the details depending on the document`s type, know all the operations of preparation, drawing up, approval and

execution of documents; to study the organization of work with documents. Includes the study of modern record keeping, existing standards on documents` execution, classification and standardization of documents and rules of documents` preparation and registration, the general requirements of documents` requisites, drawing up and execution of official documents, organization of work with documents, preparation and transfer them to the archives.

Civil protection. Civil defense in modern conditions. The reasons of occurrence and classification of emergencies. Characteristics of possible emergency situations in Ukraine. Planning civil defense actions in the agricultural enterprise. Framework of sustainable agriculture in emergencies. Methods of sustainability`s evaluation of agricultural production in emergency situations. Framework for the protection of crop and livestock sector, machine-tractor fleet, fuel and energy complex, hydro-technical objects at threat and occurrence of emergency situations.

Staff management. The staff of the organization as an object of management. Methodology of management. Resource maintenance management. Socio-psychological aspects of management. Personnel service and management. Planning and development of personnel. Personnel development. The movement of personnel. Regulation of labour activity of the personnel. Creation of favorable working conditions. Assessment of personnel. Motivation and stimulation of the personnel. Social partnership in the organization. Efficiency of staff`s management.

**Information technology decisions` substantiation.** The theory of decision-making`s support`s systems as the methodological base of the ARM. Concept of software`s use of accounting`s automation at the agroindustrial complex`s enterprises. Information systems and technologies of registration. Service opportunities of 1S Enterprise. Management Accounting results in 1S. Changes in the tax laws amend the programmer 1S. The main differences between 1S version 7.7 and 8.2.

Modeling of economic dynamics. Study of the discipline contributes to the formation of theoretical knowledge and practical skills of construction and mathematical model's analysis of the economic processes` development`s dynamics. Includes the study of the economic processes` modeling`s principles, linear dynamic models of equilibrium and disequilibrium, stability and instability of dynamic economic models of nonlinear dynamic models of economic systems, qualitative methods of the socio-economic systems` analysis, models of economic change and their analysis.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Management of risks. Study of the discipline involves the acquisition of knowledge on the management of risk factors, methods of active and passive protection from risk. Involves the study of the essence and causes of the risk, classification of risks, the main approaches to the identification and management of risks, assessment`s risk, methods of risk`s management, cost structures in various methods of risk`s management, economic criteria for evaluating the effectiveness of risk`s management, analysis of economic insurance`s efficiency and self-insurance.

Regulation of labor. Study of the discipline involves the formation of theoretical knowledge and practical skills on the valuation and payment for agricultural enterprises` labor. Includes the study of the subject, method and objective of work`s normalization, theoretical and methodological foundations of work`s normalization at agricultural enterprises, labour norming of crop production, labour norming livestock, labour norming

service of industries, labor regulation and payment of labour norms governing of the agricultural enterprises` composition, the development and implementation of the scientific organization`s activities of labour and determine their economic efficiency.

Macroeconomic analysis. The discipline includes the study of the foundations of macroeconomic analysis and mastering the techniques and methods of analysis. Includes the study of basic macroeconomic indicators, the theory and practice of macroeconomic analysis, analysis of the main macroeconomic indicators, macroeconomic analysis of labour and employment, monetary circulation and credit`s system, fiscal, supply and demand, prices, indices of foreign economic activity, social sphere, state environmental protection.

Principles of customs and currency legislation. Discipline foresees the formation of theoretical knowledge and practical skills of customs and currency legislation`s application. Includes the study of movement and clearance of goods and vehicles through the customs border of Ukraine, customs procedures, customs and peculiarities of checkpoints and taxation of goods transported through the customs border, customs value and methods of its establishment, violation of customs regulations and responsibility, the system of currency regulation and control regime current accounts in foreign currency and foreign exchange operations of banks, documentation, control of foreign exchange operations.

Financial law. Study of the discipline contributes the theoretical knowledge and practical skills` legislation`s formation on financial issues and principles of financial institutions` activity. Includes the study of the concept of financial law and its place in the system of Ukraine`s law, subjects, objects of financial law and administration, financial control, budgetary legislation and its application, tax legislation and its application, operations with foreign currency, customs legislation and customs rules, the powers of state bodies in the sphere of currency regulation.

Market researches. Study of the discipline promotes mastering by the students of theoretical bases in marketing research of agrarian enterprises` management. Provides studying of marketing researches system, formulation of strategies, marketing research, pricing, supply and demand conditions of agricultural market`s functioning, complex marketing researches, organization of marketing research for agricultural enterprises.

Specialist training
in specialty «FINANCE AND CREDIT»
field of knowledge «Economics and Entrepreneurship»

Forms of training, licensed study:	
– full-time	30 persons
– extra-mural	30 persons
Term of training	1 year
Credits	60 ECTS
Language of training	Ukrainian, Russian
Qualification of graduates	Specialist in «Finance and Credit»

The concept of training

Specialty «Finances and Credit» has the purpose to prepare managers and financial managers who know the art of financial management company. This specialty can equip Specialists modern methods of financial management, promote the ideology of the new financial management, adequate market economy familiarize with modern financial instruments and help create dynamic management decisions. Graduates «Finance and credit» is highly qualified in finance, financial management, financial analysis. They have modern methods of analysis and forecasting financial and economic situation.

Practical training

The amount of practical training on «Finance and Credit» is 6 weeks practice. Production practice of the profession involves you receive a practical knowledge of financial and tax management.

By the bases of practical training in specialty include: CT «Crimea-Aroma», LLC «Adonis», LLC «Dzhankoj Niva», LLC «Azovchani», LLC «Agro Niva», PJSC «Starokrymskiy» , JV «Niva» SE «Malorechenskoye, LOD «Massandra», SE «Sea», SE «Tavriia» and other works, as well as units the Ministry of Agrarian policy and Food of Crimea.

Proposed themes of diploma projects

1. Improved lending operations of commercial banks
2. Management of equity companies
3. Formation and distribution of financial results of the company
4. Crisis financial management of the Company
5. Organization of financial controlling in the enterprise
6. Cash Management Company
7. Assessment of market value businesses
8. Rating of investment attractiveness

Academic rights of graduates - Students can continue their studies for Master Programmer in specialty 8.03050801 «Finance and Credit» and the field of knowledge 1801 «Specific categories».

Areas of graduates' employment

Designed to prepare professionals who can work in the public, joint, private enterprises of various sectors of the economy, banks, insurance companies, consulting companies. Graduates are able to lead the economic units of government and industrial manufacturing plants, research and design institutions, will be able to use knowledge and skills in the laboratories and centers of economic research that can perform analytical work and the work of financial managers.

Specialist Degree Program and Curriculum in Specialty «Finance and Credit»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Financial Management	1	108	2	3
2	Budget Management	2	108	2	3
3	Tax Management	1	108	2	3
4	Financial Services Market	1	108	2	3
5	Financial reorganization and bankruptcy	2	144	2,7	4
6	Project Management	1	108	2	3
7	International Finance	1	108	2	3
Total			***792***	***14,7***	***22***
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training					
1	Occupational Health in the Branch	2	36	0,7	1
2	Civil protection	2	36	0,7	1
3	Fundamentals of office	2	108	2	3
4	Personnel Management	2	108	2	3
5	Information Technology Decisions	2	108	2	3
6	Principles of treasury	1	108	2	3
Total			***504***	***9,4***	***14***
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training					
1	Risk Management	1	72	1,3	2
2	Corporate Finance	1	72	1,3	2
3	Mortgages	1	72	1,3	2
4	Actuarial calculations	1	72	1,3	2
5	Financing and Crediting of Agricultural Enterprises	1	72	1,3	2
6	Simulation of Economic Dynamics	1	72	1,3	2
Total			***216***	***3,9***	***6***
Elective part, total			***720***	***13,3***	***20***
Practical training			**324**	**6,0**	**9,0**
Degree examination			**324**	**6,0**	**9,0**
Total, according to specialty			**2160**	**40,0**	**60,0**

* The list of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Financial Management. Concept of financial management and financial policies of the enterprise. Organizational and informational support financial management. Analysis of the system of financial management. Control of the system of financial management. Cash

Management. Asset management company. Wealth management companies and profits. Investment management. Financial Risk Management. Tax management in the enterprise. Crisis financial management.

Budget management. Gaining theoretical and practical knowledge to uncover opportunities, develop skills to organize the budget process in Ukraine and its management, and implementation of the state budget, the discipline is the state budget resources and relationships associated with their use. Mastering knowledge of the mechanism of drawing up, approval and implementation of the budget. Formation of knowledge on public credit and debt management. Learning assembly process of budget reporting, monitoring the implementation of the budget.

Tax management. Mastering the latest knowledge on tax and business skills necessary for future management professionals in the field of taxation. Involves the study of economic, organizational, legal issues that arise in the management of tax administration, theoretical and organizational principles of tax management and accounting work in the bodies of DPS, Control and Inspection work of DPS.

Financial services market. Involves the study of the theoretical foundations of market functioning financial services to segments of the financial market, organizational and legal framework for the functioning of the financial services market in Ukraine. Financial reorganization and bankruptcy. Involves the formation of knowledge on methodology and practical implementation of financial reorganization, bankruptcy, financial support disposal procedures. Provides evaluation study sanation power companies, procedures preparation and coordination of financial reorganization of the enterprise, enterprise reorganization procedure in the courts, enterprise restructuring, reorganization methods of state support of enterprises, economic and legal aspects of bankruptcy and liquidation.

Project Management. History and general principles of project management. Environment project management. Systematic approach to project management. Project analysis. Investment research and project financing. Business planning project. Hardware and software project management. Management integration project. Content management project. Time Management Project. Cost Management Project. Risk management project.

Financial reorganization and bankruptcy. Involves the formation of knowledge on methodology and practical implementation of financial reorganization, bankruptcy, financial support disposal procedures. Provides evaluation study sanation power companies, procedures preparation and coordination of financial reorganization of the enterprise, enterprise reorganization procedure in the courts, enterprise restructuring, reorganization methods of state support of enterprises, economic and legal aspects of bankruptcy and liquidation.

Project Management. History and general principles of project management. Environment project management. Systematic approach to project management. Project analysis. Investment research and project financing. Business planning project. Hardware and software project management. Management integration project. Content management project. Time Management Project. Cost Management Project. Risk management project.

International finance. Forming future financiers of knowledge in international finance mechanisms and instruments of decision-making in the monetary, credit and investment relations at the micro and macro levels, practical skills in the international financial sector. The study of the theory and practice of the system of international finance.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

Occupational health in the branch. Injuries and illnesses among workers . Traumatic factors. Dynamics of injuries and an analysis of its performance. Labor Code . Control and responsibility of managers to ensure safety at the plant, station facility. Structure of labor in industry and acts of state inspections for safety. Health services in the enterprise. The concept and definition of occupational health. Occupational health and injury, occupational diseases . Harmful and hazardous production factors in the workplace and work areas . The working conditions of employees. Safety at work on agricultural machinery, units, combine harvesters and so on. Training employees on health and safety.

Fundamentals of management. Learning discipline can teach students to work with documents - to know their structure and properly placed requisites depending on the type of document to know all the operations of training, preparation, agreedtion and documentation to examine the organization of documents. Provides study the characteristics of modern management, current standards for documentation, classification and standardization of documents and regulations for the execution of documents, the general requirements for the design details of the documents, preparation and execution of official documents, the organization of the documents systematization of documents, preparation and transfer them to the archive.

Civil protection . Civil defense in modern conditions. Causes and classification of emergencies. Characterization of possible emergencies in Ukraine. Event Planning Civil Defense in the agricultural enterprise. Basics sustainability of agriculture in emergencies. Methods for assessing the sustainability of agricultural facilities, agricultural areas in emergency situations. Basics protect crops and livestock industries, machine and tractor fleet, fuel and energy, water facilities and with the threat of an emergency.

Personnel Management. Staff of the object management. The methodology of management personnel. Resource provision of personnel management. Social and psychological aspects of personnel management . Service Personnel and HR outsourcing. Planning and formation personnel. Staff development . The movement of personnel. Regulation of employment of staff. Creating favorable conditions. Evaluation of staff. Motivation and incentives for staff. Social partnership in the organization. Performance management personnel.

Information Technology decisions. The theory of decision support systems solutions, as methodological framework workstations. The concept of application software in the automation of accounting in agricultural enterprises. Information systems and technology records. Service opportunities 1C. Management accounting results in 1C. Changes in tax legislation that made changes to the program 1C Company. The main differences in 1C versions 7.7 and 8.2.

Fundamentals of treasury. Study subjects can examine the contents of the operations of cash income and expenditures of the State budget. Involves the study of budgeting and budgetary system of Ukraine, budget control and its organization of the State Treasury of Ukraine, the organization of public payments of cash execution of budget revenues, cash execution of the state budget of the race moves control the budget deficit and public debt Ukraine.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Risk Management. Learning involves mastering the discipline of knowledge management of risk factors, methods of active and passive protection against risk. Involves the study of the nature and causes of risk, risk classification, the main approaches to the identification and management of risk, risk assessment, risk management practices, cost structure with different methods of risk management, economic criteria for evaluating the effectiveness of risk management, cost-effectiveness analysis of insurance and self-insurance.

Corporate Finance. Learning discipline allows us to consider the basic concepts of corporate finance, corporate financial policy , their relationship with financial market participants . Involves the study of the following topics: economic sense and purpose of corporate finance, equity price and its management structure, management equity, loan capital management, financing investments in fixed assets, Investments in working capital.

Mortgages. Study subjects allow you to create a system of knowledge on the theory and practice of mortgage lending in Ukraine. Involves the study of the following topics : mortgage and its object relations and members of mortgage types mortgage value mortgage in today's conditions, especially mortgage relations in the agricultural sector , the basic premise of mortgages , foreign experience in regulating mortgage relations , legal support mortgage relations in Ukraine , valuation as collateral , property valuation methods , the application of methods of real estate valuation , valuation of buildings, businesses and their structural subdivisions, land rent and its definition , assessment of agricultural land, non-agricultural land assessment , especially real estate, emerging monetary valuation that develops, functions and activities of mortgage banks , especially the establishment of mortgage banks in Ukraine , mortgage credit operations of banks, the loan agreement with the value of collateral lending rate determination , the loan and mortgage agreement, credit support , real mortgage securities of its own issue, conditions of issue mortgage-backed securities, foreign experience issue mortgage-backed securities , mortgages and mortgage bonds : a comparative analysis of models , reliability, mortgage banks, mortgage banks of principles.

Actuarial calculations. The purpose of discipline is to develop a system of fundamental knowledge about the nature, construction and analysis of mathematical models and methods of regulating the relations between insurers and insured, we are. Involves the study of the following topics : objectives and tools of actuarial calculations, the general principles of insurance risk modeling , analysis and management of risk in insurance , models of individual claims, lawsuits dynamic model, static model of bankruptcy insurance companies determine insurance rate insurance life insurance reserves system , the model risk management com through reinsurance, the insurance market equilibrium models .

Financing and crediting of agricultural enterprises. Study subjects can form a system of knowledge of financial management companies operating and investing activities of the strategy and tactics of financial entities. Involves the study of the following topics : features financing of agrarian sector sources of financial resources, analysis of effectiveness of funding sources , subjects of credit relations in agriculture, regulation of farm loans , application term financial instruments in the financial market , the mechanism of bank lending farm , insurance, financial and credit risks, financial instruments of state support to farmers, land use mortgage lending for agriculture programs and features lending farms.

Simulation of economic dynamics. The study contributes to the formation of the discipline of theoretical knowledge and practical skills in the construction and analysis of mathematical models of the dynamics of economic processes. Involves the study of the principles of economic processes modeling, linear dynamic models, equilibrium and disequilibrium, stability and instability of dynamic economic models, nonlinear dynamic models of economic systems, qualitative methods of analysis of socio-economic systems, models of economic changes and their analysis synergetic approach to modeling and analysis of economic processes.

Specialist training
in specialty «ACCOUNTING AND AUDITING»
field of knowledge « Economics and Entrepreneurship»

Forms of training, licensed study:	
– full-time	80 persons
– extra-mural	90 persons
Term of training	1 year
Credits	60 ECTS
Language of training	Ukrainian, Russian
Qualification of graduates	Expert of accounting and auditing

The concept of training

Training in «Accounting and Auditing» main task involves students acquiring knowledge and skills of accounting required for efficient operation of enterprises of different ownership in a market economy according to national accounting standards, the ability to make better decisions to improve organizational forms and methods of accounting. Accountant - is a highly demanded expert competent in the design of information systems, which is able to interpret and analyze data about the company and the financial statements give recommendations for management decisions, conduct audits, qualified to advise on tax issues.

Practical training

The amount of practical training in «Accounting and Auditing» is 6 weeks of practice. Production practice of the profession involves you receive a practical skills of accounting, reporting, organization of information systems.

Proposed themes of diploma projects

1. Formation of accounting and reporting in the company by international standards.
2. An audit of the company in accordance with international standards.
3. Analytical Support for accounting and reporting according to international standards.
4. The organization of management accounting in the enterprise.
5. Organization of accounting of production (or other) costs.

Academic rights of graduates – Students can continue their studies for Master Program in specialty 8.03050901 «Accounting and audit» and the field of knowledge 1801 «Specific categories».

Areas of graduates' employment

Specialist of accounting and auditing - a specialist qualifications, prepared for self-employment in enterprises, companies of all ownership forms, organizations, banks, budget and financial structures of the executive. Specialist accounting and auditing at the beginning of their professional careers may hold the position of a leading accountant, accountants and other categories and management positions in accounting, control and audit at various levels of financial and credit system.

Specialist Degree Program and Curriculum in Specialty «Accounting and Auditing»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of professional and practical training					
1	Organization of accounting	1	144	2,7	4
2	Management information systems in the analysis and audit	1	144	2,7	4
3	Financial analysis	2	108	2	3
4	Reporting of an enterprise	1	144	2,7	4
5	Accounting in foreign economic activity	1	108	2	3
6	Models and methods of decision-making analysis and audit	2	144	2,7	4
Total			***792***	***14,8***	***22***
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training*					
1	Occupational Health in the Branch	2	36	0,7	1
2	Civil protection	2	36	0,7	1
3	Fundamentals of management	2	108	2	3
4	Personnel management	2	108	2	3
5	Information technology inform decisions	2	108	2	3
6	Forensic accounting	2	108	2	3
Total			***504***	***9,4***	***14***
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training*					
1	Risk management	1	72	1,3	2
2	International finance	1	72	1,3	2
3	Quantitative methods in economic analysis	1	72	1,3	2
4	Fundamentals of customs and currency legislation	1	72	1,3	2
5	Cost accounting and budgeting in agricultural enterprises	1	72	1,3	2
6	Financial accounting and reporting according to international standards	1	72	1,3	2
Total			***216***	***3,9***	***6***
Elective part, total			***720***	***13,3***	***20***
Practical training			**324**	**6,0**	**9,0**
Degree examination			**324**	**6,0**	**9,0**
Total, according to specialty			**2160**	**40,0**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of professional and practical training

Organization of accounting. Fundamentals of Accounting. Organization of regulatory accounting software. Organizing your process. Organization of accounting equity. Organization of accounting obligations. Organization of accounting and analysis of long-term assets . Organization of accounting and analysis of current assets. Organization of accounting and analysis of costs, revenues and results of the company. Organization of staff employed accounting , control and analysis. Organization of information , technical support and accounting, control and analysis. Planning for future development of accounting.

Management information systems in analysis and audit. Learning discipline of learning involves the creation and use of management information systems and technologies of the financial and management accounting and control- analytical processes. Involves the study of principles of management information systems, advanced information technology, information technology solving the financial, managerial and tax accounting, objectives of internal control, analytical problems, problems with the audit company.

Financial analysis. The theoretical basis of financial analysis , the overall assessment of the financial condition of the company , analysis of financial stability , solvency and liquidity analysis , cash flow analysis , analysis of the creditworthiness of companies , analysis of the efficiency of capital , production and evaluation of financial leverage , analysis of business activity and investment attractiveness , short-term financial forecast state enterprises , financial analysis of insolvent enterprises, strategic analysis of financial risks.

Reporting of an enterprise. General reporting requirements . Balance sheet . Income Statement . Statement of Cash Flows. Statement of changes in equity. Correction of errors and changes in the financial statements . Overall and consolidated financial statements. The financial report of the small businesses . Tax reporting . Statistical and special reports.

Accounting in foreign economic activity. Involves the formation of knowledge systems to integrate external financial and business transactions. Study subjects studied based on the accounting of export and import, barter and tolling, on account of investment, monetary and financial transactions, transactions in enterprises with foreign investment.

Models and methods of decision-making analysis and audit. Management decisions: classification, comparable risk factor. Methodology competitiveness management decisions. Technology development and implementation of management decisions. Methods of analysis of management decisions. Principles applying functional cost analysis. Analysis of the effectiveness of resource use. Prediction of managerial decisions.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

Occupational health in the branch. Injuries and illnesses among workers. Traumatic factors. Dynamics of injuries and an analysis of its performance. Labor Code. Control and responsibility of managers to ensure safety at the plant, station facility. Structure of labor in industry and acts of state inspections for safety. Health services in the enterprise. The concept and definition of occupational health. Occupational health and injury, occupational diseases. Harmful and hazardous production factors in the workplace and work areas. The working conditions of employees. Safety at work on agricultural machinery, units, combine harvesters and so on. Training employees on health and safety.

Fundamentals of management. Learning discipline can teach students to work with documents - to know their structure and properly placed rekvizity depending on the type of document to know all the operations of training, preparation, coordination and execution of documents and to examine the organization of documents. Provides study the characteristics of modern management, current standards for documentation, classification and standardization of documents and regulations for the execution of documents, the general requirements for the design details of the documents, preparation and execution of official documents, the organization of the documents systematization of documents, preparation and transfer them to the archive

Civil protection. Civil defense in modern conditions. Causes and classification of emergencies. Characterization of possible emergencies in Ukraine. Event Planning Civil Defense in the agricultural enterprise. Basics sustainability of agriculture in emergencies. Methods for assessing the sustainability of agricultural facilities, agricultural areas in emergency situations. Basics protect crops and livestock industries, machine and tractor fleet, fuel and energy, water facilities and with the threat of an emergency.

Personnel management. Staff of the object management. The methodology of management personnel. Resource provision of personnel management. Social and psychological aspects of personnel management. Service Personnel and HR outsourcing. Planning and formation personnel. Staff development. The movement of personnel. Regulation of employment of staff. Creating favorable conditions. Evaluation of staff. Motivation and incentives for staff. Social partnership in the organization. Performance management personnel.

Information technology inform decisions. The theory of decision support systems solutions, as a methodological framework workstations. The concept of application software in the automation of accounting in agricultural enterprises. Information systems and technology records. Service opportunities 1C. Management accounting results in 1C. Changes in tax legislation that made changes to the program 1C Company. The main differences in 1C versions 7.7 and 8.2.

Forensic accounting. Summary of forensic accounting , forensic accounting expertise, conduct, methodological aspects of the records in the detection and investigation of offenses in areas of the economy, the use of registers and primary documents in detecting and investigating fraud in the banking sector and small businesses, especially the revision which is an initiative of the inquiry and investigation.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Risk Management. Learning involves mastering the discipline of knowledge management risk factors of active and passive protection against risk. Involves the study of the nature and causes of risk, risk classification , the main approaches to the identification and management of risk , risk assessment , risk management practices , cost structure with different methods of risk management , economic criteria for evaluating the effectiveness of risk management, cost-effectiveness analysis of insurance and self-insurance.

International finance. Forming future financiers of knowledge in international finance mechanisms and instruments of decision-making in the monetary, credit and investment relations at the micro and macro levels, practical skills in the international financial sector. The study of the theory and practice of the system of international finance.

Quantitative methods in economic analysis. Involves the study of quantitative methods of economic analysis to assess the state of the economy enterprise, its production capacity, efficiency and forecasting trends in business. Students study the following topics: classification of methods of analysis, methods of mathematical programming, game theory, queuing theory, learning theory, methods of inventory management, catastrophe theory, break-even analysis and target profit planning.

Fundamentals of customs and currency legislation. Discipline provides the theoretical knowledge and practical skills to apply customs and exchange regulations. Involves the study of movement and space goods and vehicles across the customs border of Ukraine, customs procedures, customs regulations and characteristics pass and taxation of goods crossing the customs border of the customs value and methods of installation, violation of customs rules and responsibilities of currency regulation and control, mode current accounts in foreign currency and exchange operations of banks, documentation, control of foreign exchange transactions.

Cost accounting and budgeting in agricultural enterprises. The essence of the costs and the need for classification: fixed and variable costs. The behavior of fixed and variable costs, the zone of relevance. Methods of cost functions. Using cost functions in decision making. Regulatory support cost accounting and costing of agricultural products. Items of cost accounting and calculation facilities. Accounting and valuation costs economic elements.

Financial accounting and reporting according to international standards. Definition and classification of accounting systems. Models accounting, the nature and characteristics. Harmonization and standardization of accounting systems. Activities of international accounting organizations to establish an international system of accounting and reporting. History and organization of the Committee on International Accounting Standards Committee (IASC). The procedure for creating IAS. Scope of IFRS. Purpose, composition and users of financial statements. General requirements for the presentation of information in the financial statements. Elements of Financial Statements. Asset Accounting: Concepts, features and book reviews for reflection. Borrowing Costs: concept and measurement. Impairment of assets. Identification and assessment of the impairment of assets. Investment Property: recognition, assessment and registration. Rent: concept, types and features of accounting. Operational leasing, leasing. Financial Instruments: Recognition and Measurement.

Specialist training
in specialty «MANAGEMENT OF ORGANIZATION AND ADMINISTRATION»
field of knowledge «Management and Administration»

Forms of training, licensed study:	
– full-time	30 persons
– extra-mural	20 persons
Term of training	1 year
Credits	60 ECTS
Language of training	Ukrainian, Russian
Qualification of graduates	Specialist in Management and Administration

The concept of training

Specialist in organizational management and administration - a professional who has specialized management education and is responsible for the development and management decisions, engaged in a wide range of issues. Main areas of professional activity - information-analytical, organizational, managerial, administrative and economic, and in terms of gaining relevant experience may adapt to such adjacent areas of professional activity: economic, marketing, accounting and control, foreign trade, education, science and research. This is representative of a particular profession that combines the manager, economist, engineer and lawyer.

Practical training

The amount of practical training specialty «Management and Administration» is 8 weeks, including 6 - production and 2 weeks - pre-diploma practice. Production practice of the profession involves the formation of professional ability to make professional decisions in specific circumstances of any business entity, mastery of modern techniques, form of organization of production.

Proposed themes of diploma projects

1. Resource ways to improve the management of the enterprise (for example).
2. Streamlining HR (for example).
3. Innovative forms of organization of the head (for example).
4. Innovative Labor Organization Manager (for example).
5. Rationalization of the functional organization of human resource management (for example).
6. Organization strategic management (for example, district).
7. Organization strategic planning (for example, district).

Academic rights of graduates – students can continue their studies for Master Programmer in specialty 8.03060101 «Management and Administration» and the field of knowledge 1801 «Specific categories».

Areas of graduates' employment

Specialist in organizational management and administration prepared to work in such sectors as agriculture, hunting and related services, manufacturing, and construction. Posts that can take specialist organization management and administration of a director of the company, department, branch, director of small business, the head of the department, head of economic, financial, legal, administrative, economic, personnel and labor relations, freight forwarding, logistics supply, marketing, commercial, advertising department, office and others.

Specialist Degree Program and Curriculum in Specialty «Management of Organization and Administration»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of professional and practical training					
1	Intellectual property	2	54	1	1,5
2	Occupational Health in the Branch	2	54	1	1,5
3	Civil protection	2	54	1	1,5
4	Contract Law	1	54	1	1,5
5	Public administration	2	72	1,3	2
6	**Business Administration:**				
6.1	*Management*	1	108	2	3
6.2	*Corporate Governance*	2	72	1,3	2
6.3	*Change Management*	2	72	1,3	2
6.4	*Project Management*	1	72	1,3	2
6.5	*Quality Management*	2	72	1,3	2
7	Financial Management	1	108	2	3
8	Information systems and technology in management of an organization	1	72	1,3	2
Total			***864***	***16***	***24***
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training					
1	Psychology of management	1	72	1,3	2
Total			***72***	***1,3***	***2***
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training					
1	Investment Management	1	72	1,3	2
2	Risk Management	1	72	1,3	2
3	Innovation Management	1	72	1,3	2
4	Fundamentals of management	1	72	1,3	2
Total			***144***	***2,7***	***4***
Elective part, total			***216***	***4***	***6***
Practical training			**432**	**8,0**	**12,0**
Degree examination			**648**	**12,0**	**18,0**
Total, according to specialty			**2160**	**40,0**	**60,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of professional and practical training

Intellectual Property. The concept of intellectual property. Objects and subjects of intellectual property. Protection of Intellectual Property in Ukraine . Legal Protection of patent rights. Legal protection of individualization of participants circulation of commodities , goods and services. The legal protection of copyright and related rights. International

legal protection of intellectual property. Protection of intellectual property rights. The rights and obligations of protection for intellectual property rights . The legal form of the right to intellectual property.

Occupational health in the branch. International standards in safety. Key legislation and regulations on health and safety in the industry. Safety management in the organization. Injuries and diseases in the field . Investigation of accidents . Special sections of work in the field of professional activity. Actual problems of health and safety in research. Basic fire prevention measures on industry sites. State supervision and monitoring of public safety. Social insurance against accidents and occupational diseases in the workplace.

Civil Protection. Monitoring of hazards that may cause emergencies. Action planning for civil defense. Methods for calculating damage zones from technogenic explosions and fires and the antiexplosive and fire-preventoin CO. Forecasting and planning environment protection measures in the areas of radiation, chemical and biological contamination, testing engineering environment and socio-economic consequences of emergencies.

Contract Law. Definition and general description of contract law in Ukraine. Terms of contracts in economic activity. Contractual obligations entities (entrepreneurs). Agreements on the transfer of property ownership, contracts on transfer of property in use. Contracts for works, contracts for legal and actual services. Legal regulation of credit and payment relations. The obligation of cooperation.

Public Administration. Subject and methodological framework of public administration. Basic theory of social control. Public - sector economic unity . Social and political spheres . Civil society as the subject of the formation of public administration purposes . Public administration and government. Public administration and municipal public authorities . Laws and principles of public administration. Public administration as the process output. The adoption and implementation of management decisions. Values and «objectives tree» of public administration. Mechanisms , organs , methods and styles of public administration. Bureaucracy in the system of public administration. Anti-corruption activities in the field of public administration. Effectiveness and efficiency of public administration. Basic principles of public administration in the social field. Public administration and economics. The most important function of public administration in the economy. Corporate power and public administration in voluntary associations. Responsibility in public administration .

Business Administration:

1. Management. System model of organizational management. The evolution of the organization. Organizational mechanism of organizational management. Organizational engineering. Organizational Design. Management model. Leadership in Organizations. Ryzykozahyschenist organization. Performance Management Management organization.

2. Corporate Governance. Theoretical Foundations of Corporate Governance. The outer area of corporate governance. Members of corporate relations and corporate governance bodies. Tactical and strategic management of corporations. Management of corporate costs. Reporting and monitoring in corporate governance. Evaluation of the effectiveness of corporate management.

3. Change Management. Theoretical foundations of change management. Individual changes , team changes, organizational changes. The role of leadership in change management . Development organizations in today's management problems and resistance to change. The structural changes. Change management in the strategic development of the organization . Changes in corporate culture. Changes based on

information technology.

4. Project Management. Project Management in system management organizations. Justification of the project, planning the project. Time Management Project . Planning resources for the project. Monitoring of the project. Risk management projects. Management quality of the project. Personnel management in projects.

5. Quality Management. Standardization of technology in the field of quality management. The main problems of quality control . International experience in quality management . National experience of quality management. Basic concept of total quality management . The quality management system . Quality in ISO 9000. Statistical methods for quality control. Tools of quality management and process quality function deployment (QFD). Quality system certification enterprises. The cost of quality and their classification. Expenditure on quality in TQM. Audit quality and premium quality.

Financial Management. Essence , the purpose and functions of the financial management of enterprises. Methodological principles of formation of the financial management of enterprises. The financial strategy of the company. Asset management company. Money management company. Fundamentals of investment management companies. Cash Management businesses. Financial risk management companies. Fundamentals of Financial Crisis management companies.

Information systems and technology in the management of the organization. Introduction to information systems in the management of the organization. Stages of development and nature of information systems in the management of the organization. Types of information systems in the management of organizations. Planning the development of management information systems. Management information systems in organizations. Systems support management decisions. Corporate information systems .Information resources of the Internet. Local and regional information networks in modern organizations . Security of information systems. Automated control systems . Processing and analysis . Information processing technologies . Mathematical and information for automated analysis. The use of automated systems for the analysis of business and management decisions . Automated planning and analysis of marketing activities.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

Psychology of Management. Management psychology as a science subject, object and methods of psychology of management. The term «system» and «structure» as a model of the object in the field of psychology of management. General psychological characteristic activity. Psychological Laws of management. Psychology of Leadership. Head in the control system. Interaction in a group, group phenomena. Psychological foundations of communication. Conflict in subject field of psychology of management. The dynamics of the conflict. Social impact and its tools.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Investment Management. The notion that the essence of investment management. Investments and investment activities of enterprises in market conditions. Investment climate , its components and approaches to evaluation. The concept and the nature of the project. Basics of forming a business plan innovation and investment projects . Methods

for evaluating investment projects. Risk and uncertainty when making investment decisions. Formation of the investment policy and investment strategy of the enterprise, taking into account environmental factors. Investment monitoring. Organization finance investment and innovation projects.

Risk Management. Learning involves mastering the discipline of knowledge management of risk factors, methods of active and passive protection against risk. Involves the study of the nature and causes of risk, risk classification , the main approaches to the identification and management of risk , risk assessment , risk management practices , cost structure with different methods of risk management , economic criteria for evaluating the effectiveness of risk management, cost-effectiveness analysis of insurance and self-insurance.

Innovation Management. Provides adopt advanced their theoretical bases and practical skills in organizing and managing innovation processes. The main issues of discipline include: structuring and organization of the innovation process, information, investment security, innovation management and strategy of the company, an innovative project: the stages of preparation and implementation, efficiency, methods to reduce the risk of the investor innovative project.

Fundamentals of management. Learning discipline can teach students to work with documents - to know their structure and details correct place depending on the type of document to know all the operations of training , preparation , coordination and execution of documents and to examine the organization of the document , we are. Provides study the characteristics of modern management, current standards for documentation, classification and standardization of documents and regulations for the execution of documents, the general requirements for the design details of the documents, preparation and execution of official documents, the organization of the documents systematization of documents, preparation and transfer them to the archive.

2.7. STRUCTURAL SUBDIVISION OF NULES OF UKRAINE «BEREZHANY AGROTECHNICAL INSTITUTE»

Director – Doctor of Technical Sciences, Professor
Vasyl Pavliskyi

Tel.: (03548) 2-11-59 E-mail: office@bati.ber.te.ua
Location: educational building № 1, room. 119

FACULTY OF ELECTRICAL ENGINEERING

Dean – Candidate of Technical Sciences, Associate Professor
Mykola Klendii
Tel.: (03548) 2-26-48 E-mail: mtfbati2010@gmail.com
Location: educational building № 5, room. 211

Faculty organizes and coordinates the training process of specialists in specialties:

7.10010203 «Mechanization of Agriculture»

Department in charge of graduate training:
Power Machinery and Servicing of Agro-Industrial Complex
Tel.: (03548) 2-26-48 E-mail: mtfbati2010@gmail.com
Head of the Department – Candidate of Technical Sciences, Associate Professor
Ihor Chvartatskyi

Machinery and Technology in Agriculture
Tel.: (03548) 2-26-48 E-mail: mtfbati2010@gmail.com
Head of the Department – Candidate of Technical Sciences, Associate Professor
Stefania Bilyk

7.10010101 «Energetics of Agricultural Production»

Department in charge of graduate training:
Energetics and Automatics
Tel.: (03548) 2-14-51 E-mail: energetuksh@i.ua
Head of the Department – Candidate of Technical Sciences, Associate professor
Petro Klendii

FACULTY OF ECONOMICS AND ENVIRONMENTAL SCIENCE

Dean – Candidate of Economic Sciences, Associated Professor
Luibov Yarema
Tel.: (03548) 244590 E-mail: kafekon2012@mail.ru
Location: educational building № 1, room. 212

Faculty organizes and coordinates the training process of specialists in specialties:

7.050107 « Economics of Enterprise»

Department in charge of graduate training:
Economics of enterprise
E-mail: gerchanivska@mail.ru
Head of the Department - Ph.D., assistant professor
Galina Khristenko

7.050106 «Accounting and Auditing»

Department in charge of graduate training:
Accounting and Audit
E-mail: gerchanivska@mail.ru
Head of the Department – Candidate of Economic Sciences, Associated Professor
Svitlana Hrechanivska

Specialist training
in specialty «MECHANIZATION OF AGRICULTURE»
field of knowledge «Technology and Energy of Agricultural Production»

Form of Studies, licensed study amount:	
– full-time	75
– extra-mural	100
Duration of training	
– full-time	1 year
– extra-mural	1 year 6 months
Credits	51 ECTS
Language of training	Ukrainian
Qualification of graduates	Mechanical Engineer

The concept of training

Competence of expert of educational and qualificational level «Specialist» in «Mechanization of Agriculture» is defined by high potential of its fundamental education and thorough professional training for engineering in agricultural production enterprises, agrotechnical service enterprises, research institutions, designed organizations and institutions of higher education. It is also prepared for administrative activity in sphere of agro-industrial production, agrotechnical service and maintaining personal business affairs.

Practical training

Competence of expert of educational and qualificational level «Specialist» in «Agricultural Engineering» provides opportunity to develop and implement measures of complex mechanization of production and effective use of technology, technical services, safety and environmental improvement of manufacturing processes and machinery construction, research in the field of mechanization of agriculture and teaching special subjects in higher education.

Proposed topics for theses

1. Mechanization of cultivation of winter wheat with improvement of technology of preparation of working liquids of pesticides and herbicides.
2. Organization of technology of general processing with justification of parameters of advanced design of a hinged plow.
3. Technology of silage with development of construction of pickup rollers.
4. Feasibility study for establishing appropriate production line for juice.
5. Improving device for application of herbicides irrigation system DDA - 100AM.
6. Design of maintenance of rolling stock motor company.
7. Mechanization streaming and technological lines for poultry eggs with improvement.

Academic rights of graduate's - Specialists can continue their education by training programs:

specialty 8.10010203 - «Mechanization of Agriculture» and master degree related to specialty:

8.10010203 «Mechanization of Agriculture»

or field of knowledge 1801 «Specific categories»:

8.18010010 «Quality, Standardization and Certification»

8.18010018 «Administrative Management»

8.18010020 – «Academic Institution»

8.18010021 «Higher School of Pedagogy»

Spheres of graduates' employment

Graduates can work at agricultural enterprises, processing industry enterprises and service companies.

Specialist Degree Program and Curriculum in Specialty «Mechanization of Agriculture»

№	The name of course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic Training *					
1	Legislation and Law of AIC	2	72	1,5	2
2	Engineering Psychology	1	54	1	1,5
3	Stock market	1	54	1	1,5
Total for the cycle			***180***	***3,5***	***5***
1.2. Cycle of natural science (fundamental) training *					
1	Labor Ecology	1	54	1	1,5
2	Civil Protection	1	54	1	1,5
3	World Agricultural Production	2	54	1	1,5
Total for the cycle			***162***	***3***	***4,5***
1.3. Cycle of professional and practical training *					
1	Transport Processes in Agriculture	2	54	1	1,5
2	Agricultural Reclamation	2	54	1	1,5
3	Repair	1	108	2	3
4	Reliability of Technological Systems	2	54	1	1,5
5	Engineering Management	1	108	2	3
6	Safety of Labour	2	72	1,5	2
Total for the cycle			**450**	**8,5**	**12,5**
Regulatory part, total			**792**	**15**	**22**
2. ELECTIVE ACADEMIC DISCIPLINES					
Specialization 1. «Mechanization of Crop»					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training *					
1	Technical Maintenance of Crop Machinery	1	**126**	2,5	3,5
2	Design Processes in Crop	2	**72**	1,5	2
Chosen by the University, total			***198***	***4***	***5,5***
2.2. Disciplines, chosen by students					
2.2.1. Cycle of professional and practical training *					
1	Productive Technologies of Crop Plants	1	**126**	2,5	3,5
2	Machinery in Crop Plants	2	**108**	2	3
Chosen by students, total			***234***	***4,5***	***6,5***
Elective part, total			***432***	***8,5***	***12***
Practical training			**180**	**3,5**	**5**
Degree examination			**432**	**8**	**12**
Total, according to specialty			**1404**	**35**	**51**

* Titles of cycles of disciplines and forms of state certification are in accordance with inductive standards of higher education approved in 2007.

Annotation of discipline in the curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Legislation and Law in Agriculture. Discipline is aimed at mastering the legislation of the agrarian law and practical skills of its application for learning and mastering knowledge of labor law, its application, and scientific achievements of the national labor law, combined with the experience of international legal labor regulation.

Engineering psychology. The purpose of discipline is to reveal the objective laws of human interaction processes of information and technology for use in the practice of designing, building and operating the system «man-machine» (SLM). As a result of studying this course the student should know the characteristics of human interaction with information technology in SLM, including the mental and physiological processes and properties in solving the problems of human adaptation techniques and labour conditions for man.

Stock market. The purpose of discipline «Stock Market» is to get the necessary theoretical knowledge and practical skills of organizing the exchange activities and effective use of stock transactions in the students' future activity. The main content of the discipline is based on the laws of Ukraine, Resolution of the Cabinet of Ministers of Ukraine and other normative documents regulating the activities of commodity, stock, foreign exchange markets and the labor market.

1.2. Cycle of natural science (fundamental) training

Labor Ecology. The purpose of discipline is to provide scientific basis of the selection and use of high-efficiency equipment and technical measures to protect the environment from pollution of harmful emissions.

Civil protection. The purpose of discipline is to develop the students' ability to think creatively, solve complex problems of innovative character and make productive decisions in the field of Civil Protection allowing for the future careers of graduates, as well as scientific and technological progress. The task of the discipline involves mastering the latest theories, methods and technologies for the emergency situations predicting, building of their development models, assessing the risk and justification of measures aimed at preventing the emergency situations, personnel defense, population, material and cultural values in the emergency situations, localization and liquidation of their consequences.

World agricultural production. The purpose of discipline is to equip the future professionals by systematized and generalized knowledge about agricultural economy of individual countries and regions in the context of global trends in agricultural production and international relations. The importance of having knowledge of the relations of production in agriculture of some countries in general and by types of farms in these countries, the main areas of social and economic integration, forms of international economic and scientific-technical cooperation, progressive foreign practice and experience. Objective: formation of students' knowledge of the basic laws of agriculture, the ability to analyze and evaluate the current state of the prospects for its further development, the definition of the development level of the national economies of agriculture, the development of methods and ways of using the experience of foreign countries in addressing the problems of economic development of agriculture in Ukraine.

1.3. Cycle of professional and practical training

Transport processes in agriculture. The purpose of discipline is the future specialists acquisition of agricultural mechanization scientific basis of engineering support, effective use of theoretical knowledge and skills in the use of transport processes in agriculture.

Agricultural reclamation. Program of subject «Agricultural Reclamation» provides the students gaining of theoretical knowledge and practical abilities and skills of agricultural work. While studying the discipline, you should focus on intensive production techniques, ensuring of getting the planned agricultural crops and its economic

effectiveness, using the economic achievements of domestic and foreign science and technology, to raise the problems of environmental protection.

Maintenance. The purpose of discipline « Maintenance « is to develop students' understanding of the operating performance of machine during the installation time as well as rehabilitation of agricultural machinery with minimal time investment, labor and material resources.

Reliability of technological systems. The purpose of discipline «Reliability of technological systems» is to practice skills of productive formation of setting goals, solving analytical problems of calculating the parameters of technical and technological systems, design tasks, determining optimal system parameters to ensure the most efficient use through a combination of humanities, fundamental and general technical training in other disciplines. The objective of discipline «Reliability of technological systems» is students' mastering of modern methods of system analysis, acquiring skills in operation research, functional design value including specifics of agricultural production.

Engineering management. During the study course «Engineering Management» the future professionals need to master the global trend of mechanized technology, engineering production and processing of agricultural products, technical, industrial and technological services, the level of content and criteria for management of industrial and technical resources in agriculture, organizational forms and methods of their implementation, the rules of agricultural machinery trade, material and technical resources. Purpose of the discipline «Engineering Management» is gaining the theoretical and practical knowledge and skills of students in scientific management engineering activities of agricultural enterprises of different ownership.

Labor Safety. The purpose of discipline is theoretical and practical training of creation and provision of healthy and safe working conditions, prevention of accidents, injuries and illness in workplace, i.e. to train future specialists to be able to determine coordinates of hazards and develop safety measures of life at work, at home, in public and scientific spheres of life. That's why discipline «Labor Safety» is important for students to concentrate their attention on legal provision of labor in state, industries and enterprises. They must study duties of people at enterprises, structure of functioning of labor services, procedure to identify risks that characterize level of accidents, accidents and fires, loss of enterprises to be able to assess the unwanted consequences, develop action plans, finance and determine their socioeconomic effectiveness.

2. Elective academic disciplines
Specialization 1. Mechanization of Crop Production

2.1. Disciplines, chosen by the University

2.1.1. Disciplines of professional and practical training

Machinery Maintenance for Crop Production. The subject matter is directed on student studying of wide range of technologies, tools, materials and equipment's to maintain machinery for crop production in good conditions. As a result, students studying subjects should know basic research areas of technologies of maintenance of machinery for plant growing, methods of developing processing maps and complex equipment of maintenance machinery for crop production.

Design processes in crop production. The purpose of discipline is mastering the basics of design processes in agricultural sector and acquisition of practical skills in design processes and their optimum technical providing in agriculture. Design of technological

processes in plant growing is summarizing discipline in preparation of specialist and mechanical engineer and is studied in final semesters with maximum use of all knowledge which were acquired by students during all previous years of study.

2.2. Disciplines, chosen by students

2.2.1. Disciplines of professional and practical training

Productive Technologies of Crop production. The subject matter is directed on student studying of wide range of productive technologies of plant growing, complex of new agricultural machines and their effective use. As a result, students studying have to know basic research areas of crop production technology, technique of development of technological maps for growing different crops and selection of complex agricultural machinery for ensuring cultivation of production of plant growing.

Using Machines in Crop Production. The purpose of discipline is studying of scientific basis of engineering support of effective use of technology, its capacity, and technological disciplines in order to obtain planned results in specific natural productive conditions and areas of Ukraine. As a result, students gain their knowledge and skills solving pressing problems of complex mechanization of agricultural production, efficient use of resources and management of productive processes, design of operational and technological requirements, taking into account economic conditions of different organizational forms. System formation of machine use is, in particular, by formation of new type farms that do not have their own technology and engineering services, deficiency of energy and technological resources. Essential condition for resolving of current problems is appropriate technical potential of agricultural production. The program provides multicriteria choice of machine selection. Within with energy and economic estimation is suggested environmental assessment of units, mechanized processes and technologies, effective decision-making and strategies of technical capacity of production engineering of farm services.

Specialist training
in specialty «ENERGETICS OF AGRICULTURAL PRODUCTION»
field of knowledge «Technology and Power Engineering of Agrarian Production»

Form of training, licensed study amount:	
– full-time	75 persons
– extra-mural	100 persons
Duration of training	1 year
Credits	60 ECTS
Language of training	Ukrainian
Qualification of graduates	Power Engineering Specialist

The concept of training

The present demands for Energy Engineers for Ternopil region and neighboring regions who has appropriate knowledge and skills for the design, construction, installation and operation of power plants (including non-conventional energy sources) for electricity, water, heating and electrical equipment.

Practical Training

Curriculum framework is focused mainly in building number 2 and 3 of the Institute, where there are 4 classrooms with a total area 219,1 sq.m. and 20 principal laboratories with a total area 916.1 sq.m. The total area of all the educational buildings of institute are 18216 square meters, including buildings for students' studies - 14 368 sq.m. To conduct lessons at the faculty there are 4 computer labs by area 203.9 square meters, equipped with 42 computers and three lecture halls with multimedia learning tools area 238 sq.m.

Proposed topics for theses

1. Project RTP 35/10 kV and distribution network 10 kV for agricultural power consumers.
2. Agricultural enterprise electrification with the extensive development of automation the technological process in livestock (poultry) buildings.
3. Energy supply of the agricultural enterprise production unit with using of renewable energy sources.
4. Development the complex of measures from organization the operation of electrical equipment in agricultural enterprise.
5. Organization the technical service electrical equipment at the administrative district.

Academic rights of graduates – can continue training programs for masters, specialty, akin to a specialty for which studied the program of training:

8.10010101 «Energetics of agricultural production»

or field of knowledge «Specific categories»:

8.18010010 – «Quality, standardization and certification»

8.18010018 – «Administrative Management»

8.18010020 – «Management by Academic Institution»

8.18010021 − «Higher School of Pedagogy»

Spheres of graduates' employment

Students can work in academic institutions, companies manufacturing, electricity, gas and water supply, construction and commissioning of electrical installations.

Specialist Degree Program and Curriculum in Specialty «Energetics of Agricultural Production»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of professional and practical training *					
1	Power supply of Agro industrial complex	1,2	162	3,0	4,5
2	Heat and water supply of Agro industrial complex	1	108	2,0	3,0
3	Design the systems of electrification, automation and energy supply	1	108	2,0	3,0
4	Energy efficiency and using the renewable energy	1	108	2,0	3,0
5	Labour safety in the branch (Electrical safety)	2	108	2,0	3,0
6	Technology maintenance and repair of electrical equipment and automation	2	162	3,0	4,5
7	Electrical technologies in agriculture	1,2	108	2,0	3,0
8	Electric production machines and mechanisms	1	108	2,0	3,0
9	Civil protection	2	54	1,0	1,5
10	Production operational practices	1	216	4,0	6,0
11	Diploma planning	2	432	8,0	12,0
Total for the cycles			***1674***	***31,0***	***46,5***
Regulatory part, total			**1674**	**31,0**	**46,5**
2. ELECTIVE ACADEMIC DISCIPLINES					
Specialization 01 «Energy supply of Agriculture»					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of natural science (fundamental) training *					
2.1.2. Cycle of professional and practical training *					
1	Mathematical modeling on a PC	2	108	2,0	3,0
2	Thermal power plant and system	1	108	2,0	3,0
3	Production and use the biogas	1	108	2,0	3,0
4	Technology Research and Intellectual Property	2	108	2,0	3,0
Chosen by the University, total			**432**	**8,0**	**12,0**
2.2. Disciplines, chosen by students					
2.2.1. Cycle of natural science (fundamental) training *					
2.2.2. Cycle of professional and practical training *					
1	Economic calculations in engineering activities	2	54	1,0	1,5
Chosen by students, total			**54**	**1,0**	**1,5**
Elective part, total			**486**	**9,0**	**13,5**
Practical training			**216**	**4,0**	**6,0**
Degree examination			**432**	**8,0**	**12,0**
Total, according to specialty			**2160**	**40,0**	**60,0**

* Names of disciplines cycles and forms of state certification - in accordance with industry standards of higher education approved after 2007, EQC and OPP.

Annotation of discipline in the curriculum

1. Regulatory academic disciplines

1.1. Cycle of professional and practical training

Power Supply of Agro industrial complex. Features power AIC. Electric load agricultural enterprises. Selection of electrical equipment in distribution networks. The effectiveness of the systems of power AIC.

Heat and water supply of Agro industrial complex. Description of the sources and consumers of heat. Heating of industrial and municipal facilities. Ventilation and air conditioning. Extraction and improve water quality. Transportation and distribution of water. Techno-economic performance of agricultural supply.

Design the systems of electrification, automation and energy supply. Organization design work. Feasibility study options projects. Rules of the text and graphics of the project. Principles and methods of design of electrification, automation and energy.

Labour safety in the branch (Electrical safety). General Issues Electrical agriculture. Risk of electric shock and fire hazard. Protective equipment during normal and emergency modes of electrical installations. Safety in the Use of AIC.

Technology maintenance and repair of electrical equipment and automation. The organization construction, installation, operation and maintenance of power equipment and power supply networks. Technology maintenance of transformer substations and power grids, electric drives, control systems, electro installations teplovodohazopostachalnyh installations and networks. Terms of electricity. Diagnosis of power equipment.

Electrical technologies in agriculture. Feasibility basis electro-technological processes. Electrothermal installation of APC. Electro equipment and agricultural settings.

Electric production machines and mechanisms. Driving characteristics of agricultural machines and units. Electric in animal husbandry, crop production and processing industries. Methods and technical means test drives.

Civil protection. Objectives and organization of civil defense in the agricultural enterprises. Characteristics of emergency. Maintain emergency and rescue operations. Precautions doing the repair work.

2. Elective academic disciplines
Specialization 01 «Energy supply of Agriculture»

2.1. Disciplines, chosen by the University

2.1.1. Disciplines of professional and practical training

Mathematical modeling on a PC. Computer processing of information. Mathematical packages and programming. Mathematical models of components and systems. Mathematical apparatus prediction.

Thermal power plant and system. Processes and phenomena in thermal power plants. Heat agriculture. Calculation and selection of thermal power plants.

Production and use the biogas. Theoretical Foundations of biogas production. Methods and means of production substrate. Calculation and selection of equipment biogas plants. Installation and maintenance of biogas plants. The use of biogas plants.

Technology Research and Intellectual Property. The choice of research topics. Methods of theoretical studies. Methods of experimental research and experimental design. Methods of data processing. Making research results. Implementation and effectiveness research.

2.2. Disciplines, chosen by students

2.2.1. Disciplines of professional and practical training

Economic calculations in engineering activities. Energy balance of enterprises. Cost-effectiveness of investments in the design of power plants. Cost-effectiveness of innovative activity. Economic calculations in the energy sector.

Specialist training
in specialty «ECONOMICS OF ENTERPRISE»
field of knowledge «Economics and Entrepreneurship»

Form of training, licensed study amount:	
-full-time	25 people
- extra-mural	200 people
Duration of training	1 year
Credits	39 ECTS
Language of training	Ukrainian
Qualification of graduates	is a graduate in economics of enterprise

The concept of training

Increasing efficiency in the sector necessitates increasing the level of training of the economy that can accelerate the radical transformation of economic relations based on extensive use of scientific and technological progress and social reconstruction of the village. Competence, skill level of knowledge and skills of managers and agricultural specialists play an important role in the growth of labor productivity and economic efficiency. Specialist in economics should be able to organize their own activities, to take into account social relations and political beliefs.

Practical training

Rural and industrial cooperative named after Hrushevskyi, Ivano –Frankivsk district, Rohatyn region, the village of Chesnyky, Ltd. «Teofipilka» Ternopil district, Kozova region, the village of Teofipilka pop «Urmanske» Ternopil district, Berezhany region, the village of Urman, Private company «Lapshynske» Ternopil district, Berezhany region, v. Lapshyn, LLC «Krona» Ternopil district, Berezhany region, Private rental company «Agroprodservice» Ternopil district, Ternopil region, v . Nastasiv, Farm «Victoria 92» Ternopil district, Kozova region, v. Viktorivka Agricultural Ltd. «Verbiv» Ternopil district, Berezhany region, the village of Verbiv.

Proposed topics for theses

1. Land resource potential of agricultural enterprises and ways to improve its efficiency.
2. Effective functioning of farms in the milk market.
3. The economic effectiveness of sugar beet production in agrarian formations and prospects.
4. Organizational-economic conditions of the crop in the farms.
5. The economic mechanism of cost and efficiency of crop production in a market economy.

Academic rights of graduates can continue their studies for Masters programs , specialty , akin to the specialty for which studied the program of training :

8.050103 «International Economics»
8.050107 « Economics of Enterprise»
8.050108 «Marketing»

Spheres of graduates' employment

A specialist trained in economics is prepared to work in market conditions for enterprises of all patterns of ownership, as well as research institutes, colleges, audit and advisory firms in financial institutions, government.

Specialist Degree Program and Curriculum in Specialty «Economics of Enterprise»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Labor Safety	1	36	1	1
2	Civil Defence	2	36	1	1
Total for the cycle			***72***	***2***	***2***
1.2. Cycle of natural science (fundamental) training					
1	Management of Project	2	144	4	4
2	**Department of potential enterprise**	1	144	4	4
3	Financial Analysis	1	108	3	3
Total for the cycle			***396***	***11***	***11***
1.3. Cycle of professional and practical training *					
1	Strategic management of Enterprise	1	144	4	4
2	**Financial Management**	2	144	4	4
3	Economics and organization of associations of Enterprises	1	108	3	3
Total for the cycle			**396**	**11**	**11**
Regulatory part, total			**864**	**24**	**24**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of natural and science (fundamental) training					
1	Financial Accounting for small businesses	1	90	2,5	2,5
2	Mortgages	2	72	2	2
2.1.2. Cycle of professional and practical training *					
1	Banking	2	108	2	2
2	Organization and planning in agricultural farm	1	108	3	3
Chosen by the University, total			**378**	**10,5**	**10,5**
2.2. Disciplines, Chosen by students					
2.2.1. Cycle of natural and science (fundamental) training					
1	International Law	2	54	1,5	1,5
2.2.2. Cycle of professional and practical training *					
1	Financial Analysis	1	54	1,5	1,5
2	Financial Law	1	54	1,5	1,5
Chosen by students, total			**162**	**4,5**	**4,5**
Elective part, total			**540**	**15**	**15**
Practical training			**612**	**17**	**17**
Degree examination			**36**	**1**	**1**
Total, according to specialty			**1332**	**37**	**37**

* Names of cycles disciplines and forms of state certification - in accordance with the industry standards of higher education approved after 2007, EQC and OPP.

Annotation of discipline in the curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Safety in industry. To guarantee the health and performance of employees in production environment specific areas of management through effective safety management and shaping liability of officials and experts from the collective and their own safety).

Civil Protection. Mastering the latest theories, methods and technologies for predicting build models of their development, assessing the risk and justification of measures aimed at preventing the defense personnel, population, material and cultural values in the localization and liquidation of their consequences).

1.2. Cycle of natural science (fundamental) training

Project management. Development of the students the basic theoretical and methodological issues of project management, standards and technologies for their development and implementation.

Management of potential enterprises. Formation of theoretical and applied knowledge of the techniques in the management of the enterprise potential of its formation, operation and development.

Economic diagnostics. Formation of theoretical knowledge and applied skills for using analytical tools and instruments of economic diagnostics.

1.3. Cycle of professional and practical training

Strategic Enterprise Management. Mastering theoretical knowledge of business strategy and strategic management skills as amended.

Financial management. Development and use of the most effective methods for neutralizing and minimizing financial risks, financial stabilization mechanism for companies.

Economics and organization of associations of Enterprises. The study of the order of production and economic and financial groups, especially the methods of organizing and planning their activities.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.2.1. Disciplines of natural science (fundamental) training

Accounting for small businesses. Formation of theoretical knowledge and practical skills to build information accounting small business.

Mortgages. Of learning about the legal aspects of the mortgage relationship , the specifics of mortgage institutions , especially mortgage relations in agrarian sector of economy.

2.1.2. Disciplines of professional and practical training

Banking. Formation of knowledge in the field of technology by banks and passive and active operations, banking services.

Organization and planning in agrarian formations. Formation of knowledge and skills with efficient organization and planning of agricultural production in a mixed economy and the development of market relations and organizational , economic, legal and social foundations of farms of different legal forms of business, farm production and economic relations).

2.2. Disciplines, chosen by students

2.2.1. Disciplines of natural science (fundamental) training

International law. The content of international private law relations, trends in their development, they point out the characteristics of the legal systems of the present, focus on the main sources of their private rights.

2.2.2. Disciplines of professional and practical training

Financial analysis. Providing knowledge on how peer review of financial and economic activities and internal resources to strengthen the financial condition of companies)

Financial Law. Study, systematize and consolidate the theoretical and practical knowledge about financial relationships in state regulation of taxes, budget, and credit in the fields of national economy.

Specialist training
in specialty «ACCOUNTING AND AUDITING»
field of knowledge «Economics and Entrepreneurship»

Forms of training, licensed study amount:	
– full-time	75 people
– extra-mural	75people
Duration of training	1 year
Credits	37 ECTS
Language of training	Ukrainian
Qualification of graduates	Specialist in Accounting and Audit

The concept of training

Training Specialists in Accounting and Audit is distinguished by new curricula and programs, innovative forms of educational work organization, which are aimed at providing a high level of theoretical training and immediate participation in accounting, financial and economic, organizational and control and analytical work. A specialist in Accounting and Audit should be able to organize his or her own activity, take into consideration social relations and political beliefs in the process of its realization, communicate effectively in business environment, should be a specialist educated and cultured according to the world standards having intellectual potential enough for choosing certain professional activities having a wide choice for that.

Practical training

Rural and industrial cooperative named after Hrushevskyi, Ivano-Frankivsk district, Rohatyn region, the village of Chesnyky; «Teofipilka» ltd., Ternopil district, Kozova region, the village of Teofipilka; Private rental company «Urmanske», Ternopil district, Berezhany region, the village of Urman; Private company «Lapshynske», Ternopil district, Berezhany region, the village of Lapshyn; Ltd. « Krona», Ternopil district, Berezhany region, the village of Nadrichne, Private rental company «Agroprodservice», Ternopil district, Ternopil region, the village of Nastasiv, Farm «Viktoria-92», Kozova region, the village of Viktorivka, Agricultural Ltd «Verbiv», Ternopil district, Pidhaitsi region, the village of Siltse.

Proposed topics for theses

1. Accounting, analysis and audit of the payments for employees.
2. Accounting, analysis and audit of money costs of an enterprise and the analysis of its paying capacity.
3. Accounting, analysis and audit of the depreciation of fixed assets.
4. Managerial accounting for the production process of agricultural enterprises.
5. Reporting about the financial state of an enterprise and the methodology of working it out and checking it.

Academic rights of graduates – graduates have the right to apply for master's degree in specialties related to the curriculum for training specialists:

8.03050901 «Accounting and Auditing»

8.03050801 «Finance and Credit»

Spheres of graduates' employment

A specialist in accounting and auditing is prepared to work in market conditions for enterprises of all forms of property, as well as for research institutes, technical schools (colleges), audit and advisory firms, financial institutions, government.

Specialist Degree Program and Curriculum in Specialty «Accounting and Auditing»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Labor Safety	1	36	1,0	1,0
2	Civil Defense	2	36	1,0	1,0
Total for the cycle			***72***	***2,0***	***2,0***
1.2. Cycle of natural science (fundamental) training *					
1	Management of Information Systems in Analysis and Auditing	1	144	4,0	4,0
2	Models and Methods of Making Decisions in Analysis and Auditing	1	144	4,0	4,0
3	Financial Analysis	2	108	3,0	3,0
Total for the cycle			***396***	***11,0***	***11,0***
1.3. Cycle of professional and practical training *					
1	Organization of Accounting	1	144	4,0	4,0
2	Bookkeeping of Enterprise	2	144	4,0	4,0
3	Accounting of Foreign Economic Activity	1	108	3,0	3,0
Total for the cycle			**396**	**11,0**	**11,0**
Regulatory part, total			**864**	**24,0**	**24,0**
2. ELECTIVE ACADEMIC DISCIPLINES					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of natural science (fundamental) training *					
1	Financial Management	2	108	3,0	3,0
2	Strategy of Enterprise Management	2	72	2,0	2,0
2.1.2. Cycle of professional and practical training *					
1	Banking	2	72	2,0	2,0
2	Mortage Crediting	2	72	2,0	2,0
3	Controlling	1	54	1,5	1,5
Chosen by the University, total			**378**	**10,5**	**10,5**
2.2. Disciplines, chosen by students					
2.2.1. Cycle of natural science (fundamental) training *					
1	International Law	2	54	1,5	1,5
2.2.2. Cycle of professional and practical training *					
1	Organization and Planning in Agrarian Units	1	108	3,0	3,0
Chosen by students, total			**162**	**4,5**	**4,5**
Elective part, total			**540**	**15,0**	**15,0**
Practical training			**594**	**16,5**	**16,5**
Degree examination			**36**	**1,0**	**1,0**
Total, according to specialty			**1332**	**37,0**	**37,0**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Labor Safety. Ensuring employees' health safety and working capacity under production conditions in certain branches of farming by means of the effective

management of labor safety and the formation of the officials' and specialists' responsibility for the collective and their own safety.

Civil Defense. Students' mastering of new theories, methods and technologies in the field of the prognostication of emergency situations, working out new models of their development, determination of risk level and substantiation of the measures to avert emergency situations, defense of the personnel, population, material and cultural values under emergency situation conditions, localization and liquidation of their results.

1.2. Cycle of natural science (fundamental) training

Management of Information Systems in Analysis and Auditing. Knowledge in the field working out and usage of informational systems and technologies of financial and managerial accounting and control and analytical processes in management)

Models and Methods of Making Decisions in Analysis and Auditing. The formation of the system of knowledge in accounting, economic analysis and audit for working out the projects of managerial decisions)

Financial Analysis. Providing the knowledge of the methods of expert reviewing of the financial and economic activity and the internal reserves for the strengthening of the financial state of enterprises.

1.3. Cycle of professional and practical training

Organization of Accounting (knowledge in the field of the organization of accounting, control and analytical processes at enterprises).

Bookkeeping of Enterprise (knowledge of the content, structure and order of working out and using the bookkeeping of enterprises).

Accounting of Foreign Economic Activity (gaining practical skills for organizing foreign economic activity of enterprises and its correct representation in accounting).

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

2.2.1. Cycle of natural science (fundamental) training

Financial Management. The development and use of the most effective methods of neutralizing and minimizing financial risks, mechanisms for the financial stabilization of enterprises.

Strategy of Enterprise management. Theoretical knowledge of the strategy of enterprise and the formation of the skills of managing strategic changes.

2.1.2. Cycle of professional and practical training

Banking. The formation of the system of knowledge in the field of the organization and the technology of passive and active operations in banking and bank servicing.

Mortgage Crediting. Knowledge of law aspect of mortgage relations, the peculiarity of mortgage institutions, the specificity of mortgage relations in the agricultural branch of the economics.

Controlling. The clarification of the concept of controlling as an economical category, the substantiation of the methodological and organizational principles of the

effective functioning of the system of controlling at enterprises of different forms of property and organizational and regulatory forms of farming, the establishment of the conceptual parameters and quantitative and qualitative characteristics of the office service of controlling, the exposing of the main problems and obstacles on the way of the introduction of the system of controlling in Ukraine).

2.2. Disciplines, chosen by students

2.2.1. Cycle of natural science (fundamental) training

International Law. The content of international private law relationships, the tendencies of their development, distinguishing the characteristic features of modern law systems emphasizing the main sources of their private law.

2.2.2. Cycle of professional and practical training

Organization and Planning in Agrarian Units. The formation of the system of knowledge and skills for the effective organization and planning of agricultural production under current economic and market conditions as well as knowledge and skills in the field of organization and economic, legal and social principles of agricultural enterprises of different organization and legal forms of farming, internal production and economic relations.

2.8. STRUCTURAL SUBDIVISION OF NULES OF UKRAINE «NIZHYN AGROTECHNICAL INSTITUTE»

Director – Candidate of Pedagogical Sciences, Associated Professor, Honored Worker of Public Education of Ukraine, Exemplary Teacher of Agrarian Sciences and Education of Ukraine, Exemplary Teacher of Public Education of Ukraine
Vasyl S. Lukach

Tel.fax: (04631) 2-52-70, Email: natinau@ukr.net
Arrangement of educational building, room 130.

FACULTY OF MECHANICAL ENGINEERING

Dean – Candidate of Technical Sciences
Volodymyr I. Vasylyuk
Tel: (04631) 2-45-37 E-mail: dekan.msg@gmail.com
Arrangement of educational building, room 109

Faculty organizes and coordinates the training process of specialists in specialty:

7.10010203 «Mechanization of Agriculture»

Department in charge of graduate training:
Operation of machines and technical services
Tel: (04631) 2-52-70 E-mail: dekan.msg@gmail.com
Head of the Depatment – Candidate of Pedagogical Sciences, Associated Professor
Ilhom I. Makhmudov

Machines and equipment of agriculture
Tel: (04631) 2-52-70 E-mail: dekan.msg@gmail.com
Head of chair – Doctor of Technical Sciences, Professor
Evgeniy I. Khrapach

General Technical Disciplines
Tel: (04631) 2-52-70 E-mail: dekan.msg@gmail.com
Head of chair – Candidate of Pedagogical Sciences, Associated Professor
Oleh I. Lytvynov

FACULTY OF ELECTRICAL ENGINEERING AND AUTOMATIZATION OF AGRICULTURE

Dean – Valery V. Lementaryov
Tel: (04631) 2-36-81 E-mail: natinau@ukr.net
Arrangement of educational building, room 221

Faculty organizes and coordinates the training process of specialists in specialty:

7.10010101 «Energetics of Agricultural Production»

Department in charge of graduate training:
Automation and Electrified Technologies in Agricultural Production
Tel: (04631) 2-36-81 E-mail: dekan.easg@gmail.com
Head of chair – Candidate of Pedagogical Sciences, Associated Professor
Yurii A. Klimentovskyi

FACULTY OF ECONOMICS AND MANAGEMENT

Dean – Natalia G. Tsaruk
Tel: (04631) 2-31-30 E-mail: natinau@ukr.net
Arrangement of educational building, room 120a

Faculty organizes and coordinates the training process of specialists in specialties:

7.03050901 «Accounting and Auditing»

Department in charge of graduate training:
Accounting, Analysis and Audit
Tel: (04631) 2-31-30 E-mail: economyfaculty@mail.ru
Head of chair – Candidate of Economics Sciences, Associated Professor
Zoriana D. Ovcharyk

7.03060101 «Management of Organization and Administration»

Department in charge of graduate training:
Management
Tel: (04631) 2-31-30 E-mail: economyfaculty@mail.ru
Head of chair – Doctor of Economics Sciences, Professor
Igor G. Tyvonenko

Specialist training
in specialty «MECHANIZATION OF AGRICULTURE»
field of knowledge «Equipment and power engineering of agricultural production»

Forms of training, licensed study amount:	
– full-time	50 people
– extra-mural	50 people
Duration of training	1 year
Credits	60 ECTS
Language of training	Ukrainian
Qualification of graduates	Engineer Mechanic

The concept of training

Raising and improving engineer-mechanic's knowledge, abilities and practical skills in the field of machines and equipment operation in agricultural production and processing industries, based on modern standards of higher education to meet the requirements of society and European educational programs for the work in public and private sectors of Ukraine.

Practical training

Curriculum provides students passing two professional practices: maintenance - repair and undergraduate. The bases for these are: educational-scientific-industrial subdivision of the Institute , strategic partners (AJSC «Druzhba – Nova», JSC «Magnat», CLR JSC «Metekol», JSC «Krok- Agro», JSC «Zemlya and Volya» of «Nizhyn Conservation Factory», JSC «Nizhyn-Silmash Plant», etc.).

Proposed topics for theses

1. Substantiation of perspective mechanized production process (agricultural crop) with business plan developing.
2. Justification of machines complexes composition for cultivating (agricultural crop).
3. Basing of equipment complex (MAF, pig - breeding farm, sheep farm) to improve feeding, watering, removing manure.
4. Justification of safety labour protection measures to prevent accidents and injury in the production processes of technical service.

Academic rights of graduates - Graduates may continue their studies for Master's Programmer in the specialty of:

8.10010203 - «Mechanization of Agriculture» or the area 1801 of «Specific Categories»:

8.18010010 - «Quality, Standardization and Certification»;

8.18010018 - «Administrative Management»;

8.18010020 - «Educational Establishment Management»;

8.18010021 - «Pedagogics of Higher Educational School».

Sphere of graduates' employment

Specialists – engineers- mechanics - take such primary positions: an engineer of machine-tractors maintenance, an engineer of mechanization and automation of production processes , an engineer of labor-intensive processes mechanization, engineer-technologist (mechanics), group engineer- mechanic, engineer-constructor (mechanics) at the leading enterprises of agricultural and environmental complex of Chernihiv region.

Specialist Degree Program and Curriculum in Specialty «Mechanization of Agriculture»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of professional and practical training					
1	Legislation and Law in APC	1	90	1,6	2,5
2	World agricultural production	1, 2	216	4	6
3	Operating machinery and equipment in the plant-growing	1	108	2	3
4	Design of technological processes in animal husbandry.	1	108	2	3
5	Design of technological processes in the remaking industry	1	108	2	3
6	Labor protection in the field	2	54	1	1,5
7	Civil protection	2	54	1	1,5
8	Business – Planning in AIP	2	108	2	3
9	Technology. of machinery and equipment repair	1	108	2	3
Total for the cycle			***954***	***17,6***	***26,5***
Regulatory part, total			**954**	**17,6**	**26,5**
2. ELECTIVE ACADEMIC DISCIPLINES					
Specialization «Mechanization of plant- growing»					
2.1. Disciplines, chosen by the University					
1	Test of agricultural machinery	1	108	2	3
2	Transportation of agricultural products	2	108	2	3
3	Technology of agricultural products storage	1	108	2	3
Chosen by the University, total			***324***	***6***	***9***
2.2. Disciplines, chosen by students					
1	Bases of scientific research	2	108	2	3
2	Logistics	2	162	3	4,5
3	Bases of Marketing	1	108	2	3
4	Precision Agriculture System	2	144	2,6	4
Chosen by students, total			***522***	***9,7***	***14,5***
Elective part, total			**846**	**15,6**	**23,5**
Practical training			**324**	**6**	**9**
Degree examination			**36**	**0,7**	**1**
Total, according to specialty			**2160**	**40**	**60**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of professional and practical training

Legislation and Law in agriculture. The purpose of the discipline is to form sustainability of justice on graduate level for future professionals in agriculture, establishing them practical skills and ability to apply properly the regulations in the future economic and particularly engineering activity.

World agricultural production. The aim of the course is to provide knowledge about the current global development of agricultural production as a distinct social economic system , to understand the role and place of agriculture in the world economy , to know the level of population food supply (in economic systems and in separate countries), achievements of advanced countries in agricultural production.

Operating machinery and equipment in the plant growing. The purpose of the discipline is to examine the scientific basis of the technology effective use, ensuring its capacity for work , as well as technological disciplines in order to obtain planned outcomes in specific production conditions and areas of Ukraine .

Technological planning in animal husbandry. The purpose of the discipline are methods of developing and designing of current mechanized technological processes in animal husbandry, systematization and consolidation of knowledge in technology, mechanization, ecology and safety animal production .

Technological processes planning in manufacturing industry. The purpose of the discipline is to train specialists in the storage and processing of agricultural products, who independently decide the design, renovation, expansion and technical reconstruction of production lines , shops and enterprises with this specialization.

Labor protection in the branch. Normative academic discipline which is studied for the purpose of formation, required in the future professional activity of specialists, knowledge and skills with legal and organizational questions of labor protection, industrial hygiene, Industrial sanitation, safety and fire safety, defined by suitable national standards, as well as active position, regarding the practical implementation of the prior principle of employees life and health protection as to the results of productional activity.

Civil protection. The purpose of the discipline is to develop students' ability to think creatively, solve complex problems of innovative character and take productive decisions in the field of civil protection, taking into account future careers of graduates, as well as scientific- technical progress.

Business planning in agricultural production . The purpose of the discipline is to develop professional knowledge and skills concerning management of production - technical resources, based on the major projects disclosure in industrial and service enterprises of AIP, which operate in market conditions, combined operation of technological, technical and organizational factors on their effectiveness, enabling the development of resource-saving cooperative productive and service systems.

Technology of machinery and equipment repair. The purpose of the discipline is the theoretical and practical training of future specialists, capable to provide tractor park capacity to work with minimal loss of time, material and labor resources.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

Specialization «Mechanization of Plant Growing»

Agricultural machinery testing. The purpose of the discipline is to train future engineers to solve organizational, scientific, technical and legal problems in the field of testing and quality evaluation of agricultural machinery.

Transportation of agricultural products. The purpose of the discipline is the acquisition of students' theoretical knowledge and practical skills in the application of transport processes in agriculture, scientific fundamentals of engineering support of vehicles effective use, subject matter and methods of joint rules developing of vehicle potential full use in specific natural- production conditions.

Technology of storage of agricultural products. The purpose of the discipline is to teach students of proper agricultural products storage by selecting economically optimal technology, conditions and methods of storage.

2.2. Disciplines, chosen by students

Basis of scientific research . Objective: disclosure of the contents and principles of scientific research, specification of the terms « science « and « research, « better acquaintance with their components for strengthening the methodological orientation of educational process and the formation of future specialists scientific outlook.

Logistics. The purpose of the discipline is to master the scientific basis of planning and materials flow management, in order to obtain planned final outcomes in specific production conditions of Ukraine.

Principles of Marketing. Objective: formation of knowledge system about marketing nature and content as a philosophy of business in a market economy conditions and competition, learning the basic notions, systems and algorithms of marketing, acquisition of practical skills for specific marketing objectives solving, developing abilities of creative searching of reserves, improving the company marketing.

System of Precision Agriculture. Objective: to provide students with profound knowledge about the nature of relationship between agricultural machinery and object of acting and use of informational base in the system of governed agriculture , maintenance and information supply for precision farming system.

Specialist training
in specialty «ENERGETICS OF AGRICULTURAL PRODUCTION»
field of knowledge «Power engineering and agricultural production»

Forms of training, licensed study amount:	
– full-time	50 people
– extra-mural	30 people
Duration of training	1/1,5 year
Credits	60 ECTS
Language of training	Ukrainian
Qualification of graduates	Engineer Electrician

The concept of training

Experts on energetics of agriculture are able to perform organizational and managerial, production - technological, designing, installation and maintenance tasks. The objects of professional activity of specialists of educational qualification «Specialist» are power stations and substations, power generation systems and networks, electrical facilities and equipment of industries, power stations and complexes, based on alternative and renewed energy sources.

Practical training

Curriculum provides students passing two professional practices: maintenance repair and undergraduate. The bases for these are: educational-scientific- productional subdivision of the Institute, ALR «Zemlia and svoboda» ALR «Druzhba Nova» PAE «Fortuna» PAE «Progress» ALR «Batkivschyna» AFE «Colos», JSC «Nizhyn Conservation Plant», PJSC «Nijzhyn bread», ELR «Losynivka Butter-Cheese Plant».

Proposed topics for theses

1. Electrification of technological processes at the site of the diagnosis and repair of electrical equipment.
2. Complex power supply system of livestock farms, using cogeneration plants.
3. Automation of grain active ventilation for energy saving modes of over drying
4.Development of measures, reducing power consumption in electrical distribution networks 10 kV.
5. Design of automatic boiler control system DKVR 10 /13.

Academic rights of graduates. Graduates can continue their studies for Master Programmer in the field:

8.10010101 – «Power engineering of agricultural production»
8.10010103 - «Electrification and Automation of Agriculture»
or field of knowledge 1801 « Specific categories»
8.18010010 - «Quality, standardization and certification»
8.18010018 - «Administrative Management»
8.18010020 - «Educational Establishment Management»
8.18010021 - «Pedagogics of Higher School»

Sphere of graduates' employment

Specialists - engineer – electricians - occupy such primary positions: engineer-electrician, engineer of farm electrification, heating farm engineer, engineer of ventilation in agricultural enterprises of different ownership forms, research institutions of NAS of Ukraine and National Agrarian Academy of Ukraine.

Specialist Degree Program and Curriculum in Specialty «Energetics of Agricultural Production»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of professional and practical training					
1	AIC power supply	1	108	2	3
2	AIC heat and water supply	1	108	2	3
3	Electric drive of production machines and mechanisms	1	108	2	3
4	Electrical technologies in AIC	1	108	2	3
5	Design of electrification, automation and energy supply.	2	108	2	3
6	Technologies of maintenance and repair of electrical equipment and automatization devices	2	162	3	4,5
7	Energy efficiency and renewed energy use.	1	108	2	3
8	Labor protection in the field (Electrical safety)	2	108	2	3
9	Civil protection	1	54	1	1,5
10	Production operational practices	1	270	5	7,5
11	Diploma draft	2	378	7	10,5
Total for the cycles			***1620***	***30***	***45***
Regulatory part, total			**1620**	**30**	**45**
2. ELECTIVE ACADEMIC DISCIPLINES					
Specialization «Electrified Technologies in Agricultural Production»					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of humanitarian, social and economic training					
1	Physical Education	1	72	Out credit discipline	
2.1.2 Cycle of professional and practical training					
1	Electro-physical methods of agricultural products and materials processing	2	72	1,33	2
2	Agricultural machines and equipment of AIC.	2	72	1,33	2
3	Bases of scientific research	2	72	1,33	2
4	Automated control systems in AIC.	2	144	2,67	4
5	Mathematical modeling on a PC	1	72	1,33	2
6	Pre-diploma production practice	2	108	2	3
Chosen by students, total			***612***	***10***	***15***
Elective part, total			***612***	***10***	***15***
Practical training			**378**	**7**	**10,5**
Degree examination			**378**	**7**	**10,5**
Total, according to specialty			**2232**	**40**	**60**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of professional and practical training

Power supply in AIC. Technologies of production, transmission and distribution of electricity in agriculture are identified, ways of solving the problems of APC power supply. Modern methods of calculation parameters and modes and power settings are studied**.**

Heat and water supplying. The basic regulations for heat and water supply in Ukraine are considered , the principles of sources of heat and water supply selecting, methods of water purification and water treatment systems, the basic schemes of heat and water supply, the theoretical foundations of the processes, taking place in water and heat supply systems. Methods of calculation of heat and water supply systems, principles of action and design equipment construction of heat and water supply are studied.

Electric drive of production machines and mechanisms. Features of electric drives in agricultural production are identified. Electric pumping, ventilating, milking, handling, feed-preparing, grain -drying, hand machines, metal and wood-working machines-tools, electric-engine mechanisms are calculated. Schemes of their automation are developed. Methods of electric-drives tests are studied.

Electrical technologies in AIC. We consider technical-economic basis of using electro-installations in agriculture, physical and technological properties of agricultural products and materials are considered. Principles of electric equipment function, used for technological processes in agriculture, are studied. Selection and calculation of electro- technological equipment for different processes are carried out.

Design of electrification, automation and energy supply systems. Initial and normative materials for the design, composition of the project electrical part are grounded. Registration of text and graphic materials is done as well as election of electrical equipment. The estimated electrical loads and power supply are identified. A draft of electrification, automation and energy in plant growing, livestock and subsidiary industries is worked out.

Technology of electrical equipment and automation devices service and repair. The questions on the practical implementation of operational and maintenance measures complex on power equipment and automation devices , efficient use of electricity and other power resources , the introduction of energy saving technologies are considered. The technology of power equipment maintenance and repair is studied according to its specific species. A calculation and selection of protection devices against abnormal conditions is done.

Energy efficiency and use of renovated current sources. The basic principles of energy conservation, valuation, accounting and control of energy cost expanses are determined. Renewed energy sources and principles of their work are considered. The methods of selection and calculation of renewed energy sources are studied.

Health protection in the field (Electricity safety). General electrical issues are Identified in agriculture, as well as the danger of human current hitting, work safety: during wiring and repair of electrical systems in normal and emergency conditions, constructing and operation of electrical devices; fire and lightning safety of agricultural objects**.**

Civil protection. Discipline assumes mastering the latest theories, methods and technologies for predicting situations, building models of their development, assessing the risk and justification of measures to prevent emergencies, security of personnel, population , material and cultural values in extraordinary conditions , localization and elimination of their consequences. A system of regulations as to protect ion of human settlements , industrial and other facilities from the factors of emergencies; strategy of state policy in the field of civil protection , the list of expenses in case of emergency , the essence and function of the population safety and territory in the field of civil protection.

2. Elective academic disciplines

2.1. Disciplines, chosen by the University

Specialization « Electrified technology in agricultural production»

2.1.1. Cycle of professional and practical training

Electro-physical methods of agricultural products processing. Methods and devices for determining the main physical and technological parameters and characteristics of agricultural products, materials, substances and objects are discussed in the discipline. We use these settings and properties for electro- cultivation, the effectiveness of which cannot be achieved by other means or to reduce significantly technological energy expenses. The main physic-technological parameters and properties of agricultural products, materials, substances and objects are studied.

.**Agricultural machinery and equipment.** The conception of livestock and plant growing is considered in the discipline, as well as transition to new advanced technologies, using computerized equipment and robotic systems, technological robots. The structure, principles of operation, basic theory and methods of calculating machines and equipment, scientific basis for installation and technology systems use, are studied

Bases of scientific research. The content and principles of scientific research are considered in the discipline, as well as specification and extending the knowledge, acquired by students in the process of general and special subject's studying, to promote students' abilities to creative scientific activity, to independent thinking and intellect. The stages of the research, methodological foundations of scientific knowledge, theoretical and experimental research, data processing of experimental research, statistical methods of experimental data processing are studied.

The automatic control systems in AIC. The bases of operation and principles of automatic control systems of agricultural production are covered In the discipline. We study the structure and principles of automatic control systems, types and composition of automatic processes control systems with technological processes.

Mathematical modeling on a PC. Modern methods of scientific investigation and solution of applied problems are studied in the discipline. Students learn mathematical modeling of processes and objects on a PC, imitation modeling on a PC.

Specialist training
in specialty «ACCOUNTING AND AUDITING»
field of knowledge «Economics and Entrepreneurship»

Forms of training, licensed study amount:	
– full-time	30 people
– extra-mural	30 people
Duration of training	1/1,5 year
Credits	60 ECTS
Language of training	Ukrainian
Qualification of graduates	Accounting and auditing

The concept of training

Training specialists in specialty of «Accounting and Auditing» is conducted with the purpose of ensuring agricultural enterprise's needs, educational institutions and scientific establishments of Chernihiv, other regions with highly qualified specialists, that is aimed at the profound study of accounting and auditing theory and practice, ensuring in agricultural sector of economy. Experts in accounting and auditing have profound professional training; possess knowledge and skills to use effectively instructional technique and methods of economic analysis.

Practical training

Curriculum provides students passing two practices: training in accounting and complex production one on specialty. According to the agreements for practical training industrial base of agricultural enterprises are used, as well as processing enterprises of Chernihiv region, namely AELR «Druzhba –Nova», ELR APC «Magnat», ELR SPE «Metekol», ELR «Crock –Agro», ELR «Zemlya and Volya» ELR «Nizhyn Cannery» PAE «Piskyvsky Agro-holding «Mriya».

Proposed topics for theses

1. Accounting, analysis and audit of the budget and extra budgetary funds.
2. Accounting of expenses and cost calculation of agricultural products.
3. Improving accounting and payments control from fixed agricultural tax.
4. State and ways of improving the accounting and control of indirect taxes at the enterprise.
5. Recording and analysis of costs and incomes from operations in the company.

Academic rights of graduates - Graduates can continue their studies for Masters' programs, specialty, related with a specialty of studied program of training specialists:

8.03050901 - «Accounting and Auditing»

or specialty of knowledge field «Specific categories»:

8.18010010 - «Quality, standardization and certification»

8.18010018 - «Administrative Management»

8.18010020 - «Educational Establishment Management»

8.18010021 - «Higher School Pedagogics»

Spheres of graduates' employment

After graduation from the specialty «Accounting and Auditing» all graduates have the opportunity to work in the enterprises and organizations of agrarian sector and public authorities for the following positions: chief accountant , vice-chief accountant, leading accountant, head cashier, I category accountant, II category accountant; accountant, auditor, assistant auditor; leading auditor , auditor category I; auditor category II, auditor , accountant-inspector, accountant-expert, chief auditor, specialist-accountant, chief inspector, head cashier.

Specialist Degree Program and Curriculum in Specialty «Accounting and Auditing»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of professional and practical training					
1	Organization of accounting	1	135	2,5	3,75
2	Information systems of management in the analysis and audit	1	135	2,5	3,75
3	Company reporting	1	135	2,5	3,75
4	Financial Analysis	2	108	2	3
5	Foreign Trade Accounting	2	108	2	3
6	Models and methods of decision-making analysis and audit	2	135	2,5	3,75
7	Teaching practice on accounting (in training accounting)		36	0,66	1
8	Integrated with the profession (pre-diploma) practices		90	1,66	2,5
Total for the cycles			**882**	**16,3**	**24,5**
Regulatory part, total			**882**	**16,3**	**24,5**
2. ELECTIVE ACADEMIC DISCIPLINES					
Specialization «Electrified Technologies in Agricultural Production»					
2.1. Disciplines, chosen by the University					
2.1.1. Cycle of professional and practical training					
1	Civil protection	2	54	1	1,5
2	Chief accountant AWP	2	108	2	3
3	Enterprise strategic management	1	108	2	3
4	Tax accounting and reporting	2	108	2	3
5	Financial services market	2	54	1	1,5
6	Labor protection in the branch	1	54	1	1,5
Total Electives of the University			**486**	**9**	**13,5**
2.2. Disciplines, chosen by students					
2.2.2. Cycle of professional and practical training					
1	Economic control	1	54	1	1,5
2	Intellectual Property	1	54	1	1,5
3	Accounting of small businesses	2	108	2	3
4	Agricultural Consulting Fundamentals	2	108	1	3
Chosen by students, total			**162**	**3**	**4,5**
Elective part, total			**648**	**12**	**18**
Practical training			**126**	**2,3**	**3,5**
Degree examination			**648**	**12**	**18**
Total, according to specialty			**2178**	**40,3**	**60,5**

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of professional and practical training

Organization of accounting. Learning discipline involves the assimilation of knowledge about the organization control and analytic processes in the enterprise, specialties of accounting organization, learning organization and techniques of accounting, control and analysis in the company, an efficient structure of accounting, control and analytical process, organization of performers work.

Management information systems in the analysis and audit. The purpose of this course is mastering of knowledge on creation and use of management information systems and technologies of the financial and management accounting and control–analytical processes, the study of management information systems by type, levels and functions, methods of staging control and analytical, financial, administrative, audit tasks, necessary skills to solve them.

Enterprise Reporting. Students are supposed to master the theoretical knowledge of the content, structure, order of preparation and use of enterprise reporting, form practical skills in methods and technique of making financial, tax, statistical and special reports, provided by accounting standards and legislation of Ukraine**.**

Financial Analysis. The purpose of the discipline is to study the structure and content of financial reporting, teaching ability of its reading and analysis for the formation of an analytical conclusion on the financial state of organization and trends of its change, providing knowledge on making revision of financial and economic activities and internal resources of strengthening the financial condition of the company.

Accounting for foreign trade. Learning the discipline involves the formation of the students theoretical knowledge and practical skills to integrate foreign business entities, the study of methods and technologies of accounting keeping the most widespread financial and economic operations used in Foreign entities of Ukraine with foreign partners, the acquisition of skills of documentary supply and display of foreign operations in the system of accounts**.**

Models and methods of decision - making analysis and audit. The purpose of the discipline is to get the students' knowledge both methodological and applied as to modeling decisions with analytical and audit means - models, methods and means for preparing administrative decisions drafts.

2. Elective academic disciplines

Specialty «Accounting and Auditing in Agriculture»

2.1. Disciplines, chosen by the University

2.1.1. Cycle of professional and practical training

Civil protection. Study of this course promotes creative thinking to solve complex problems of innovative character and make productive decisions in the field of civil protection, taking into account the future profession, predicts mastering the latest theories , methods and technologies for prevention emergencies, building models of their development, assessing the risk and justification of measures to prevent emergencies, personnel and population defense, property in the conditions of emergencies , localization and liquidation of their consequences**.**

Chief accountant AWP. The purpose of this course is to introduce the possibilities of computer technologies in enterprise management, clear understanding of the methods and techniques of accounting, using computer technology, learning and mastering of methods and techniques of organization and practical use of automated information systems of accounting.

Strategic enterprise management. Study of this course provides students with the necessary theoretical background, methodical guidelines and practical skills in strategic enterprise management**.**

Tax accounting and reporting. The aim of this subject is to provide students with the necessary theoretical framework, methodical guidelines and practical knowledge as to the calculation of tax duties on various taxes, taxes and compulsory payments; theoretical foundations and guidelines on tax accounting and reporting on various taxes, fees and compulsory payments by taxpayers are studied**.**

Financial services market. Learning this discipline develops students' complex understanding of the formation of interrelation in the financial sector, the analysis of economic relations, arising in the financial services market, related to the accusation, distribution and redistribution of resources between the state, financial and production areas, the formation of funds using the effectively functioning intermediaries.

Labor protection in the branch. The purpose of the discipline is to form in future specialists' knowledge as to the state and problems of safety in the area and functioning of the safety management system and the ways, methods and means of ensuring the conditions of working environment and safety in accordance with acting laws and other regulations.

2.2. Disciplines, chosen by students

2.2.1. Cycle of professional and practical training

Economic control. This course systematizes knowledge about the theoretical foundations of audit-revisory work, its content and regulations, makes it possible to study and obtain skills, used in practice, control and audit-revisory procedures, which allow to expose deficiencies and irregularities in the enterprise's activity**.**

Intellectual property. The purpose and objectives of the course is studying and mastering by the students basic concepts, institutions, principles and sources of legal relations regulations, connected with the creative, intellectual activities both at the national and international levels.

Accounting of small businesses activity. The discipline is aimed at gaining knowledge on practical aspects of accounting business entities, examines the theoretical foundations and methodological guidance for accounting and reporting of small businesses**.**

Basis of agrarian consulting. The main purpose of the discipline is to ground the need of consulting organizations activity to provide information services on land legislation, the implementation of civil-law contracts , land valuation , taxation and rent, agricultural producers and citizens practical assistance in preparing a business plan and other services as to land plots.

Specialist training
in specialty «MANAGEMENT OF ORGANIZATION AND ADMINISTRATION»
field of knowledge «Management and Administration»

Forms of training, licensed study amount:	
– full-time	30 people
– extra-mural	30 people
Duration of training	1/1,5 year
Credits	60 ECTS
Language of training	Ukrainian
Qualification of graduates	Manager-economist

The concept of training

Training specialists on specialty «Management and Administration» is conducted for purpose of providing the enterprises and organizations of environmental branches and agrobusiness for highly skilled workers of initial level of governing structural subdivisions , operating systems and processes.

Practical training

Curriculum provides students for passing two training practices: a complex one on specialty and undergraduate. The bases for these purpose are: APC «Zlagoda», SE RF Nosivka SES , JSC «Kremin», JSC «Nizhyn Cannery» PE «Cheese House», PAE «Fortune», AELR «Vira», AELR « Shatursky», AFE «Colos», ELR «Agrofirm named after Shevchenko», ELR «Land and Freedom», ELR «Losynivka Butter-Cheese Plant».

Proposed topics for theses

1. Management of human resources at the enterprise.
2. Development of farm management.
3. Capital management of agricultural enterprises.
4. Leadership and management styles as an area of strategic changes in the company.
5 Range and quality of products managing at the enterprise at present.

Academic rights of graduates - Graduates can continue their studies on Master's programs, specialty, corresponding to the specialty of studied training program:

8. 03060101 - «Management and Administration»
8.03060104 - «International Management»
or specialties of knowledge field « Specific categories»
8.18010010 "Quality, Standardization and Certification";
8.18010018 "Administrative Management";
8.18010020 "Management of Education Institution";
8.18010021 "Pedagogy of Higher School".

Spheres of graduates' employment

After graduating from the specialty «Management and Administration» all graduates are settled in companies and organizations of agrarian sector and to the following positions: managers of production units in commercial service, apparatus workers of the state power institutions, workers of local state power institutions, leaders of other units in other areas (inspector, Vice-Head of Department), managers of small enterprises without the apparatus (Vice- Chairman), managers (stewards) on business and management (manager of public relations, advertising manager, HR manager etc.).

Specialist Degree Program and Curriculum in Specialty «Management of Organization and Administration»

№	The name of the course, practice	Semester	Amount		
			Hours	Credits	
				National	ECTS
1. REGULATORY ACADEMIC DISCIPLINES					
1.1. Cycle of humanitarian, social and economic training					
1	Intellectual Property	1	54	1	1,5
2	Labor Protection in the field	1	54	1	1,5
3	Civil Protection	2	54	1	1,5
4	Contract Law	2	54	1	1,5
Total for the cycle			216	4	6
1.2. Cycle of professional and practical training					
1	Public Administration	1	72	1,3	2,0
2	Organizational Management	1	54	1	1,5
3	Course paper	1	54	1	1,5
4	Corporate Management	1	36	0,7	1,0
5	Change Management	1	54	1	1,5
6	Project Management	2	72	1,3	2,0
7	Quality Management	2	54	1	1,5
8	Financial Management	1	72	1,3	2,0
9	Information Systems and Technology in Organizational Management	2	72	1,3	2,0
10	Production practice	2	324	6	9
11	Pre-diploma practice	2	108	2	3
Total for the cycle			972	18	27
Regulatory part, total			1188	22	33
2. ELECTIVE ACADEMIC DISCIPLINES					
Specialization 1. Agrarian Management					
2.1. Disciplines, chosen by the University					
1	Economics of the AIC	1	54	1	1,5
2	Psychology of Management	1	54	1	1,5
3	Organization Agroservice	2	54	1	1,5
Total Electives of the Institute			162	3	4,5
2.2. Disciplines, chosen by students					
1	Land and Agrarian Law	1	54	1	1,5
2	Social Policy	1	54	1	1,5
3	Tax Management	2	54	1	1,5
4	Insurance Management	2	54	1	1,5
Chosen by students, total			162	3	4,5
Elective part, total			270	5	7,5
Practical training			432	8	12
Degree examination			648	12	18
Total, according to specialty			2160	40	60

* The names of the cycles of disciplines and forms of state certification are given according to the requirements of the standards for higher education, accepted after 2007, EQC and OPP.

Annotation of discipline in the Curriculum

1. Regulatory academic disciplines

1.1. Cycle of humanitarian, social and economic training

Intellectual Property. The purpose of the discipline is to form a complex of theoretical knowledge on intellectual property as a decisive economic and legal category of information society. The course deals with the nature, specific intellectual capital and intellectual property, the analysis of security and protection of intellectual property, identifying areas of intellectual property in the process of national innovation system formation.

Labor Protection in the field. Learning the subject predicts mastering of urgent questions on labor protection for competitive field of business, economic and scientific-research activities, taking into account the future careers of graduates, as well as scientific and scientific- technical progress.

Civil Protection. The purpose of the discipline is to develop students' ability to think creatively, solve complex problems of innovative character and make productive decisions in the field of civil protection, taking into account future careers of graduates, as well as achievements of scientific- technical progress**.**

Contract Law. The purpose of the disciplines is to obtain the system of legal knowledge, governing the conclusion, performance and termination of commercial contracts of various kinds. The course deals with the concept , object and fundamental principles of contract law , the analysis of the main sources of contract law in Ukraine and in foreign trade activity , the legal analysis of the major institutions of contract law , the definition of agreements order conclusion with entities.

1.2. Cycle of professional and practical training

Public Administration. The purpose of the discipline is to master the theoretical knowledge of public administration and the acquisition of practical skills as to applying the laws, principles, methods, techniques, and procedures in the management of public sector entities; the acquisition of skills and the formation of competencies, necessary for performing the functions and the head powers realizations as the subject of public administration**.**

Organizational Management. The purpose of the discipline is to develop the theoretical foundations of modern management thinking and abilities and skills as to management of organizations in the area of health protection and the internal components of these facilities environment, the acquisition of practical skills and abilities in management technology by medical and pharmaceutical institutions.

Corporative Management . The purpose of the discipline is to familiarize students with the theoretical foundations of corporative governing, institutional and informational means of corporative management system, functioning at the enterprises**.**

Change Management. The purpose of the discipline is to master practical knowledge and practical skills in organization of governing process changes, that predict understanding the essence of changes and the nature of their origin, formation of the students' scientific outlook and knowledge of the technologies and techniques of changes management by organizations, studying the peculiarities of the functioning of organizations in the conditions of continuous changes.

Projects Management. The purpose of the discipline is to form in future professional's appropriate practical skills of universal means of application, design and implementation of universal projects in order to achieve effective existence and organization development. Studying subjects provides scientific-methodological background of students mastering the basic means of project management in the organization**.**

Quality Management. The purpose of the discipline is to develop students' knowledge of the theory and methodology of quality management, principles of construction and operation of the quality management system, acquiring legal, organizational and economic issues, related to quality management.

Financial Management. The purpose of the discipline is to develop in student's modern economic thinking and system of special knowledge in the field of enterprises financial management, the practical application of their skills in various areas of financial activity.

Information Systems and Technology in Organizational Management. The goal of teaching is to develop future managers with knowledge and skills as to modern information systems and technologies, their rational use, as well as practical skills of effective use of modern information technologies in the process of management implementation within the organization.

2. Elective academic disciplines
Specialization «Agricultural Management»

2.1. Disciplines, chosen by the University

Economics of the AIC. The purpose of the discipline is that of understanding and possessing of basic principles, methods and means of essence, studying the agricultural enterprises functioning as an object of economic analysis. The basis of the study in this course is the production process and peculiarities of agricultural production potential use and forming the financial activity of agricultural enterprises in the modern business environment**.**

Psychology of Management. The goal of teaching is to develop psychological abilities, skills and habits of perfect possessing the professional field, improve the communicative competence of future specialists.

Organization of Agroservice. The purpose of the discipline is learning basic concepts of agro service theory cooperative and major statements of cooperative legislation of Ukraine, mastering the mechanism of legal regulation of cooperative relations, students' practical skills mastering of cooperative law.

2.2. Disciplines, chosen by students

Land and Agrarian Law. The purpose of this course is mastering the basic legal framework regulating land relations in Ukraine in the conditions of market economy transition, the acquisition of practical skills in composition of land law documents, considering land arguments.

Social Policy. The subject study is connected with the mastering of the most important social spheres, their organization, planning and suppositions. The theory and practice of social processes governing is covered, as well as social welfare , information on the state social policy and the development of social infrastructure , state regulation of social sphere in the conditions of market economy.

Tax Management. The purpose of the discipline is providing for the budget income part and the influence of taxes on business development and social sphere. Tax management at the micro level predicts taxes supposition and planning, tax accounting, internal control of taxable bases**.**

Insurance Management. The purpose of the discipline is to gain knowledge on theory of development and practical application of specific mechanisms of governing, insurance, reinsurance and formation, insurance reserves placement and their management in the insurance company's activities**.**