

**NATIONAL UNIVERSITY OF LIFE
AND ENVIRONMENTAL SCIENCE OF UKRAINE**

**THE CURRICULA
FOR THE TRAINING OF MASTERS**

Year of entry – 2015

2015

The publication presents a framework for masters of NULES of Ukraine, the schedule of the educational process and curricula for training specialists educational degree «Master» 2015 year of entry for all professions and educational programs in accordance with the Law of Ukraine «On Higher Education».

Educational editions

CURRICULA

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INTRODUCTION

The National University of Life and Environmental Sciences of Ukraine has been training masters since 1996.

The curricula and programs of Master's Degree training are compiled in accordance with requirements of Law of Ukraine «About higher education». Their adaptation and conformity meet the requirements of U.S. and European systems of higher agricultural education.

The National University of Life and Environmental Sciences of Ukraine trains masters in 54 specialties (Table 1).

Table 1. The list of specialties of Master training programs at the NULES of Ukraine

Code and title of the branch of knowledge code and title of specialty	Form of training
<i>0101 – Pedagogical education</i>	
8.01010601 – Social pedagogy	+ (F, P)
<i>0203 – Human sciences</i>	
8.02030304 – Translation	+ (F, P)
<i>0304 – Law</i>	
8.03040101 – Law science	+ (F, P)
<i>0305 – Economics and entrepreneurship</i>	
8.03050201 – Economic cybernetics	+ (F)
8.03050401 – Economics of enterprise	+ (F, P)
8.03050701 – Marketing	+ (F, P)
8.03050801 – Finance and credit	+ (F, P)
8.03050803 – Taxation	+ (F, P)
8.03050901 – Accounting and audit	+ (F, P)
<i>0306 – Management and administration</i>	
8.03060101 – Management of organizations and administration	+ (F, P)
8.03060104 – Management of foreign economic activity	+ (F, P)
<i>0401 – Natural Sciences</i>	
8.04010601 – Ecology and environmental protection	+ (F, P)
8.04010604 – Ecological control and audit	+ (F)
<i>0501 – Informatics and computation technics</i>	
8.05010101 – Information managing systems and technologies	+ (F)
8.05010105 – Computer ecological and economic monitoring	+ (F)
<i>0502 – Automation and control</i>	
8.05020201 – Automated control of technological processes	+ (F)
<i>0505 – Mechanical engineering and processing of materials</i>	
8.05050303 – Equipment of forest complex	+ (F, P)
8.05050312 – Machinery and equipment of agricultural production	+ (F, P)
<i>0507 – Electrical engineering and electromechanics</i>	
8.05070103 – Electrotechnical systems of power consumption	+ (F, P)
<i>0514 – Biotechnology</i>	
8.05140105 – Environmental biotechnology and bioenergetics	+ (F, P)
<i>0517 – Alimentary industries and reprocessing of products of agriculture</i>	
8.05170104 – Technologies of storage, preserving and reprocessing of meat	+ (F, P)
8.05170105 – Technologies of storage and reprocessing of aquatic bioresources	+ (F, P)
<i>0518 – Wood processing</i>	
8.05180101 – Wood processing technologies	+ (F, P)
<i>0601 – Building and architecture</i>	
8.06010101 – Industrial and civil construction	+ (F)

Code and title of the branch of knowledge code and title of specialty	Form of training
0701 – Transport and transport infrastructure	
8.07010102 – Organization of transportation and management in transport (road transport)	+ (F, P)
8.07010104 – Organization and regulation of traffic	+ (F, P)
0801 – Geodesy and land management	
8.08010103 – Land management and cadastre	+ (F, P)
0901 – Agriculture and forestry	
8.09010101 – Agronomy	+ (F, P)
8.09010102 – Agrochemistry and soil science	+ (F, P)
8.09010104 – Fruit and vegetable science and viticulture	+ (F, P)
8.09010105 – Selection and genetics of agricultural crops	+ (F, P)
8.09010201 – Technologies of production and processing of livestock products	+ (F, P)
8.09010301 – Forestry	+ (F, P)
8.09010302 – Hunting industry	+ (F, P)
8.09010303 – Park and gardening management	+ (F, P)
8.09010501 – Plant protection	+ (F, P)
8.09010502 – Quarantine of plants	+ (F)
0902 – Fish industry and aquaculture	
8.09020101 – Water bioresources	+ (F, P)
1001 – Techniques and energetics of agricultural production	
8.10010101 – Energetics of agricultural production	+ (F, P)
8.10010103 – Electrification and automation of agriculture	+ (F, P)
8.10010202 – Transport technologies and facilities in agroindustrial complex	+ (F)
8.10010203 – Mechanization of agriculture	+ (F, P)
1101 – Veterinary science	
8.11010101 – Veterinary medicine (by types)	+ (F, P*)
8.11010102 – Veterinary-sanitary inspection, quality and safety of livestock products	+ (F)
1501 – Public service	
8.15010002 – Public administration	+ (F*, P*)
1801 – Specific categories	
8.18010004 – Extension service	+ (F)
8.18010009 – Stock exchange activities	+ (F)
8.18010010 – Quality, standardization and certification	+ (F, P)
8.18010012 – Management of innovative activity	+ (F)
8.18010018 – Administrative management	+ (F, P)
8.18010020 – Management of educational institution	+ (F, P)
8.18010021 – Pedagogy of higher school	+ (F, P)
8.18010022 – Educational Measurement	– (F, P)
8.18010024 – Applied Economics	+ (F, P)
Note: + – available; – – not available; f – full-time; p – part-time; * – training on the basis of full higher education	

The peculiarities of Master training at NULES of Ukraine are characterized by close relationship of the program contents with the sphere of future employment of graduates.

Master training at NULES of Ukraine is carried out according to:

- programs:
 - educational and professional;
 - educational and research;

- branch of knowledge «Specific categories» in specialties:
 - «Administrative management»;
 - «Stock exchange activities»;
 - «Extension service»;
 - «Pedagogy of higher school»;
 - «Management of innovative activity»;
 - «Management of educational institution»;
 - «Quality, standardization and certification»;
 - «Educational measurement»;
 - «Applied economics»;
- branch of knowledge «Public Service» in specialty «Public Administration».

Individuals who have studied and intend to continue training in the chosen field of study for deeper specialization in the chosen specialty are enrolled on educational and professional programs (1,5 years of study (90 ECTS)) by the results of entrance exams. These programs are implemented to ensure the science-intensive production sector with highly qualified specialists who possess the innovative knowledge and are able to apply them into modern high technologies.

Masters on the educational and research program (2 years of study (120 ECTS)) are trained only at departments of the University, which are entitled to train postgraduate students, have sufficient funding and considerable progress in research activities. Applicants to such Master Degree Programs should have a good command of at least one foreign language. The educational and research program includes an obligatory research (scientific component no less than 30 percent). Master training on this program includes conducting research activity according to the chosen specialty during postgraduate study or at educational and research institutions and science-intensive industries.

The specialties in the branch of knowledge «Specific Categories» have a great appeal to students. Their brief description is given below.

Specialty «Administrative Management» is focused on training highly-professional managers who are able to manage agrarian business using innovative managerial knowledge and skills, modern computer technologies and foreign languages. The program content is determined by basic education (economic or non-economic) and future employment. The curriculum of economic program includes technological disciplines in the cycle of elective disciplines, for others – economic disciplines.

Specialty «Stock exchange activities». The specialty focuses on training specialists through effective use of the tools of stock market, who will be able to minimize both the production and financial risks in almost all spheres of economic activity, to develop and implement the forecasts for domestic and world markets, on the whole and within the specific groups of commodities or financial instruments. In addition to specialization, graduates will be able to trade in the commodity and stock markets.

Specialty «Extension Service». The development of market relations in Ukraine has caused an urgent need to establish an effective advisory information and consultancy service for agricultural producers and the population. Knowledge and practical experience obtained through training will help graduates create their consulting services (firms) to extend knowledge, information, innovation, using new information technologies with interactive, consulting systems for competitive agricultural production.

Specialty «Educational Measurement». Master's training in the specialty caused by the growing demand for specialists in educational measurement that are able to define, simulate and implement procedures for monitoring, evaluation and measurement of educational quality. Gain skills for learning outcomes will facilitate the employment centers of education quality evaluation at the regional, district and local levels, their structural divisions expert, specialized institutions and organizations both national and public importance.

Specialty «Pedagogy of higher school». Training of a university teacher is caused by the demand in specialists able to organize the educational process, methodological and research

activities in colleges and vocational schools, promote social development of young people in higher education institutions.

Specialty «Applied Economics». Specialty allows getting the knowledge necessary to successfully solution of complex problems in improving the competitiveness of agribusiness; application of advanced methods of economic-mathematical modeling to study the dynamics of the agrarian sector. Students have the opportunities to learn first newest software package «Wolfram Mathematica».

Specialty «Management of Innovative activity». The specialty focuses on training highly qualified managers with special knowledge in basic education, able to make strategic and tactical managerial innovative solutions, identify the most promising scientific developments and implement them in production on the administrative level of the central state and regional regulatory agencies, counseling centers, innovative financial and credit institutions, enterprises in accordance with the requirements of international standards.

Specialty «Management of educational institution». Training of managers of enterprises, institutions and organizations (in the sphere of education and industrial training) is caused by the demand in specialists able to carry out work on planning and optimization of the organizational structure of the institution; management of its educational and economic activities; monitoring the implementation of the plan; development of the staff policy of the institution and the student audience.

Specialty «Quality, standardization and certification». The specialty focuses on training specialists able to adapt Ukrainian system of assessment of quality, safety, certification and standardization of AIC products according to international standards and their practical implementation.

Since 2012, the University has been training experts-analysts in specialization «Laboratory activity» who master modern methods of chemical, physico-chemical, biological, ecological expertise and evaluation of the quality and security of facilities according to international standards.

At NULES of Ukraine the **specialty «Public service»** in the branch of knowledge «Public administration», is in demand. It focuses on training specialists for public authorities and local governments, able to effectively develop and implement their knowledge in the field of state regulation on the basis of current legislation and information technology.

The list of memoranda of mutual recognition of the educational system, memoranda of double diplomas, international mobility. At present, NULESU maintains contacts and cooperates with 146 organisations from 41 countries in the framework of partnership agreements.

Fruitful cooperation with world leading universities contributed to the reforming of the NULESU education system adapting it to the requirements of world universities. Two U.S. universities (Iowa – 1996, 2011 and Louisiana – 1998, 2009), 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 2014, NULESU signed Memoranda of double diploma with universities-partners:

- Iowa State University, USA: «Quality and safety of agricultural and foodstuff products and objects of environment», «Bioeconomics», «Bioenergetics»;
- the University of Wageningen, the Netherlands: «Protection of environment», «Bioeconomics», «Biotechnology»;
- Humboldt University, Germany: «Process management and quality management»;
- Tokyo University of Agriculture, Japan «International bio-business»;
- University of Applied Sciences Weihenstephan, Germany: Master of Business Administration in Agriculture (MBA);
- University of Applied Sciences Anhalt, Germany: Master of Food and Agribusiness (MFA);
- Warsaw University of life sciences, Poland: «Energetics and automation of biosystems»;

– Russian State agricultural university (MAA named after K. A. Timiriazev): «Information and consulting in AIC».

These universities and NULES of Ukraine maintain agreements on mutual exchange of scientific and pedagogical staff and students.

International mobility in NULES of Ukraine is one of the leading areas of international activity, which offers its students the exceptional opportunities to obtain quality education, do research or internship, and get experience abroad in the framework of international cooperation. Developing the mobility through the implementation of the mechanism of student exchange and participation in the dual diploma programs, individual grants, the University participates in the processes of internationalization and globalization, develops the training of professionals, highly qualified specialists; supports the social, economic, cultural, political relations and ties with other countries.

Content Structure of Master programs at NULES of Ukraine (Fig. 1.)

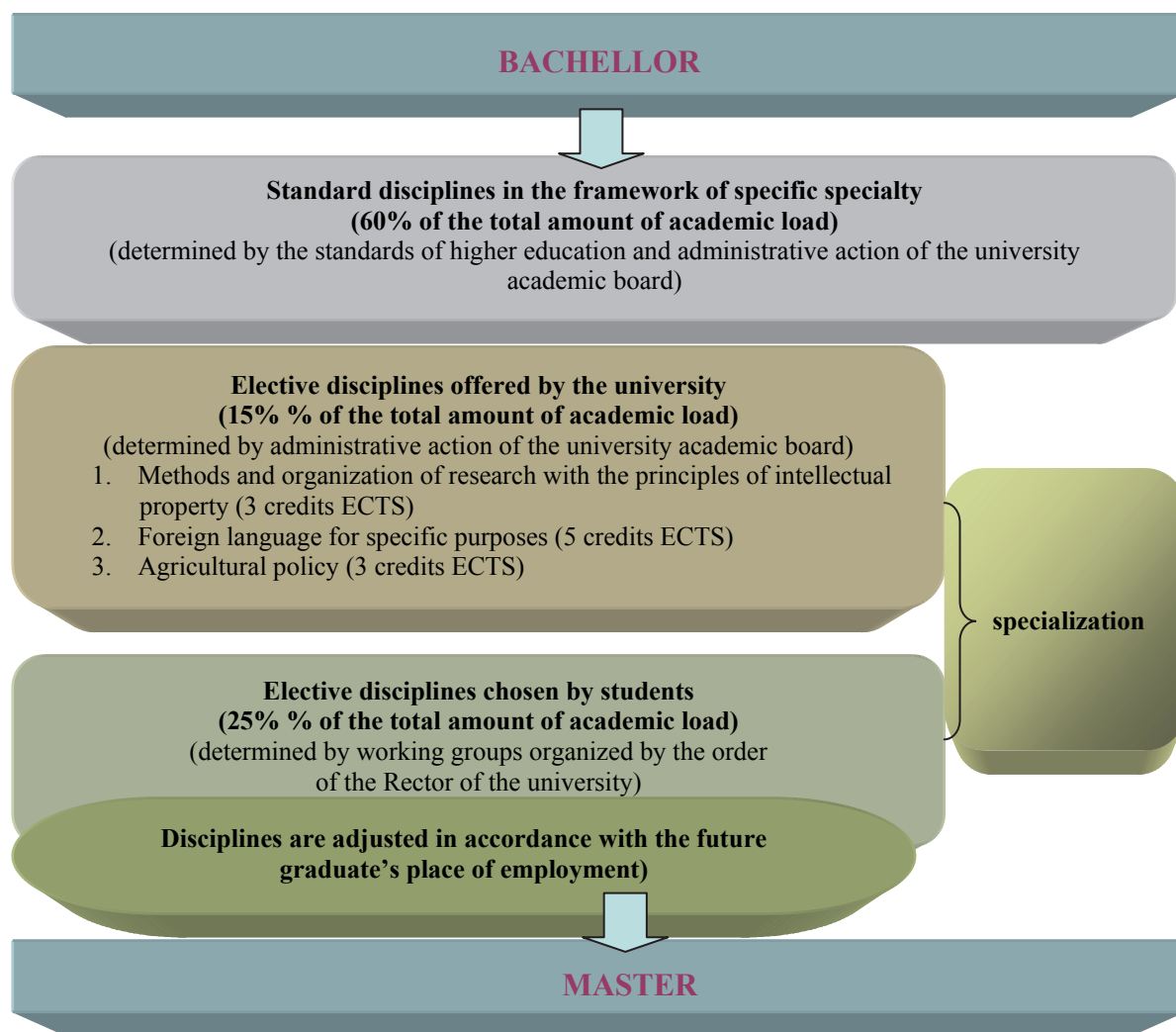


Fig. 1. Content Structure of Master programs at NULES of Ukraine

The content of Master programs at the NULES of Ukraine is determined by:

- the requirements to the professional activity of specialists;
- the field of study and professional specialization of basic education;
- the peculiarities of Master training.

The content structure of Master programs at the NULES of Ukraine includes three discipline blocks.

The list, extent and attestation forms of standard disciplines within the framework of a definite specialty (block 1) are determined by the branch standards of higher education of Ukraine and the administrative action of the academic board of the university. The study of these disciplines provides the basis of specialty and master degree.

The elective part of disciplines determines the basis of specialization within the relevant specialty. The list, extent and attestation forms of elective disciplines offered by the university (block 2) are determined by the academic board of the university. These disciplines are studied by students during their first year according to educational programs of training. They contribute to masters' future research activities and postgraduate studies, help to master a foreign language, methodology and organization of scientific research and be professionally aware in agricultural issues.

The list of standard disciplines and elective courses offered by the University are the same for all students who study according to the same curriculum, regardless of their chosen major.

The list, forms of study and attestation of elective courses chosen by students (block 3) are defined by working groups organized by the rector's order, are recommended by the academic boards of the faculties (ERI), approved by educational-methodological council and by the academic board of the University. They are included in the curriculum depending on the student's choice and studied mainly during the second year of study. These disciplines enable the students to write master's thesis and adjust graduates to their future place of employment.

Professional training of students, including the master's degree research begin in the first semester. A significant part of the training is allotted for independent study.

The main forms of implementation of educational process at NULES of Ukraine. The educational process at NULES of Ukraine is realized through various forms including in-class activities, practical training, independent study and control (Fig. 2).

The in-class activities are conducted in the form of lectures, practical classes, seminars, laboratory activities and individual lessons, including the use of distance learning methods.

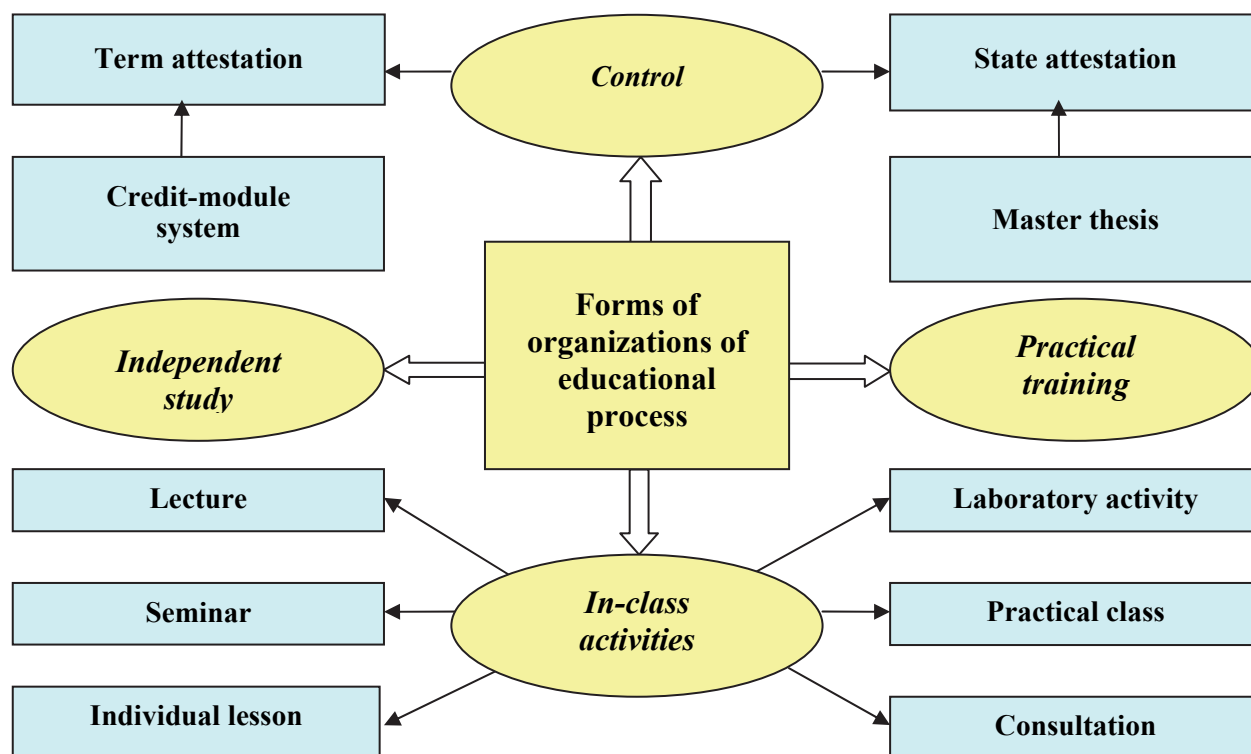


Fig. 2. The main form of implementation of educational process at NULES of Ukraine

Independent study is the main way to master knowledge and skills apart from regular classes. At NULES of Ukraine it is provided by the system of teaching tools, including textbooks, teaching and methodological aids, course books, abstracts of lectures, practical classes etc, as well as their electronic versions for distance learning. This work is conducted according to schedules. It guarantees the student's individual access to the necessary didactic materials. At the beginning of the current semester the students are informed about the schedule.

The teaching staff of appropriate departments is always available for consultation when students use complex equipment and information access systems while studying independently.

Special attention is paid to students' practical training system aimed at generalization of the theoretical and practical knowledge and acquisition of professional skills. It is conducted in the form of laboratory and practical classes, training and production practices that can be conducted at university's centers of practical training:

- 2 research stations: «Agronomic Research Station» SD of the NULES of Ukraine and «Boyarka Forestry Research Station» SD of the NULES of Ukraine (Kyiv region);
- 5 training and research farms (TRF): «Velykosnitynka Training and Research Farm named after Muzychenko», SS of the NULES of Ukraine «Vorzel», SS of NULESU «Nemishaievo Agro-Technical College» (Kyiv region), SS of NULESU «Zalischyky Agricultural College named after Khraplyvyi», SS of NULESU «Nizhyn Agro-Technical Institute» (Chernihiv Region);
- Special facilities for practical training of regional higher educational institutions of NULES of Ukraine I-II accreditation levels;
- Botanical garden of NULES of Ukraine.

Forms of control of students' progress are credits which are done in the form of tests and exams in written form according to the examination cards which include various questions and tests of different types. After conducting the written examination and according to the results of answers to the exam questions, the student is interviewed by two lecturers, who conducted the final attestation. They determine the student's final grade.

Students take regular attestation during the course at department meetings, where they reports on the implementation of the individual plan on the whole and master's thesis in particular (Fig. 3).

Defence of Master's thesis is the final stage of student training and the form of graduates' state attestation. Attestation of applicants for higher education, that is, conformity of the level and amount of applicant's knowledge, skills and other competences to the requirements of higher education, is carried out by the board (EB) which makes the decision on the award of the relevant level higher education and qualification to a graduate.

Training of graduate students at the University is carried out by full-time and part-time (distance) forms. The main form of training masters at NULES of Ukraine – is full-time, for individuals who have already chosen the place of work – part-time form.

Part-time form, as a rule, has a longer duration compared to full-time (not more than by 25 %) and requires students to do a great deal of tasks independently, using appropriate teaching materials and means of distance education.

At NULES of Ukraine, educational and information portal moodle.nubip.edu.ua functions on the basis of the platform Moodle in order to provide information and methodological support of disciplines. It hosts e-learning courses in the respective disciplines and services of on-line communications (Skype, Google Apps, social networks). All this makes it possible to use distance learning technologies in the academic process, which raises the learning process to the international standards.

The process of part-time (distance) education is organized during a calendar year examination sessions. During these sessions as well as in the intersessional period, all forms of the educational activities are carried out: in-class activities, independent study, practical training and control.

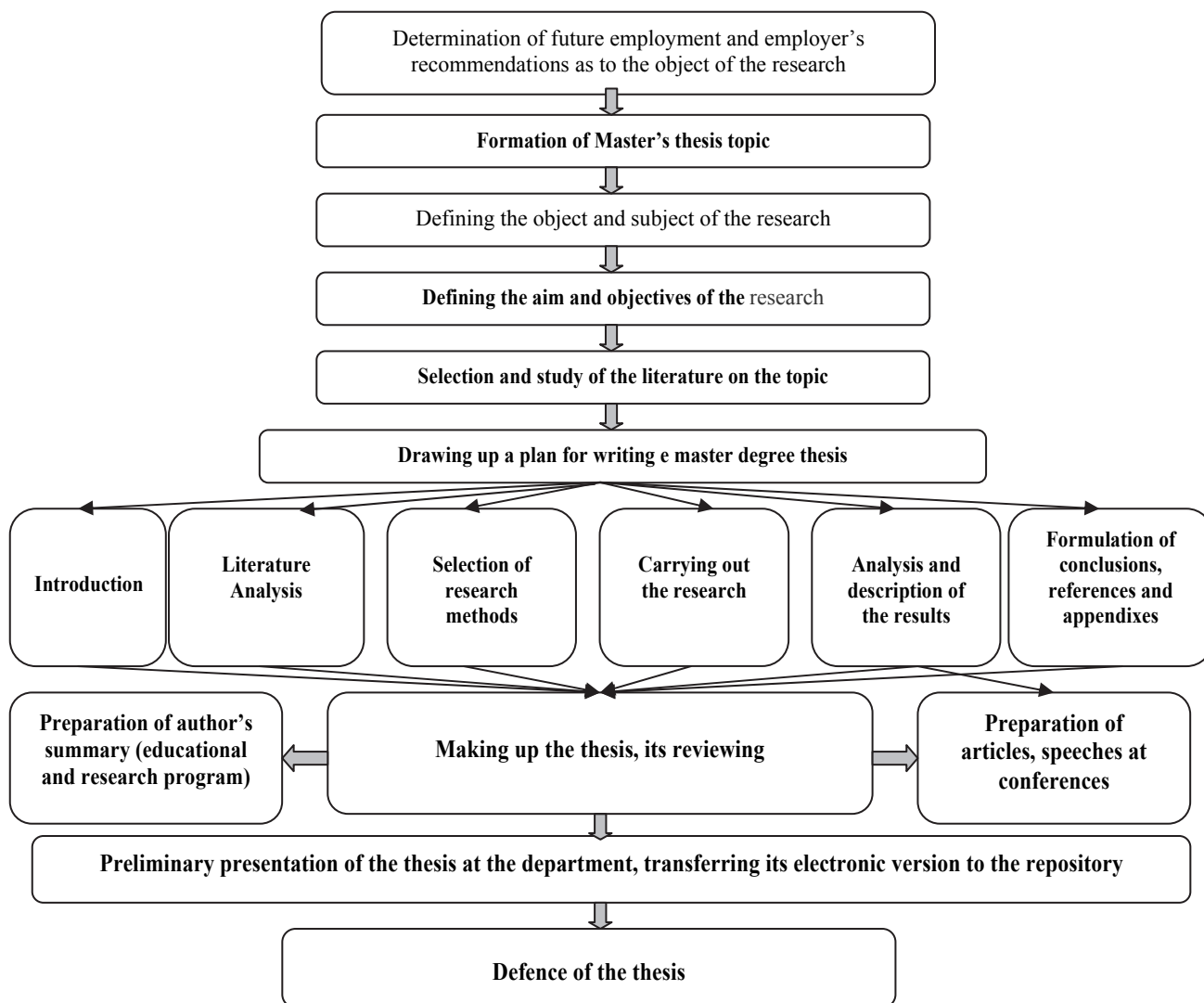


Fig. 3. Stages of writing Master thesis

The list of specialties in master training program in full-time and part-time forms of training is shown in table.1.

Information and telecommunication support of the academic process. The main objective of the university – to train highly qualified specialists for the agricultural sector with up-to-date computer knowledge and skills. In order to make efficient use of ICT in the educational process, a corporate information-educational environment (IEE). It includes the following components: well-developed computer infrastructure, software platforms, information and educational resources and a system of IEE management (Fig. 4).

The University infrastructure provides students with an access to information and educational resources. On average, there is one computer per 3.4 students at the University. By the end of 2014 the university information system had 2872 computers. They are supported by servers with the following operating systems: Windows 2003 Advanced Server (6 server licenses available) and SQL Server 2000 (one license available) as well as 12 servers on Open Source software Unix Free BSD and Linux. For some servers, virtualization methods are used. All virtual servers are running in a clustered environment. All educational buildings and student residence buildings are connected to the Local Area Network (LAN) with a bandwidth of 1 Gbps in each direction, and there is also a local Wi-Fi network with free access to the Internet.

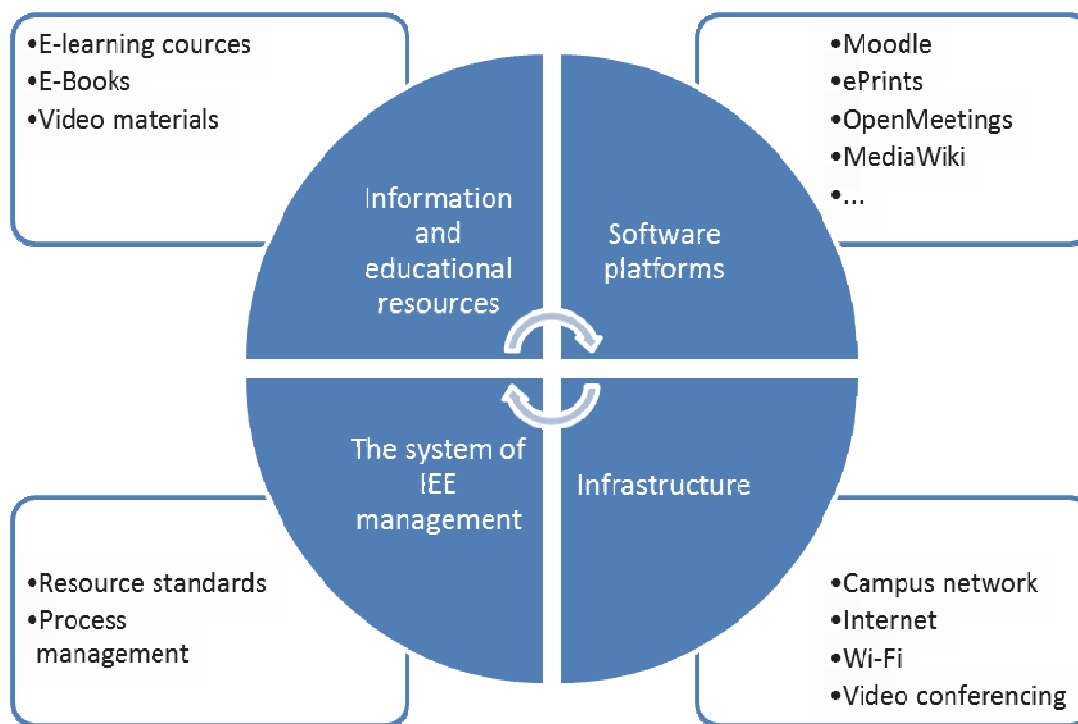


Fig. 4. Information-Educational Environment of NULESU

To support teaching activities in information-educational environment the university makes use of the following software platforms:

- Learning and Information Portal (elearn.nubip.edu.ua), which contains e-learning courses (ELC) for students at 13 faculties and 3 educational and research institutes. Each academic discipline is supported by e-course with theoretical material and resources for laboratory and practical work, independent work, formative, interim and final control. University experts have developed a standard structure of ELC, its certification, as well as training system for teaching personnel to develop such e-courses;

- an electronic archive of scientific and educational materials (elibrary.nubip.edu.ua), which includes electronic copies of papers of the university lecturers, proceedings of the conferences held at the University, abstracts of theses defended at NULESU, Masters' scientific papers and theses, books and teaching guidelines to support the learning process, a description of open e-learning courses, patents;

- Wikiportal (agrowiki.nubip.edu.ua), where scholars, educators and students place thematic articles on the problems of research, standards (Codex Alimentarius, ISO, JMA, BS), portfolios;

- Video Portal (video.nubip.edu.ua), which houses educational videos, video lectures and other video resources produced at the University and used in training, educational and cultural activities.

In the field of information and computer training, the University maintains cooperation with Ukrainian and foreign IT companies – IBM, Microsoft, Intel etc.

Admission to master degree course at NULES of Ukraine. Admission to Master training is conducted according to governmental order, and contract with physical persons or entities. Applicants for Master Programs must have basic or full higher education in respective direction (specialty), according to requirements, approved by the rules of admission to Master Degree Programs at the NULES of Ukraine.

To apply for Master programs on the basis of full higher education, applicant should pay tuition fee (except applicants to specialty «Public service» at the basic institution of NULES of Ukraine). To apply for EQL Master in specialty 8.11010101 «Veterinary Medicine» (according to specialization),

applicants are required to have EQL «Junior specialist» in specialty 5.11010101 «Veterinary Medicine» and on the basis of full secondary education.

According to the special rules confirmed by the regulation of the Cabinet of Ministers № 789 «On the approval of the procedure of admission to educational professional program of Masters training in specialty «Public Administration» of the branch of knowledge «Public Service» and employment of graduates» from 29.07.2009, admission to the specialty «Public Administration» is realized at the basic institution of NULES of Ukraine. Persons that have full higher education, work in public authority and self-government bodies, have at least one year work experience in public authority and self-government bodies and are younger than 45 years old at the moment of documents submission can apply for the program mentioned above.

An applicant applying for Master Program shall submit the following documents to the Admission Committee: application to Rector of the University; original of diploma about education obtained (EQL) and an annex to diploma (originals and approved copies); 5 colour photos (size 3x4sm); direction-recommendation (for research specialization); copy of identification number document, copy of passport (1, 2 pages and the place of registration). Passport and other documents giving the right for entrance are shown personally.

The individual's competitive grade is calculated as a sum of grades of the entrance examinations results and the average grade in the appendix to diploma. It is assessed according to the scale from 100 to 200 points. Entrance examinations for programs of EQL «Master» are conducted in the form of tests in the complex of fundamental and professionally oriented disciplines of the normative(standard) cycle and foreign language according to the Bachelor program.

For applicants in specialties:

- «Pedagogy of higher school», «Management of educational institution» and «Educational measurement» – tests in the complex of humanitarian disciplines and foreign language;
- «Quality, standardization and certification» – tests in quality, standardization, certification and foreign language;
- «Administrative management», «Stock exchange activities», «Extension service» and «Applied economics» – tests in the principles of economic theory and foreign language;
- «Public administration» – tests in the principles of state and law and the principles of economics and an interview on the issues of public management.
- “Management of Innovative activity” – tests in the principles of economics and management and foreign language.

Applicants for master's degree on the basis of bachelor's degree in another specialty, take an additional entrance test.

In conclusion it should be mentioned that clearly defined concept of Master training, regular selection of talented young people and their scientific support, highly qualified teaching staff, up-to-date material and technical base promote training of competitive and highly-skilled specialists able to combine scientific achievements with innovative activity finding their place in today's rapidly changing labour market.

SCHEDULE

15

Specialty (direction of preparation of specialists)	Year of study	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

AGROBIOLOGY FACULTY

**EDUCATION PLANE
training specialists since 2015 year**

Level of higher education
Branch of knowledge
Specialty
The master's program
Specialization

Training form
Training period (Credits)
On the basis of
Higher education degree
Qualification of graduates

The second (Master)
0901 «Agriculture and forestry»
8.09010101 «Agronomy»
educational and vocational
«Production and marketing of cereal crops», «Organic
agriculture», «Manufacture and marketing of fodder crop
production», «Transportation, storage and processing of
crop production»
full-time study
1,5 years (90)
EQL «Bachelor»
«Master»
agronomist-researcher

I. TRAINING PROCESS SCHEDULE
training specialists second (master's) level of higher education in 2015 entry
specialty 8.09010101 «Agronomy»

Year of study	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Legend:

	-	theoretical training	X	-	industrial practice
:	-	examination period	II	-	preparation of master's work
-	-	vacation	//	-	state certification (protection of master's thesis)

II. PLAN OF THE EDUCATIONAL PROCESS

№	Subjects	The total volume		Forms of knowledge control (by semester)			Audience lessons (hours)					Independent work			The work experience		The distribution of hours per week on courses and semesters			
		The total number of hours	credits ECTS	Exam	Test	Course work (project)	Total			including										
							Lectures	Lab works	Practical lessons											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
1. STANDARD ACADEMIC DISCIPLINES																				
1	Geographic information systems	90	3		t		30	15	15			60			2					
2	Prediction and programming of yields of agricultural crops	90	3		t		30	15	15			60			2					
3	Methods and organization of research in Agronomy	90	3		t		30	15	15			60			2					
4	Adaptive systems of agriculture	120	4	e		CW	45	15	30			75			3					
5	Systems of modern intensive technologies	120	4	e			45	15	30			75			3					
6	Innovative technologies in the branch of storage and processing of plant products	90	3	e			30	15	15			60			2					
7	Innovative technologies in crop-growing	90	3	e			28	14	14			62				4				
8	Scientific justification of farming systems	90	3	e			35	14	21			55				5				
9	Field and Meadow Fodder Production	90	3		t		28	14	14			62				4				
10	Post-harvest handling, storage and transportation of plant products	90	3		t		35	14	21			55				5				
11	Theory of agro systems sustainability	90	3	e			40	16	24			50					5			
12	Problems of weed-infested in modern farming systems	90	3	e		CW	32	16	16			58					4			
13	Commodity of crop-growing products	90	3		t		40	16	24			50					5			
14	Ecologization of technological processes in fodder production	90	3		t		32	16	16			58					4			
The total		1320	44	7	7	2	480	210	270	0		840			14	18	18			
2. ELECTIVE ACADEMIC DISCIPLINES																				
2.1. Disciplines offered by University																				
1	Business foreign language	150	5	e			30		30			120			2					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2	Methodology and organization of scientific research on the basics of intellectual property	90	3		t		30	15	15		60			2			
3	Agricultural policy	90	3		t		20	10	10		70						2
The total		330	11	1	2		80	25	55		250			4			2
2.2. Disciplines offered by students																	
Specialization «Production and marketing of cereal crops»																	
1	Technological and market principles of crop production	150	5	e		CW	40	20	20		110						4
2	Ecology and biology of agricultural crops	90	3	e			30	10	20		60						3
3	Biometry	90	3		t		30	10	20		60						3
4	Seed science field crops	120	4	e			30	10	20		90						3
5	Energy and raw phytoresources	90	3		t		30	10	20		60						3
The total		540	18	3	2	1	160	60	100	0	380	0	0	0	0	0	16
Specialization «Transportation, storage and processing of crop production»																	
1	Processing of crop production	150	5	e		CW	40	20	20		110						4
2	Techno-chemical control of crop production	120	4	e			40	20	20		80						4
3	Material and technical base for storage and processing of plant products	90	3		t		30	10	20		60						3
4	Quality management and certification of plant products	90	3		t		30	10	20		60						3
5	Methods and organization studies of storage and processing of plant products	90	3		t		20	10	10		70						2
The total		540	18	2	3	1	160	70	90	0	380	0	0	0	0	0	16
Specialization «Organic agriculture»																	
1	Modern systems of agriculture	150	5	e		CW	50	20	30		100						5
2	Theoretical and applied Herbolgy	120	4	e			40	20	20		80						4
3	Ecological problems of agriculture	150	5		t		40	20	20		110						4
4	Methods and organization of research in agriculture	120	4		t		30	10	20		90						3
The total		540	18	2	3	1	160	70	90	0	380	0	0	0	0	0	16
Specialization «Manufacture and marketing of fodder crop production»																	
1	Methods and organization of research in fodder production	180	6		t		50	20	30		130						5
2	Energy saving technologies of fodder production	180	6	e		CW	50	20	30		130						5
3	Growing of fodder plants for sowing methods of their quality defining	180	6	e			60	30	30		120						6

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
The total		540	18	2	1	1	160	70	90	0	380	0	0	0	0	0	16
Together		870	29	3	3	1	240	95	145	0	630	0	0	4	0	0	18
3. OTHER TYPES OF TRAINING																	
Preparation and defense of Master works		210	7														
Practical training		300	10														
Number of coursework						3											
Number of tests					10												
Number exams				10													
Together for EQL		2700	90	10	10	3	720	305	415	0	1470	0	0	18	18	18	18

III. STRUCTURE OF A TRAINING PLAN

The disciplines	Hours	Credits	%
1. Standard academic disciplines	1320	44	49
2. Elective academic disciplines	870	29	32
2.1. Courses by the University selection	330	11	12
2.2. Courses by the student selection	540	18	20
3. Other types of training	510	17	19
Together for EQL	2700	90	100

IV. SUMMARY THE BUDGET ON TIME, WEEKS

Year of study	Theoretical study	Examination period	Practical training	Preparing baccalaureate work	State certification	Vacation	Total
1	30	5	7	–	–	10	52
2	10	2	–	3	2	–	17
Together for EQL	40	7	7	3	2	10	69

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production (research) practice	2, 3	300	10	7

VI. COURSE WORK AND PROJECTS

Nº	Subjects	Hours	Credits	Course work
1	Adaptive systems of agriculture	15	0,5	
2	Problems of weed-infested in modern farming systems	15	0,5	
3	Technological and market principles of crop production	15	0,5	
4	Processing of crop production	15	0,5	
5	Modern systems of agriculture	15	0,5	
6	Energy saving technologies of fodder production	15	0,5	

VII. STATE CERTIFICATION

Nº	Component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	210	7	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

AGROBIOLOGY FACULTY

**EDUCATION PLANE
training specialists since 2015 year**

Level of higher education
Branch of knowledge
Specialty
The master's program
Specialization
Training form
Training period (Credits)
On the basis of
Higher education degree
Qualification of graduates

The second (Master)
0901 «Agriculture and forestry»
8.09010102 «Agrochemistry and Soil Science»
educational and vocational
«Agrochemical service and quality management of soil»
full-time study
1,5 years (90)
EQL «Bachelor»
«Master»
Researcher in agrochemistry and soil science

II. PLAN OF THE EDUCATIONAL PROCESS

№	Subjects	The total volume		Forms of knowledge control (by semester)			Audience lessons (hours)					Independent work			The work experience		The distribution of hours per week on courses and semesters			
							Total				including									
		The total number of hours	credits ECTS	Exam	Test	Course work (project)	Lectures	Lab works	Practical lessons	Practical training	Industrial practice	1 year of study	2 year of study	1	2	3	number of weeks per semester			
																		15	15	10

1	2																		
1. STANDARD ACADEMIC DISCIPLINES																			
1	Soil Quality, Standardization and Certification	120	4	e				60	30	30			60				4		
2	The scientific communication in agrochemistry and soil science	90	3	e				45	15	30			45				3		
3	Soil Conservation and Restoration of Fertility	120	4	e	t	CW		75	30	45			45				2	3	
4	Management of nutritive conditions of crops in the greenhouses and in the fertigation	120	4	e		CW		45	15	30			75				3		
5	Optimization of crop nutrition in modern growing technologies	120	4	e				60	30	30			60				4		
6	Innovative technologies in soil science	120	4	e				45	15	30			75					3	
7	Management of soil regimes	120	4		t			45	15	30			75					3	
8	Agrochemical service crop	150	5	e	t	CW		60	25	35			90					2	3
9	The technologies of the management by the quality of crop products	90	3	e				30	15	15			60					2	
10	Technologies of Rational Land Use	90	3		t			45	15	30			45					3	
11	System of the application of the special agrochemical products	90	3	e				30	10	20			60						3
12	Land Reclamation	90	3		t			20	10	10			70						2
The total		1320	44	9	5	3	3	560	225	335	0		760				16	10	8
2. ELECTIVE ACADEMIC DISCIPLINES																			
2.1. Disciplines offered by University																			
1	Methodology and organization of scientific research on the basics of intellectual property	90	3		t			30	15	15			60						2

III. STRUCTURE OF A TRAINING PLAN

The disciplines	Hours	Credits	%
1. Standart academic disciplines	1320	44	49
2. Elective academic disciplines	870	29	32
2.1. Courses by the University selection	330	11	12
2.2. Courses by the student selection	540	18	20
3. Other types of training	510	17	19
Together for EQL	2700	90	100

IV. SUMMARY THE BUDGET ON TIME, WEEKS

Year of study	Theoretical study	Examination period	Practical training	Preparing baccalaureate work	State certification	Vacation	Total
1	30	5	7	–	–	10	52
2	10	2	–	3	2	–	17
Together for EQL	40	7	7	3	2	10	69

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production (research) practice	2, 3	300	10	7

VI. COURSE WORK AND PROJECTS

Nº	Subjects	Hours	Credits	Course work
1	Soil Conservation and Restoration of Fertility	15	0,5	
2	Management of nutritive conditions of crops in the greenhouses and in the fertigation	15	0,5	
3	Agrochemical service crop	15	0,5	

VII. STATE CERTIFICATION

Nº	Component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	210	7	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

AGROBIOLOGY FACULTY

**EDUCATION PLANE
training specialists since 2015 year**

Level of higher education	The second (Master)
Branch of knowledge	0901 «Agriculture and forestry»
Specialty	8.09010104 «Fruit and Vegetable Science and Viticulture»
The master's program	educational and vocational
Specialization	«Horticulture», «Vegetables growing»
Training form	full-time study
Training period (Credits)	1,5 years (90)
On the basis of	EQL «Bachelor»
Higher education degree	«Master»
Qualification of graduates	horticulture and viticulture researcher

I. TRAINING PROCESS SCHEDULE

[illegible]

Legend:

-	theoretical training	X	-	industrial practice
-	examination period	II	-	preparation of master's work
-	vacation	//	-	state certification (protection of master's thesis)

II. PLAN OF THE EDUCATIONAL PROCESS

№	Subjects	The total volume		Forms of knowledge control (by semester)			Audience lessons (hours)					Independent work		The work experience		The distribution of hours per week on courses and semesters				
		The total number of hours	credits ECTS	Exam	Test	Course work (project)	Total	including			12	13	14	1 year of study	2 year of study					
								Lectures	Lab works	Practical lessons										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17				
1. STANDARD ACADEMIC DISCIPLINES																				
1	Psychology of Management	90	3		t		15	15				75			1					
2	History of Horticulture, vegetables growing and viticulture	90	3		t		30	30				60			2					
3	Civil protection	90	3		t		15	15				75			1					
4	Modern technologies in horticulture and viticulture	180	6	e		CW	60	30	30			120			4					
5	Labor protection in gardening, horticulture and viticulture	90	3	e			15	15				75			1					
6	Investigations methods in Horticulture	120	4	e			45	15	30			75			3					
7	Mushroom-growing	120	4	e			45	15	30			75			3					
8	Agribusiness and marketing in fruit and vegetable growing and viticulture	120	4	e			30	15	15			90				2				
9	Modern technologies of open and closed ground	180	6	e		CW	90	30	60			90				6				
10	Postharvest preparation of fruits, vegetables and vine	120	4	e			45	15	30			75				3				
11	Floriculture of open and closed ground	120	4	e			45	15	30			75				3				
The total		1320	44	8	3	2	435	210	225	0	885				15	14	0			
2. ELECTIVE ACADEMIC DISCIPLINES																				
2.1. Disciplines offered by University																				
1	Methodology and organization of scientific research on the basics of intellectual property	90	3		t		30	15	15			60				2				
2	Business foreign language	150	5	e			45		45			105			3					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	Agricultural policy	90	3		t		30	15	15		60				2	
The total		330	11	1	2		105	30	75		225			3	4	0
2.2. Disciplines offered by students																
Specialization «Horticulture»																
1	Modern technologies in horticulture	180	6	e		CW	60	30	30		120					6
2	Advanced technologies in the nursery	180	6	e			60	30	30		120					6
3	Ornamental crops Protected Cultivated	180	6	e			60	30	30		120					6
The total		540	18	3		1	180	90	90	0	360	0	0	0	0	18
Specialization «Vegetables growing»																
1	Organic vegetable	180	6	e		CW	60	30	30		120					6
2	Organic vegetables Protected Cultivated	180	6	e			60	30	30		120					6
3	Varieties' study of the vegetable crops	180	6	e			60	30	30		120					6
The total		540	18	3		1	180	90	90	0	360	0	0	0	0	18
Together		870	29	3		1	285	120	165	0	585	0	0	3	4	18
3. OTHER TYPES OF TRAINING																
Preparation and defense of Master works																
Practical training		210	7													
Number of coursework		300	10													
Number of tests						3										
Number exams					4											
Together for EQL		2700	90	12	4	3	720	330	390	0	1470	0	0	18	18	18

III. STRUCTURE OF A TRAINING PLAN

The disciplines	Hours	Credits	%
1. Standart academic disciplines	1320	44	49
2. Elective academic disciplines	870	29	32
2.1. Courses by the University selection	330	11	12
2.2. Courses by the student selection	540	18	20
3. Other types of training	510	17	19
Together for EQL	2700	90	100

IV. SUMMARY THE BUDGET ON TIME, WEEKS

Year of study	Theoretical study	Examination period	Practical training	Preparing baccalaureate work	State certification	Vacation	Total
1	30	5	7	-	-	10	52
2	10	2	-	3	2	-	17
Together for EQL	40	7	7	3	2	10	69

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production (research) practice	2, 3	300	10	7

VI. COURSE WORK AND PROJECTS

№	Subjects	Hours	Credits	Course work
1	Modern technologies in horticulture and viticulture	15	0,5	
2	Modern technologies of open and closed ground	15	0,5	
3	Modern technologies in horticulture	15	0,5	
4	Organic vegetable	15	0,5	

VII. STATE CERTIFICATION

№	Component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	210	7	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
AGROBIOLOGY FACULTY**

**EDUCATION PLANE
training specialists since 2015 year**

Level of higher education
Branch of knowledge
Specialty
The master's program
Specialization
Training form
Training period (Credits)
On the basis of
Higher education degree
Qualification of graduates

The second (Master)
0901 «Agriculture and forestry»
8.09010105 «Selection and Genetics of Agricultural Crops»
educational and vocational
«State scientific and technical expertise of plant varieties and their
legal protection»
full-time study
1,5 years (90)
EQL «Bachelor»
«Master»
Selection and crop genetics researcher

II. PLAN OF THE EDUCATIONAL PROCESS

№	Subjects	The total volume		Forms of knowledge control (by semester)		Audience lessons (hours)				Independent work		The work experience		The distribution of hours per week on courses and semesters			
		The total number of hours	credits ECTS	Exam	Test	Course work (project)	Total	including			Practical training	Industrial practice	1 year of study	2 year of study	semesters		
								Lectures	Lab works	Practical lessons							
1. STANDARD ACADEMIC DISCIPLINES																	
1	Plant genetic resources	120	4	e			60	30	30		60			4			
2	Modern methods for creating varieties and hybrids of crops	150	5	e			60	30	30		90			4			
3	Genetics immunity against diseases and pests	120	4	e			60	30	30		60			4			
4	Special genetic field crops	210	7	e		CW	60	30	30		150				4		
5	Ecological genetics	120	4	e			45	15	30		75				3		
6	Special breeding and seed production of certain crops	240	8	e			45	15	30		195				3		
7	Special breeding and seed production of vegetables and fruits	120	4	e			45	15	30		75				3		
8	Examination of varieties on patentability	120	4	e			30	15	15		90				2		
9	Genetics of quantitative traits	120	4		t		45	15	30		75				3		
The total		1320	44	8	1	1	450	195	255	0	870			12	18	0	
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines offered by University																	
1	Methodology and organization of scientific research on the basics of intellectual property	90	3	e		CW	30	15	15		60				2		
2	Business foreign language	150	5	e			30		30		120				2		
3	Agricultural policy	90	3		t		30	15	15		60				2		
The total		330	11	2	1	1	90	30	60		240			6	0	0	
2.2. Disciplines offered by students																	
Specialization «State scientific and technical expertise of plant varieties and their legal protection»																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Breeding and Seed-growing heterosis hybrids	90	3	e		CW	40	20	20		50					4
2	The legal protection of plant varieties	90	3		t		20	10	10		70					2
3	Ecological genetics	90	3	e			20	10	10		70					2
4	Modern methods of varieties and hybrids identification	90	3	e			40	20	20		50					4
5	State qualifying examination for fitness for spreading	90	3	e			40	20	20		50					4
6	Varietal Certification	90	3		t		20	10	10		70					2
The total		540	18	4	2	1	180	90	90	0	360	0	0	0	0	18
Together		870	29	6	3	2	270	120	150	0	600	0	0	6	0	18
3. OTHER TYPES OF TRAINING																
Preparation and defense of Master works		210	7													
Practical training		300	10													
Number of coursework						3										
Number of tests					4											
Number exams				14												
Together for EQL		2700	90	14	4	3	720	315	405	0	1470	0	0	18	18	18

III. STRUCTURE OF A TRAINING PLAN

The disciplines	Hours	Credits	%
1. Standart academic disciplines	1320	44	49
2. Elective academic disciplines	870	29	32
2.1. Courses by the University selection	330	11	12
2.2. Courses by the student selection	540	18	20
3. Other types of training	510	17	19
Together for EQL	2700	90	100

IV. SUMMARY THE BUDGET ON TIME, WEEKS

Year of study	Theoretical study	Examination period	Practical training	Preparing baccalaureate work	State certification	Vacation	Total
1	30	5	7	-	-	10	52
2	10	2	-	3	2	-	17
Together for EQL	40	7	7	3	2	10	69

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production (research) practice	2, 3	300	10	7

VI. COURSE WORK AND PROJECTS

№	Subjects	Hours	Credits	Course work
1	Special genetic field crops	15	0,5	
2	Methodology and organization of scientific research on the basics of intellectual property	15	0,5	
3	Breeding and Seed-growing heterosis hybrids	15	0,5	

VII. STATE CERTIFICATION

№	Component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	210	7	6

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF THE PLANT PROTECTION, BIOTECHNOLOGY AND ECOLOGY

**EDUCATION PLANE
training specialists of 2015 year of entry**

Level of higher education	Second (master)
Area of knowledge	0401 «Natural Sciences»
Specialty	8.04010601 «Ecology and Environmental Protection»
Master program	Educational and vocational
Specializations	«Ecology and protection of aquatic resources of the agrarian sphere»; «Environmental management in the agricultural domain: monitoring, certification, expertise»
The form of education	full-time
The term of education (Credits)	1,5 years (90)
Based on	EQL «Bachelor»
Degree of higher education	«Master»
Qualification	Ecologist; teacher of higher education institution

II. CURRICULUM TRAINING OF LEVEL "MASTER"

№	Subject	The total volume		The forms of knowledge control			Lecture sessions (hours)				Independent work		Practical training		Distribution of weekly hours by years of study and semesters		
		hours	credits	(per semester)			Total	including			12	13	14	1 year			
				exam	test	Course work (project)		Lecture	Laboratory studies	Practical exercises (seminars)				semestr			
														17	19	10	
																	Number of weeks in a semester
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1	2																
1. STANDARD ACADEMIC DISCIPLINES																	
1	Civil defense	60	2		1		15			15	45					1	
2	Labor Safety in the industry	30	1	1			15	10		5	15					1	
3	Pedagogy and Psychology of high school	60	2	1		1	30	15		15	30				2		
4	Teaching methods at higher school	60	2		1		30	30			30				2		
5	Methods and organization of scientific studies	60	2	1			30	15	15		30				2		
6	Sustainable development strategy	90	3		1		60	30		30	30					4	
7	Ecological management and audit	60	2		1		30	15		15	30				2		
8	Systems analysis of environmental quality. GIS analysis of agrolandscapes.	150	5	1			45	15		30	105					3	
Total		600	20	4	4	1	285	145	15	125	315	0	0	8	9		
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines offered by University																	
1	Agricultural and Ecological policy	90	3		1		45	30		15	45				3		
2	Intellectual property and world information resources	60	2		1		30	15		15	30					2	
3	Agricultural radio-ecology	120	4		1		30	15		15	90					2	
4	Problems of environmental safety and modern concepts of nature use	150	5		1		30	15		15	120					3	
5	Philosophy of science and innovation development	60	2	1			30	15		15	30				2		
6	Business foreign language	120	4	1			60			60	60				2	2	1
7	Agricultural, Land and environmental Law	30	1		1		15	15			15				1		
8	Information technologies	90	3	1		1	30	15	15		60					2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
9	Ecological standardization and certification	90	3	1			30	15		15	60				2	
Total		810	27	4	5	1	300	135	15	150	510	0	0	8	13	1
2.2. Disciplines offered by students																
2.2.1. Specialization «Ecology and protection of aquatic resources of the agrarian sphere»																
1	Water quality monitoring in agrosphere	90	3	1		1	40	20	20		50					4
2	Wastewater treatment	180	6	1			40	10	30		140					4
3	The methodology of modern chemical analysis and environmental chemistry	180	6	1			40	20	20		140					4
4	Environmental safety of water ecosystems	90	3		1		60	30	30		30					6
Total		540	18	3	1	1	180	80	100		360	0	0	0	0	18
2.2.2. Specialization «Environmental control in agrosphere: monitoring, certification, expertise»																
1	Agroecology	180	6	1			40	20	20		140					4
2	Ecological expertise in agriculture (ahrobiotekhnolohiy)	90	3	1		1	50	20		30	40					5
3	Environmental monitoring and control (monitoring, certification, management, inspection)	180	6	1			60	20	40		120					6
4	Agrarian Biotechnologies	90	3		1		30	10	20		60					3
Total		540	18	3	1	1	180	70	80		360	0	0	0	0	18
Total		1950	65	13	9	3	765	350	110	305	1185			28	48	19
3. OTHER TYPES OF TRAINING																
Preparation and defense of master's thesis																
Practice preparation																
Number of coursework																
Number of tests																
Number of examinations																
Total		2700	90	11	10	3	765	350	110	305	1185	540	60	28	48	19

III. СТРУКТУРА НАВЧАЛЬНОГО ПЛАНУ

Educational disciplines	Hours	Credits	%
1. Standard academic disciplines	600	20	22
2. Elective academic disciplines	1350	45	50
2.1. Disciplines offered by University	810	27	30
2.2. Disciplines offered by students	540	18	20
3. Other types of training	750	25	28
Total for Specialty	2700	90	100

IV. SUMMARY INFORMATION ABOUT BUDGET TIME, WEEKS

Year of education	Theoretical education	Examination period	Practical preparation	Preparation of baccalaureate work	State attestation	Holidays	Total
1	30	5	8	-	-	9	52
2	10	2	-	3	2		17
Total	40	7	8	3	2	9	69

V. PRACTICAL PREPARATION

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Pedagogical (assistant) practice	2	60	2	2
2	Scientific and productional	1,2,3	540	18	6

VI. COURSEWORKS AND PROJECTS

№	Discipline	Hours	Credits	Courseworks	Projects
1	Methodology of teaching in higher education	30	1	+	-
2	Information technology	30	1	+	-
3	Ecological Expertise for agriculture in production	30	1	+	-
4	Water quality monitoring in agrosphere	30	1	+	

VII. STATE ATTESTATION

№	Content of state attestation	Hours	Credits	Number of weeks
1	Defense of master's thesis	30	1	2

EDUCATION PLANE

training specialists of 2015 year of entry

Level of higher education	Second (master)
Area of knowledge	0401 «Natural Sciences»
Specialty	8.04010604 «Ecological control and audit»
Master program	Educational and vocational
Specialization	«Control and expert regulation in the agrosphere»
The form of education	full-time
The term of education (Credits)	1,5 years (90)
Based on	EQL «Bachelor»
Degree of higher education	«Master»
Qualification	Expert on ecology

II. CURRICULUM TRAINING OF LEVEL "MASTER"

№	Subject	The total volume		The forms of knowledge control			Lecture sessions (hours)				Independent work			Practical training		Distribution of weekly hours by years of study and semesters			
		hours	credits	(per semester)		test	Course work (project)	Total		including		Educational Practice			Manufacturing Practice		1 year 2 year semester 1 2 3 Number of weeks in a semester		
				exam	exam			Lecture	Laboratory studies	Practical exercises (seminars)									
		I. STANDARD ACADEMIC DISCIPLINES																	
1	Civil defense	30	1		1			15			15	15					1		
2	Labor safety in the industry	30	1	1				15	10		5	15					1		
3	Sustainable development strategy	90	3		1			30	15		15	60			2				
4	Methods and organization of scientific studies	120	4	1				30	15	15		90			2				
5	Ecological inspection	210	7	1	1			60	30	30		150			2	2			
6	Ecological management	210	7	1	1	1		60	30	30		150			2	2			
7	Ecological audit	210	7	1	1	1		60	30	30	30	150			2	2			
Total		900	30	5	5	2		270	130	75	65	630	0	0	10	8	0		
2. ELECTIVE ACADEMIC DISCIPLINES																			
2.1. Disciplines offered by University																			
1	Ecological policy	120	4	1				45	30		15	75			3				
2	High education and Bologna process	90	3		1			30	30			60			2				
3	Intellectual property	60	2		1			15	15			45				1			
4	Systems analysis of environmental quality	90	3		1			30	15		15	60				2			
5	Business foreign language	120	4	1				60	30		30	60				4			
6	Ecological control and safety	90	3	1				45			45	45			3				
7	Regulatory and methodological support of control of expert activity of ecologist	90	3		1			30	10		20	60					3		
8	Ecological and low regulation of environment	90	3	1				30	15		15	60				3			
9	Methods of environmental analyses	90	3		1			20	10		10	70					2		
Total		840	28	4	5	0		305	155	0	150	535	0	0	8	10	5		
2.2. Disciplines offered by students																			
2.2.1. Specialization «Control and expert regulation in the agrosphere»																			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Ecological expertize and audit of areas and enterprises	120	4	1			30	10	20		90					3
2	Soil and environmental monitoring and management of land resources in the agrosphere	120	4	1			40	20	20		80					4
3	Professional ecological expert activity	90	3	1			30	10	20		60					3
4	Ecotoxicological estimation of pesticides, agrochemicals and technologies	90	3		1		30	10	20		60					3
Total		420	14	3	1	0	130	50	80	0	290	0	0	0	0	13
Total for elective part		2160	72	12	11	0	705				1455			18	18	18
3. OTHER TYPES OF TRAINING																
Master Thesis processing and defense		360	12													
Practical training		180	6									180				
Number of coursework						2										
Number of tests					11											
Number of examinations				13												
Total for Specialty		2700	90	12	11	2	705	0	0	0	1455	216	0	18	18	18

III. STRUCTURE OF CURRICULUM

Subject	hours	credits	%
1. Standard academic disciplines	900	30	33
2. Elective academic disciplines	1260	42	47
2.1. Disciplines offered by University	840	28	31
2.2. Disciplines offered by students	420	14	16
3. Other types of training	540	18	20
Total for Specialty	2700	90	100

IV. SUMMARY INFORMATION ABOUT BUDGET TIME, WEEKS

Year of education	Theoretical education	Examination period	Practical preparation	Preparation of baccalaureate work	State attestation	Holidays	Total
1	30	5	2	6	–	9	52
2	10	2	–	4	1		17
Total for Specialty	40	7	2	10	1	9	69

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Scientific and productional	2	216	6	2

VI. COURSE WORK (PROJECT)

Nº	Subject	Hours	Credits	Courseworks	Projects
1	Ecological management	30	1	x	
2	Ecological audit	30	1	x	

VII. STATE ATTESTATION

Nº	Content of state attestation	Hours	Credits	Number of weeks
1	Defense of master's thesis	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF PLANT PROTECTION, BIOTECHNOLOGY AND ECOLOGY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0514 «Biotechnology»
Specialty	8.05140105 «Environmental biotechnology and bioenergetics»
Master's program	Educational
Specialization	«DNA-certification and mapping the genome», «Biosafety and bioethics»
Form of training	full-time
Term of study (Credits)	2 years (120)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Biotechnologist

I. SCHEDULE OF EDUCATION PROCESS

Legend:

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II. CURRICULUM OF THE EDUCATIONAL PROCESS

№	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours					Individual work			Practical training		Distribution of hours per week within an acad. year and semesters
							due to semesters			And others							
		Hours	Credit	Exam	Test	Course project	Total			Lectures	Laboratory classes	Seminars	Practical training	Practical training (internship)			
							1	2	3								
														Number of weeks in semester			
														15	15	15	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1. THE OBLIGATORY ACADEMIC DISCIPLINES																	
1	Philosophy of science and innovation development	60	2	i			30	15		15	30				2		
2	Civil defense	90	3		3		15			15	75					1	
3	World agriculture and food resources	60	2		3		30	15		15	30				2		
4	Strategy of sustainable development of nature and society	60	2		3		15	15			45				1		
5	Applied Genetics with the basics of Cytology	60	2	i			60	30	30							4	
6	Ecology Biotechnology	90	3	i			30	15	15		60					2	
7	Plant Biotechnology	90	3	i		c.p.	60	30	30		30					4	
8	Alternative energy: bioenergy and bioenergy conversion	90	3		3		15	15			75					1	
9	Information Technology	90	3		3		30	15	15		60					2	
10	Applied Ecology	90	3	i			30	15	15		60				2		
11	Biological Statistics	90	3		3		30	15		15	60						2
Total		870	29				345	180	105	60	525				7	14	2
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Methodology and organization of scientific research on the basics of intellectual property	90	3		3		30	15		15	60				2		
2	Business foreign language	120	4	i			30			30	90				2		
3	Agricultural policy	90	3		3		30	15		15	60				2		
4	Instrumental methods of analysis	90	3	i			45	15	30		45				3		
5	Agricultural Radiobiology and Radioecology	90	3	i			30	15	15		60				2		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6	Biosafety	90	3		3		30	15		15	60				2	
7	Design bioprocess	120	4	i		c.p.	30	15		15	90					2
8	Biotechnology in agriculture and biotekmetody in environmental biotechnologies	90	3		3		15	15			75				1	
9	Biomarketing of biotech products	60	2		3		30	15		15	30					2
Total		840	28				270	120	45	105	570		11	3	4	
2.2. Disciplines chosen by students																
Specialization «DNA-certification and mapping the genome»																
1	Diagnosis and identification of GMO DNA Passport	120	4	i			45	15	30		75					3
2	Cell and Molecular Biology	120	4		3		30	15	15		90					2
3	Population genetics	90	3	i			30	15	15		60					2
4	Genetic Engineering	90	3		3		45	15	30		45					3
5	Molecular Virology	120	4		3		30	15	15		90					2
Total		540	18				180	75	105		360					12
Specialization «Biosafety and bioethics»																
1	Microclonal plant propagation	90	3	i			30	15	15		60					2
2	Technology in vitro in crop growing	90	3		3		30	15	15		60					2
3	Biotechnology Biosafety	90	3		3		30	15	15		60					2
4	Immune Biotechnology	90	3	i			30	15	15		60					2
5	Biology of individual	90	3		3		30	15	15		60					2
6	Cell selection for resistance	90	3		3		30	15	15		60					2
Total		540	18				180	90	90		360					12
Total		1380	46				450	210	135	105	930		11	3	16	
3. OTHER FORM OF TRAINING																
Preparing and defense of Master paper																
		150	5													
Practical training (internship)																
		300	10													
Implementation of research at the departments																
		900	30													
Number of Course Projects																
						2										
Number of passes																
					15											
Number of Exams																
				11												
Total for the specialty																
		3600	120	11	15	2	795	390	240	165	1455		18	17	18	

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	870	29	24,2
2. Elective academic disciplines	1380	46	38,3
2.1. Disciplines chosen by University	840	28	-
2.2. Disciplines chosen by students	540	18	-
3. Other form of training	1350	45	37,5
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of bachelor thesis	State certification	Holidays	Total
1	30	5	6	-	-	11	52
2	15	3	15	5	1	3	42
Total for the specialty	45	11	21	5	1	13	94

V. PRACTICAL TRAINING

Nº	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training	2	180	6	6
2	Practical training	4	450	15	15

VI. COURSE PAPERS AND PROJECTS

Nº	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Design bioprocess	30	1	+	

VII. STATE CERTIFICATION

Nº	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
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FACULTY OF PLANT PROTECTION, BIOTECHNOLOGY AND ECOLOGY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0901 «Agriculture and forestry»
Specialty	8.09010501 «Plant protection»
Master's program	Educational
Specialization	«Phytosanitary monitoring and forecasting»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Plant Protection Inspector

II. CURRICULUM OF THE EDUCATIONAL PROCESS

№	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)				Auditorium classes, hours				Individual work		Practical training		Practical training (internship)	Distribution of hours per week within an acad. year and semesters			
		Credit		due to semesters		Exam	Test	Course project	Total		And others		Laboratory classes	Seminars	Practical training	Practical training (internship)	Number of weeks in semester			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	15	15	15	15
1. THE OBLIGATORY ACADEMIC DISCIPLINES																				
1	Logistics and communication in plant protection	90	3		t		30	15		15	60									
2	Standardization and jurisprudence in plant protection	60	2		t		30	15		15	30									
3	Managing the number of weeds in agrophytocenoses	90	3		t		30	15		15	60						2			
4	Complex systems of crop plant protection from diseases	90	3		t		30	15	15		60						2			
5	Phytopagous insect management	90	3	e			30	15		15	60									
6	Civil Defence	90	3		t		30	15		15	60						2			
7	Toxicology of Pesticides	90	3	e			30	15		15	60									
8	Technology of mass rearing of beneficial insects	120	4	e			30	15		15	90									
9	Epiphytotology	90	3	e			30	15		15	60						2			
10	Crop Seed pathology	90	3		t		30	15	15		60									
11	Labour protection in plant protection	90	3	e			10	10			80								1	
Total		990	33	5	6		310	160	30	120	680						8	12	1	
2. ELECTIVE ACADEMIC DISCIPLINES																				
2.1. Disciplines chosen by University																				
1	Methodology and organization of scientific research on the basics of intellectual property	90	3	e			45	15	30		45						3			90
2	Business foreign language	150	5	e			30		30		120						2			150
3	Agricultural policy	90	3		t		30	15		15	60						2			90
4	Economic and organization of agricultural service	60	2		t		15	15			45						1			60

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
5	Biosafety in Plant Protection	60	3	e			30	15		15	30			2		60
6	Desinfection of Management objects	90	3	e			30	15		15	60			2		
7	Methods of plant protectant testing	60	3	e			30	15		15	30				2	
8	Strategy for sustainable development of nature and society	60	2		t		30	15		15	30				2	
Total		660	22	5	2		240	105	60	75	420			10	6	
2.2. Disciplines chosen by students																
Specialization «Phytosanitary monitoring and forecasting»																
1	Experimental research methods in entomology	90	3	e			40	20	20		50					4
2	Insect pathology	120	4	e			40	20	20		80					4
3	Insects ecology	120	4	e			40	20	20		80					4
4	Insect physiology	120	4		t		30	10	20		90					3
5	Technical entomology	120	4		t		20	10	10		100					2
Total		570	19	3	2		170	80	90		400					
Total		2220	74	13	11		720	345	180	195	1500			18	18	18
3. OTHER FORM OF TRAINING																
Preparing and defense of Master paper																
		180	6													
Practical training (internship)																
		300	10													
Number of Course Projects																
Number of passes																
					11											
Number of Exams																
				13												
Total for the specialty																
		2700	90	13	11		720	345	180	195	1500			18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	990	33	36,7
2. Elective academic disciplines	1230	41	45,6
2.1. Disciplines chosen by University	660	22	-
2.2. Disciplines chosen by students	570	19	-
3. Other form of training	480	16	17,8
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of bachelor thesis	State Certification	Holidays	Total
1	30	6	5	-	-	11	52
2	10	2	-	3	1	-	16
Total for the specialty	40	8	5	3	1	11	68

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training	2	150	5	5

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	-	-	-	-	-

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF PLANT PROTECTION, BIOTECHNOLOGY AND ECOLOGY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education
Area of knowledge
Specialty
Master's program
Specialization

Form of training
Term of study (Credits)
On the basis of
Educational degree
Qualification

The second (Master)
0901 «Agriculture and forestry»
8.09010501 «Plant protection»
Educational
«Biological justification of obligate and facultative pathogens control»
full-time
2 years (120)
the first level of higher education (bachelor)
«Master»
Plant Protection Scientists

II. CURRICULUM OF THE EDUCATIONAL PROCESS

№	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours					Individual work			Practical training		Distribution of hours per week within an acad. year and semesters
		Credit		due to semesters		Total	And others			Practical training (internship)							
				Exam	Test		Course project	Lectures	Laboratory classes			Seminars					
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1	2	1. THE OBLIGATORY ACADEMIC DISCIPLINES															
1	Logistics and communication in plant protection	90	3		t		30	15		15	60				2		
2	Standardization and jurisprudence in plant protection	60	2		t		30	15		15	30				2		
3	Managing the number of weeds in agrophytocenoses	90	3		t		30	15		15	60			2			
4	Complex systems of crop plant protection from diseases	90	3		t		30	15	15		60			2			
5	Phytofagous insect management	90	3	e			30	15		15	60				2		
6	Civil Defence	90	3		t		30	15		15	60			2			
7	Toxicology of Pesticides	90	3	e			30	15		15	60				2		
8	Technology of mass rearing of beneficial insects	120	4	e			30	15		15	90				2		
9	Epiphytotology	90	3	e			30	15		15	60			2			
10	Crop Seed pathology	90	3		t		30	15	15		60				2		
11	Labour protection in plant protection	90	3	e			10	10			80					1	
Total		990	33	5	6		310	160	30	120	680			8	12	1	
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Methodology and organization of scientific research on the basics of intellectual property	90	3	e			45	15	30		45			3		90	
2	Business foreign language	150	5	e			30		30		120			2		150	
3	Agricultural policy	90	3		t		30	15		15	60			2		90	
4	Economic and organization of agricultural service	60	2		t		15	15			45			1		60	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
5	Biosafety in Plant Protection	60	3	e			30	15		15	30				2	60
6	Desinfection of Management objects	90	3	e			30	15		15	60			2		
7	Methods of plant protectant testing	60	3	e			30	15		15	30				2	
8	Strategy for sustainable development of nature and society	60	2		t		30	15		15	30				2	
Total		660	22	5	2		240	105	60	75	420			10	6	
2.2. Disciplines chosen by students																
Specialization «Biological justification of obligate and facultative pathogens control»																
1	Actinomisetes diseases of plant	90	3	e			40	10	30		50					3
2	Physiological and biochemical aspects of plant resistance to disease	120	3	e			40	10	30		80					3
3	Mycotoxology	120	3	e			50	20	30		70					5
4	Methods for infectious backgrounds forming in phythopathology	60	2		t		20	10	10		40					2
5	Pathogenesis in plant production	90	3		t		20	10	10		70					2
6	Pathological process of plants' root system	90	3		t		20	10	10		70					2
Total		570	19	3	3		190	70	120		380					
Total		2220	74	13	11		740	335	210	195	1480			18	18	18
3. OTHER FORM OF TRAINING																
Preparing and defense of Master paper																
Practical training (internship)		180	6													
Implementation of research at the departments		300	10													
Number of Course Projects		900	30													
Number of passes					11											
Number of Exams				13												
Total for the specialty		3600	120	13	11		740	335	210	195	1480			18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	990	33	27,5
2. Elective academic disciplines	1230	41	34,2
2.1. Disciplines chosen by University	660	22	-
2.2. Disciplines chosen by students	570	19	-
3. Other form of training	1380	46	38,3
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of bachelor thesis	State Certification	Holidays	Total
1	30	5	5	-	-	12	52
2	15	3	15	5	1	3	42
Total for the specialty	45	8	20	5	1	15	94

V. PRACTICAL TRAINING

Nº	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training	2	180	6	5
2	Practical training	4	450	15	15

VI. COURSE PAPERS AND PROJECTS

Nº	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	-	-	-	-	-

VII. STATE CERTIFICATION

Nº	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF PLANT PROTECTION, BIOTECHNOLOGY AND ECOLOGY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0901 «Agriculture and forestry»
Specialty	8.09010502 «Quarantine of Plants»
Master's program	Educational
Specialization	«Quarantine of Plants»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Inspector Plant Quarantine

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)		Auditorium classes, hours					Individual work			Practical training		Practical training (internship)		Distribution of hours per week within an acad. year and semesters			
		Hours	Credit	due to semesters		Course project	Total	And others		Seminars	13	14	15	16	17						
				Exam	Test			Lectures	Laboratory classes												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17					
1. THE OBLIGATORY ACADEMIC DISCIPLINES																					
1	Civil Protection	90	3		t		30	15		15	60				2						
2	Safety in Plant Quarantine	90	3		t		10	10			80					1					
3	Decontamination of regulated entities	120	4	e			30	15		15	90				2						
4	External and internal quarantine	90	3		3		30	15		15	60				2						
5	Methods for inspection and examination of objects of regulation	90	3		t		30	15		15	60				2						
6	Quarantine pests	210	7	e	t	KP	30	15		15	180				2	2					
7	Phytosanitary law and international cooperation	120	4		t		30	15		15	90					2					
8	Integrated Pest Management	150	5	e	t		30	15		15	120				4	2					
Total		960	32	3	7	2	220	115		105	740				10	10	1				
2. ELECTIVE ACADEMIC DISCIPLINES																					
2.1. Disciplines chosen by University																					
1	Methodology and organization of scientific research on the basics of intellectual property	90	3	e			45	15	15	15	45				3						
2	Business Foreign Language	150	5	e			30		30		120				2						
3	Agricultural policy	90	3		t		30	15		15	60					2					
4	Economics and Organization agricultural sector	90	3		t		30	15		15	60					2					
5	Biosafety in quarantine and plant protection	90	3		t		30	15		15	60					2					
Total I		510	17	2	3	2	165	60	45	60	345				5	6					
2.2. Disciplines chosen by students																					
Specialization «Quarantine of Plants»																					
1	International phytosanitary standards	120	4	e			30	15		15	90				2						
2	Alien pests	120	4	e			40	20	20		80						4				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	Risk analysis quarantine organisms	90	3	e			30	15		15	60				2	
4	Location quarantine organisms	120	4	e			40	20	20		80					2
5	Harmful organisms Ukraine in the international phyto sanitation	90	3		t		30	10	20		60					2
6	Harmful organisms introduced plants	120	4	e			40	20	20		80					4
7	Plant Quarantine forest crops	90	3		t		20	10	10		70					4
Total		750	25	5	2	2	230	110	90	30	520			2	2	16
Total		2220	74	10	12	2	615	285	135	195	1605			17	18	17
3. OTHER FORM OF TRAINING																
	Preparing and defense of Master paper	180	6													
	Practical training (internship)	300	10													
	Number of Course Projects					2										
	Number of passes				12											
	Number of Exams			10												
	Total for the specialty	2700	90	10	12	2	615	285	135	195	1605			17	18	17

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	960	32	35,6
2. Elective academic disciplines	1260	42	46,7
2.1. Disciplines chosen by University	510	17	-
2.2. Disciplines chosen by students	750	25	-
3. Other form of training	480	16	17,7
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of bachelor thesis	State Certification	Holidays	Total
1	30	5	5	-	-	12	52
2	10	2	-	3	1	-	16
Total for the specialty	40	7	5	3	1	12	68

V. PRACTICAL TRAINING

Nº	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training	2	150	5	5

VI. COURSE PAPERS AND PROJECTS

Nº	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Quarantine pests	30	1	c p	

VII. STATE CERTIFICATION

Nº	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF LIVESTOCK SCIENCE AND WATER BIORESOURCES

**EDUCATION PLAN
training of specialists entered in 2015**

Level of higher education (EQL)
Branch of knowledge
Training direction

The master's program
Specializations

Form of study
Training period (volume ECTS credits)
Based on
The degree of higher education
Qualifications of

The second (Master)
0901 «Agriculture and Forestry»
8.09010201 «Technologies of Production and Processing of Livestock Products»
Educational and vocational
«Horse breeding», «Production and processing of pig products», «Dairy cattle», «Livestock Genetic Resources», «Technology of production of beekeeping», «Production and processing products of sheep and goats»
full-time
1,5 years (90)
«Bachelor»
«Master»
engineer-researcher for the production and processing of livestock products

I. THE EDUCATIONAL PROCESS SCHEDULE

training of specialists second (Master) level of higher education entered in 2015

training direction 8.09010201 «Technologies of Production and Processing of Livestock Products»

[illegible]

Academic year		2016 years																	
		September			October				November				December			28			
		1	7	14	21	IX	5	12	19	26	2	9	16	23	XI	7	14	21	XII
		5	12	19	26	X	10	17	24	31	7	14	21	28	XII	12	19	26	I
		53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
II												:	:	:	II	II	II	II	//

Legend:

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- theoretical training
examination period
holiday

X	II	//
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- research and production practice
- preparation of masters work
- State certification (state examination and diploma defense)

II. PLAN EDUCATIONAL PROCESS

№	Course Title	Overall volume		The forms of knowledge control by semesters			Classroom training					Independent work		Practical training		The distribution of weekly hours of years and semesters		
							Credits		by semester		Total							
		Hours	Exam	Test	Coursework				lectures	laboratory		practical						
					3	4	5	6			7		8	9	10	11	12	13
		1. MANDATORY TRAINING COURSE																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Civil Defence	30	1	-	1	-	15	15	-	-	15	-	-	1	-	-		
2	Labour Protection	30	1	-	1	-	15	15	-	-	15	-	-	1	-	-		
3	Biological productivity	120	4	1	-	-	30	15	-	15	90	-	-	2	-	-		
4	Feed resources in animal breeding	150	5	2	1	-	60	30	30	-	90	-	-	2	2	-		
5	Modern research methods in animal breeding	90	3	1	-	-	45	15	30	-	45	-	-	3	-	-		
6	Modelling technological processes in animal husbandry	90	3	1	-	1	30	15	15	-	60	-	-	2	-	-		
7	Organization of agrarian business	90	3	-	2	-	15	15	-	-	75	-	-	-	1	-		
8	Management of technological processes in animal husbandry	120	4	2	-	2	45	30	-	15	75	-	-	-	3	-		
9	Information technologies in animal breeding	90	3	-	2	-	15	15	-	-	75	-	-	-	1	-		
10	Modern trends of selection in animal breeding	120	4	-	2	-	30	15	-	15	90	-	-	-	2	-		
11	Technology of meat and meat products	120	4	2	-	-	30	15	15	-	90	-	-	-	2	-		
12	Technology of milk and dairy products	120	4	2	-	-	30	15	15	-	90	-	-	-	2	-		
Total		1170	39	7	6	2	360	210	105	45	810	-	360	11	13	-		
2. SELECTIVE COURSES																		
2.1. Disciplines elective of the University																		
1	Methodology and organization of scientific research	90	2	-	1	-	30	15	-	15	60	-	-	-	2	-		
2	Business foreign language	150	5	1	-	-	30	15	-	15	120	-	-	2	-	-		
3	Agricultural policy	90	2	-	1	-	30	15	-	15	60	-	-	2	-	-		
Total		330	11	1	2	-	30	15	-	15	30	-	-	4	2	-		
2.2. Courses on choice student																		
Specialization «Livestock Genetic Resources»																		
1	Special genetics	150	5	3	-	-	60	30	30	-	90	-	90	-	-	6		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Livestock and Genetic Resources	150	5	3	-	-	40	20	20	-	110	-	60	-	-	4
3	Biotechnology of reproduction	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3
4	Information systems in animal breeding	180	6	3	-	-	50	20	30	-	130	-	-	-	-	5
5	Special selection in livestock	150	5	-	3	3	60	30	30	-	90	-	90	-	-	6
6	Organize breeding business in livestock	150	5	3	-	-	40	20	20	-	110	-	60	-	-	4
Total		600	20	3	1	1	180	80	100	-	420	-	150	-	-	18
Specialization «Dairy cattle»																
1	Maintenance of dairy cattle stock	150	5	3	-	-	50	20	30	-	100	-	90	-	-	5
2	Feeding of high producing cows	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5
3	Management of milk production	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3
4	Production equipment in dairies	180	6	3	-	-	50	20	30	-	130	-	-	-	-	5
5	Intensive technologies of rearing young cattle stock	150	5	-	3	3	50	20	30	-	100	-	90	-	-	5
6	Management and marketing in dairy farming	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5
Total		600	20	3	1	1	180	70	110	-	420	-	150	-	-	18
Specialization «Production and processing of pig products»																
1	Production equipment in pig breeding enterprises	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3
2	Reproduction and breeding of pigs	150	5	3	-	-	50	20	30	-	100	-	90	-	-	5
3	Slaughtering of pigs and processing of pig products	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5
4	Production of pig products	180	6	-	3	3	50	20	30	-	130	-	-	-	-	5
Total		600	20	3	1	1	180	70	110	-	420	-	150	-	-	18
Specialization «Technology poultry production»																
1	Incubation of eggs and embryology basics	150	5	3	-	-	50	20	30	-	100	-	90	-	-	5
2	Production of food eggs	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5
3	Pure-strain stock-breeding in poultry farming	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3
4	Feeding of agricultural poultry	180	6	3	-	-	50	20	30	-	130	-	-	-	-	5
5	Production of agricultural poultry meat	150	5	-	3	3	50	20	30	-	100	-	90	-	-	5
6	Management and marketing of poultry	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5
Total		600	20	3	1	1	180	70	110	-	420	-	150	-	-	18
Specialization «Horse breeding»																
1	Breeds of horses	150	5	3	-	-	50	20	30	-	100	-	90	-	-	5
2	Racetrack and sports training in horse breeding	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5
3	World genetic resources of horse	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3
4	Reproduction of horses	180	6	3	-	-	50	20	30	-	130	-	-	-	-	5
5	Organize breeding business in horse breeding	150	5	-	3	3	50	20	30	-	100	-	90	-	-	5
6	Horse Breeding	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5
Total		600	20	3	1	1	180	70	110	-	420	-	150	-	-	18
Specialization «Technology of production of beekeeping»																
1	Technological equipment in apiculture	150	5	3	-	-	50	20	30	-	100	-	90	-	-	5
2	Breeding and keeping of bees	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	Bees' pathology	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3
4	Honey resources and pollination of plants	180	6	3	-	-	50	20	30	-	130	-	-	-	-	5
5	Production, storage and processing of bee products	150	5	-	3	3	50	20	30	-	100	-	90	-	-	5
6	Management and marketing in beekeeping	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5
Total		600	20	3	1	1	180	70	110	-	420	-	150	-	-	18
Specialization «Production and processing products of sheep»																
1	Production equipment in sheeps breeding enterprises	150	5	3	-	-	50	20	30	-	100	-	90	-	-	5
2	Reproduction and breeding of sheeps	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5
3	Slaughtering of sheeps and processing of pig products	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3
4	Production of sheeps products	180	6	-	3	3	50	20	30	-	130	-	-	-	-	5
5	Management and marketing in sheep breeding	150	5	3	-	-	50	20	30	-	100	-	90	-	-	5
Total		600	20	3	1	1	180	70	110	-	420	-	150	-	-	18
Together		2100	70	11	8	3	720	355	200	165	1380	-	360	18	18	18
3. OTHER TRAINING																
State attestation		30	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Preparation and defense of Master works		210	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Practical training		360	12	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of coursework						3										
Number of tests					8											
Number exams				11												
Together for EQL		2700	90	11	8	3	720	355	200	165	1380	-	360	18	18	18

III. STRUCTURE OF EDUCATION PLAN

Educational disciplines	Hours	Credits	%
1. Compulsory educational disciplines	1170	39	43,3
2. Selected educational disciplines	930	31	34,4
2.1. Courses on choice University	330	11	-
2.2. Courses on choice student	600	20	-
3. Other training	600	20	22,3
Together for EQL	2700	90	100

IV. SUMMARY OF TIME BUDGET, WEEK

Academic year	Theoretical training	Examination period	Practical training	Preparation of master work	State attestation	Holiday	Total
1	30	5	12	-	-	9	56
2	10	3	-	4	1	-	18
Together for EQL	40	8	12	4	1	9	74

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production practice	I	360	12	12

VI. PRACTICAL TRAINING

Nº	Course Title	Hours	Credits	Coursework	Course project
1	Intensive aquaculture technologies	30	1	-	I
2	Modelling technological processes in fish farming	30	1	-	II
3	Course project for master program	30	1	-	III

VII. STATE ATTESTATION

Nº	Component certification	Hours	Credits	Number of weeks
1	State examination	60	2	1
2	Protection of master's work	240	8	4

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF LIVESTOCK SCIENCE AND WATER BIORESOURCES

**EDUCATION PLAN
training of specialists entered in 2015**

Level of higher education (EQL)	The second (Master)
Галузь знань	0901 «Agriculture and Forestry»
Training direction	8.09010201 «Technologies of Production and Processing of Livestock Products»
The master's program	Education and Science
Specialization	«Animal Feeding»
Form of study	full-time
Training period (volume ECTS credits)	2 years (120)
Based on	«Bachelor»
The degree of higher education	«Master»
Qualifications of	Technologist-researcher by Production and Processing of Livestock Products

I. THE EDUCATIONAL PROCESS SCHEDULE

[illegible]

Legend:

	-	theoretical training	X
:	-	examination period	II
-	-	holiday	//

II. PLAN EDUCATIONAL PROCESS

№	Course Title	Overall volume		The forms of knowledge control by semesters			Classroom training.					Independent work		Practical training		The distribution of weekly hours of years and semesters			
		Hours	Credits	by semester		Total	including			Educational practice	Practical training	Number of weeks in the semester							
				Exam	Test		Coursework	lectures	laboratory			practical	1	2	3	4			
3	4	5	6	7	8	9	10	11	12	13	14	15	15	16	17	18			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	15	16	17	18
1. COMPULSORY EDUCATIONAL DISCIPLINES																		
1	Civil Defence	30	1	-	1	-	15	15	-	-	15	-	-	1	-	-	-	-
2	Labour Protection	30	1	-	1	-	15	15	-	-	15	-	-	1	-	-	-	-
3	Biological productivity	120	4	1	-	-	30	15	-	15	90	-	-	2	-	-	-	-
4	Feed resources in animal breeding	150	5	2	1	-	60	30	30	-	90	-	-	2	2	-	-	-
5	Modern research methods in animal breeding	90	3	1	-	-	45	15	30	-	45	-	-	3	-	-	-	-
6	Modelling technological processes in animal husbandry	90	3	1	-	1	30	15	15	-	60	-	-	2	-	-	-	-
7	Organization of agrarian business	90	3	-	2	-	15	15	-	-	75	-	-	-	1	-	-	-
8	Management of technological processes in animal husbandry	120	4	2	-	2	45	30	-	15	75	-	-	-	3	-	-	-
9	Information technologies in animal breeding	90	3	-	2	-	15	15	-	-	75	-	-	-	1	-	-	-
10	Modern trends of selection in animal breeding	120	4	-	2	-	30	15	-	15	90	-	-	-	2	-	-	-
11	Technology of meat and meat products	120	4	2	-	-	30	15	15	-	90	-	-	-	2	-	-	-
12	Technology of milk and dairy products	120	4	2	-	-	30	15	15	-	90	-	-	-	2	-	-	-
Total		1170	39	6	4	1	450	225	135	90	645	-	360	16	14	-	-	-
2. SELECTIVE COURSES																		
2.1. Disciplines elective of the University																		
1	Methodology and organization of scientific research	90	3	-	1	-	30	15	-	15	60	-	-	-	2	-	-	-
2	Business foreign language	150	5	1	-	-	30	-	-	30	120	-	-	2	-	-	-	-
3	Agricultural policy	90	3	-	1	-	30	15	-	15	60	-	-	-	2	-	-	-
Total		330	11	1	2	-	90	30	-	60	240	-	-	2	4	-	-	-
2.2. Courses on choice student																		
Specialization «Animal feeding»																		
1	Methods and organization of research	150	5	3	-	-	45	15	30	-	105	-	-	-	-	-	3	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2	Nutrition of animals	150	5	3	-	-	75	30	45	-	75	-	60	-	-	5	-
3	Management of voluminous forages and pastures	210	7	3	-	-	75	30	45	-	135	-	60	-	-	5	-
4	Feeding of ruminant animals	210	7	-	3	3	75	30	45	-	135	-	-	-	-	5	-
5	Quality assessment and nutritive value of forages	210	7	4	-	-	75	30	45	-	135	-	-	-	-	-	5
6	Feeding of poultry	210	7	-	4	-	75	30	45	-	135	-	-	-	-	-	5
7	Processing and analysis of research	180	6	4	-	-	45	15	30	-	135	-	-	-	-	-	3
8	Feeding of monogastric	180	6	4	-	-	75	30	45	-	105	-	-	-	-	-	5
Total		1500	50	6	2	1	540	210	330	-	960	-	120	-	-	18	18
Together		3000	100	14	8	2	1080	480	435	150	1920	-	360	18	18	18	18
3. OTHER TRAINING																	
State attestation		30	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preparation and defense of Master works		210	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Practical training		360	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of coursework		-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Number of tests		-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Number exams		-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-
Together for EQL		3600	120	14	8	2	1080	480	435	150	1920	-	360	18	18	18	18

III. STRUCTURE OF EDUCATION PLAN

Educational disciplines	Hours	Credits	%
1. Compulsory educational disciplines	1170	39	32,5
2. Selected educational disciplines	1830	61	51
2.1. Courses on choice University	330	11	-
2.2. Courses on choice student	1500	50	-
3. Other training	600	20	16,5
Together for EQL	3600	120	100

IV. SUMMARY OF TIME BUDGET, WEEK

Academic year	Theoretical training	Examination period	Practical training	Preparation of master work	State attestation	Holiday	Total
1	30	5	12	-	-	9	56
2	30	6	-	3	1	3	43
Together for EQL	60	11	12	3	1	12	99

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production practice	I	360	12	12

VI. COURSE WORK AND PROJECTS

№	Course Title	Hours	Credits	Coursework	Course project
1	Technology of production and processing of livestock products	30	1	-	II
2	Course project for master program	30	1	-	III

VII. STATE ATTESTATION

№	Component certification	Hours	Credits	Number of weeks
1	State examination	30	1	1
2	Protection of master's work	210	7	3

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF LIVESTOCK SCIENCE AND WATER BIORESOURCES

**EDUCATION PLAN
training of specialists entered in 2015**

Level of higher education (EQL)
Branch of knowledge
Training direction
The master's program
Specializations

Form of study
Training period (volume ECTS credits)
Based on
The degree of higher education
Qualifications of

The second (Master)
0902 «Fish industry and Aquaculture»
8.09020101 «Water bioresources»
Educational and professional
«Sturgeon culture», «Protection of aquatic organisms»,
«Pond fish farming»
full-time
1,5 years (90)
«Bachelor»
«Master»
researcher aquaculture

[illegible]

	-	theoretical training	X	-	research and production practice
:	-	examination period	II	-	preparation of masters work
-	-	holiday	//	-	state certification (state examination and protection Master thesis)

Legend:

II. PLAN EDUCATIONAL PROCESS

№	Course Title	Overall volume		The forms of knowledge control by semesters			Classroom training.					Independent work			Practical training		The distribution of weekly hours of years and semesters			
		Hours	Credits	by semester			Total	including			12	13	14	Practical training						
				Exam	Test	Coursework		lectures	laboratory	practical				Educational practice	210	14	15	16	17	18
1. COMPULSORY EDUCATIONAL DISCIPLINES																				
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
1	Civil Defence in fishing industry	60	2	-	1	-	15	15	-	-	45	-	-	1	-	-	-	-		
2	Theory of fish population dynamics	90	3	1	-	-	30	15	-	15	60	-	-	2	-	-	-	-		
3	Psychology of labour relations in fishery enterprises	60	2	-	1	-	30	15	-	15	30	-	-	2	-	-	-	-		
4	Occupational Health in fish farming	60	2	1	-	-	30	15	-	15	30	-	-	2	-	-	-	-		
5	Theoretical foundations of fish	90	3	1	-	-	45	15	-	30	45	-	-	3	-	-	-	-		
6	Intensive aquaculture technologies	120	4	1	-	1	60	30	30	-	60	-	210	4	-	-	-	-		
7	Acclimatization of hydrocole	90	3	2	-	-	30	15	15	-	60	-	-	-	2	-	-	-		
8	Fisheries research methods	90	3	2	-	-	30	15	15	-	60	-	-	-	2	-	-	-		
9	Modelling technological processes in fish farming	120	4	2	-	2	30	15	-	15	90	-	-	-	2	-	-	-		
10	Environmental physiology and biochemistry of aquatic organisms	120	4	2	-	-	30	15	15	-	90	-	-	-	2	-	-	-		
11	Financial aspects of fishery business	60	2	-	2	-	30	15	-	15	30	-	-	-	2	-	-	-		
12	Doing business in fish farming	60	2	-	2	-	30	15	-	15	30	-	-	-	2	-	-	-		
13	World fisheries	60	2	-	2	-	15	15	-	-	45	-	-	-	1	-	-	-		
14	Basics of aquatic organisms evolution theory	90	3	-	2	-	15	15	-	-	75	-	-	-	1	-	-	-		
Total		1170	39	8	6	2	420	225	75	120	750	-	210	14	14	-	-	-		
2. SELECTED EDUCATIONAL DISCIPLINES																				
2.1. Courses on choice University																				
1	Methods and organization of scientific studies	90	3	-	1	-	30	15	-	15	60	-	-	2	-	-	-	-		
2	Business foreign language	150	5	2	1	-	60	30	-	30	90	-	-	2	2	-	-	-		
3	Agricultural policy	90	3	1	2	-	30	15	-	15	60	-	-	-	2	-	-	-		
Total		330	11	-	3	-	120	60	-	60	210	-	-	4	4	-	-	-		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2.2. Courses on choice student																	
Specialization of «Protection of aquatic organisms»																	
1	Protection of aquatic organisms	150	5	3	-	-	60	30	30	-	90	-	90	-	-	6	-
2	Management of aquatic organisms	150	5	3	-	-	40	20	20	-	110	-	60	-	-	4	-
3	International fisheries regulation	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3	-
4	Native ichthyofauna	180	6	-	3	3	50	20	30	-	130	-	-	-	-	5	-
Total		600	20	3	1	1	180	80	100	-	420	-	150	-	-	18	-
Specialization of «Sturgeon culture»																	
1	Biological productivity of sturgeon species	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3	-
2	Selection of sturgeon breeding objects	150	5	3	-	-	50	20	30	-	100	-	60	-	-	5	-
3	Biotechnology of sturgeon breeding	150	5	3	-	-	50	20	30	-	100	-	90	-	-	5	-
4	Sturgeon husbandry in ponds	180	6	-	3	3	50	20	30	-	130	-	-	-	-	5	-
Total		600	20	3	1	1	180	70	110	-	420	-	150	-	-	18	-
Specialization of «Pond fish farming»																	
1	Biological productivity of pond fish	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3	-
2	Selection of pond fish	150	5	3	-	-	50	20	30	-	100	-	90	-	-	5	-
3	Modern technology of pond fish farming	150	5	3	-	3	50	20	30	-	100	-	60	-	-	5	-
4	Modern technologies of cultivation of non-traditional objects of pond fish farming	180	6	-	3	-	50	20	30	-	130	-	-	-	-	5	-
Total		600	20	3	1	1	180	70	110	-	420	-	150	-	-	18	-
Together		2100	70	11	8	3	720	355	185	180	1380	-	360	18	18	18	-
3. OTHER TRAINING																	
State attestation		30	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preparation and defense of Master works		210	7														
Practical training		360	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of coursework						3											
Number of tests					9												
Number exams				14													
Together for EQL		2700	90	11	8	3	720	355	185	180	1380	-	360	18	18	18	-

III. STRUCTURE OF EDUCATION PLAN

Educational disciplines	Hours	Credits	%
1. Compulsory educational disciplines	1170	39	43,3
2. Selected educational disciplines	930	22	34,4
2.1. Courses on choice University	330	11	-
2.2. Courses on choice student	600	20	-
3. Other training	600	20	22,3
Together for EQL	2700	90	100

IV. SUMMARY OF TIME BUDGET, WEEK

Academic year	Theoretical training	Examination period	Practical training	Preparation of master work	State attestation	Holiday	Total
1	30	5	12	-	-	9	56
2	10	3	-	4	1	-	18
Together for EQL	40	8	12	4	1	9	74

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production practice	I	360	12	12

VI. COURSE WORK AND PROJECTS

Nº	Course Title	Hours	Credits	Coursework	Course project
1	Intensive aquaculture technologies	30	1	-	I
2	Modelling technological processes in fish farming	30	1	-	II
3	Course project for master program	30	1	-	III

VII. STATE ATTESTATION

Nº	Component certification	Hours	Credits	Number of weeks
1	State examination	30	1	1
2	Protection of master's work	210	7	4

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF LIVESTOCK SCIENCE AND WATER BIORESOURCES

**EDUCATION PLAN
training of specialists entered in 2015**

Level of higher education (EQL)	The second (Master)
Branch of knowledge	0902 «Fish industry and Aquaculture»
Training direction	8.09020101 «Water bioresources»
The master's program	Education and Science
Specializations	«Fish fauna of reservoirs of complex appointment»
Form of study	full-time
Training period (volume ECTS credits)	2 years (120)
Based on	«Bachelor»
The degree of higher education	«Master»
Qualifications of	researcher aquaculture

II. PLAN EDUCATIONAL PROCESS

№	Course Title	Overall volume		The forms of knowledge control by semesters			Classroom training.					Independent work		Practical training		The distribution of weekly hours of years and semesters				
		Credits		by semester			Total			including			Educational practice		Practical training		First year		Second year	
				Exam	Test	Coursework				lectures	laboratory	practical								
3	4	5	6	7	8	9	10	11	12	13	14	15	15	15	15	15	15	15		
1	2																			
1. COMPULSORY EDUCATIONAL DISCIPLINES																				
1	Civil Defence in fishing industry	60	2	-	1	-	15	15	-	-	45	-	-	1	-	-	-	-	-	
2	Theory of fish population dynamics	90	3	1	-	-	30	15	-	15	60	-	-	2	-	-	-	-	-	
3	Psychology of labour relations in fishery enterprises	60	2	-	1	-	30	15	-	15	30	-	-	2	-	-	-	-	-	
4	Occupational Health in fish farming	60	2	1	-	-	30	15	-	15	30	-	-	2	-	-	-	-	-	
5	Theoretical foundations of fish	90	3	1	-	-	45	15	-	30	45	-	-	3	-	-	-	-	-	
6	Intensive aquaculture technologies	120	4	1	-	1	60	30	30	-	60	-	210	4	-	-	-	-	-	
7	Acclimatization of hydrocole	90	3	2	-	-	30	15	15	-	60	-	-	-	2	-	-	-	-	
8	Fisheries research methods	90	3	2	-	-	30	15	15	-	60	-	-	-	2	-	-	-	-	
9	Modelling technological processes in fish farming	120	4	2	-	2	30	15	-	15	90	-	-	-	2	-	-	-	-	
10	Environmental physiology and biochemistry of aquatic organisms	120	4	2	-	-	30	15	15	-	90	-	-	-	2	-	-	-	-	
11	Financial aspects of fishery business	60	2	-	2	-	30	15	-	15	30	-	-	-	2	-	-	-	-	
12	Doing business in fish farming	60	2	-	2	-	30	15	-	15	30	-	-	-	2	-	-	-	-	
13	World fisheries	60	2	-	2	-	15	15	-	-	45	-	-	-	1	-	-	-	-	
14	Basics of aquatic organisms evolution theory	90	3	-	2	-	15	15	-	-	75	-	-	-	1	-	-	-	-	
Total		1170	39	8	6	2	420	225	75	120	750	-	210	14	14	14	-	-	-	
2. SELECTED EDUCATIONAL DISCIPLINES																				
2.1. Courses on choice University																				
1	Methods and organization of scientific studies	90	3	-	1	-	30	15	-	15	60	-	-	2	-	-	-	-	-	
2	Business foreign language	150	5	2	1	-	60	30	-	30	90	-	-	2	2	-	-	-	-	
3	Agricultural policy	90	3	1	2	-	30	15	-	15	60	-	-	-	2	-	-	-	-	
Total		330	11	-	3	-	120	60	-	60	210	-	-	4	4	-	-	-	-	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2.2. Courses on choice student																	
Specializations «Fish fauna of reservoirs of complex appointment»																	
1	Fish fauna of the ponds in Ukraine	180	6	3	-	3	50	20	30	-	130	-	90	-	-	5	-
2	Modern methods of ichthyological research	180	6	3	-	-	30	10	20	-	150	-	-	-	-	3	-
3	Ichthyocenosis	180	6	3	-	-	50	20	30	-	130	-	60	-	-	5	-
4	Trophic ecology of fishes	210	7	-	3	-	50	20	30	-	130	-	-	-	-	-	5
5	Fish toxicology continental reservoirs	180	6	4	-	-	50	20	30	-	130	-	-	-	-	-	5
6	Prediction catch fish	210	7	-	4	-	50	20	30	-	130	-	-	-	-	5	-
7	Protection of fish fauna of the continental water	180	6	4	-	-	30	10	20	-	150	-	-	-	-	-	3
8	Fishing continental waters Ukraine	180	6	4	-	-	50	20	30	-	130	-	-	-	-	-	5
Total		1500	50	6	2	1	360	140	210	-	1080	-	150	-	-	18	18
Together		3000	100	14	9	3	900	425	285	180	1500	-	360	18	18	18	18
3. OTHER TRAINING																	
State attestation		30	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preparation and defense of Master works		210	7														
Practical training		360	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of coursework						3											
Number of tests					9												
Number exams				14													
Together for EQL		3600	120	14	9	3	900	425	285	180	1500	-	360	18	18	18	18

III. STRUCTURE OF EDUCATION PLAN

Educational disciplines	Hours	Credits	%
1. Compulsory educational disciplines	1170	39	32,5
2. Selected educational disciplines	1830	61	51
2.1. Courses on choice University	330	11	-
2.2. Courses on choice student	1500	50	-
3. Other training	600	20	16,5
Together for EQL	3600	120	100

IV. SUMMARY OF TIME BUDGET, WEEK

Academic year	Theoretical training	Examination period	Practical training	Preparation of master work	State attestation	Holiday	Total
1	30	5	12	-	-	9	56
2	30	6	-	3	1	3	43
Together for EQL	60	11	12	3	1	12	99

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production practice	I	360	12	12

VI. COURSE WORK AND PROJECTS

№	Course Title	Hours	Credits	Coursework	Course project
1	Intensive aquaculture technologies	30	1	-	I
2	Modelling technological processes in fish farming	30	1	-	II
3	Course project for master program	30	1	-	III

VII. STATE ATTESTATION

№	Component certification	Hours	Credits	Number of weeks
1	State examination	30	1	1
2	Protection of master's work	210	7	3

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF VETERINARY MEDICINE

CURRICULUM

training of specialists since 2015 year of admission to university

2012 year of admission – 4 course

2011 year of admission – 5 course

Educational and qualification level
Field of knowledge
Specialty
Master programs
Specializations

The second (Master)

1101 «Veterinary science»

8.11010101 «Veterinary medicine» (by types)

Educational and professional

«Veterinary preventive technologies providing of the animal health»;
«Veterinary providing of the health of dogs and cats»; «Veterinary
and sanitary inspection, quality and safety of food and feed»;
«Veterinary providing of the cattle and sheep production veterinary
pharmacy»; «Veterinary providing of pig production»

Form of training

Duration of training (credits)

Qualification

Based on

Higher education degree

Qualification

2 years (120)

Doctor of veterinary medicine

Younger Specialist of Veterinary Medicine

«Master»

Doctor of veterinary medicine

I. TRAINING PROCESS SCHEDULE
training of specialists of second (Master) level of higher education for 2015-2016
specialty 8.11010101 «Veterinary medicine» (by types)

2015												2016																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Legend:

	-	Theoretical education		-	production practice
:	-	examination period		-	preparation of masters work
-	-	Vacations		-	state certification (state examination and protection Master thesis)

II. PLAN OF EDUCATIONAL PROCESS

№	Disciplines	Total amount		Form of control (by semesters)			Lecture classes (hours)					Independent work	Practical training		Distribution of hours per week by semesters and courses									
		Hours	Credits	Exams	Credit test	Course work	Total	including			Educational practice		Production practice	1 kype	2 kype	3 kype	4 kype	5 kype						
								Lectures	Laboratory lesson	Practical lesson														
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
I. STANDARD ACADEMIC DISCIPLINES																								
1	Ukrainian language	120	4	x			30				30	90			2									
2	Foreign Language	120	4	x			60				60	60			4									
3	History of Ukraine	120	4	x			30	15			15	90			2									
4	Philosophy	120	4	x			30	15			15	90			2									
5	History of Ukrainian Culture	90	3	x			15				15	75			1									
6	Anatomy of domestic animals	270	9	x	x		135	30	105			135	x		5	4								
7	Biochemistry of animals with basics of physical and colloid chemistry	150	5	x			75	30	45			75				5								
8	Cytology, histology, embryology	150	5	x	x		90	30	60			60			3	3								
9	Bioinorganic chemistry	90	3		x		30	15	15			60			2									
10	Organic chemistry	90	3		x		30	15	15			60			2									
11	Biophysics	90	3		x		30	15	15			60			2									
12	Physiology of animals	150	5	x	x		105	45	60			45				3	4							
13	Fundamentals of biosafety, bioethics and veterinary ecology	90	3		x		30	15	15			60				2								
14	Veterinary Sanitation and Hygiene	120	4		x		45	15	30			75	x			3								
15	Veterinary Microbiology and Immunology	150	5	x			75	30	45			75	x				5							
16	Veterinary virology	90	3	x			45	15	30			45					3							
17	Biotechnology in Veterinary Medicine	120	4		x		45	15	30			75					3							
18	Pathological physiology	150	5	x			75	30	45			75					5							
19	Obstetrics, gynecology and biotechnology of animal reproduction	180	6	x		x	105	45	60			75	x				3	4						
20	Veterinary and sanitary examination	180	6	x	x		90	30	60			90	x				3	3						

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
21	Epizootology and infectious diseases	240	8	x	x	x	180	60	120		60	x						5	7			
22	General and special surgery	150	5	x	x	x	120	45	75		30	x						5	3			
23	Operative surgery, anesthesiology, topographic anatomy	90	3	x			60	30	30		30	x				4						
24	Parasitology and invasive disease	150	5	x	x	x	105	45	60		45	x				4	3					
25	Pathological anatomy and autopsy	150	5	x	x	x	135	60	75		15	x						5	4			
26	Internal diseases of animals	210	7	x	x	x	180	60	120		30	x						6	6			
27	Veterinary pharmacology	150	5	x			75	30	45		75	x			5							
28	Veterinary clinical biochemistry	90	3		x		45	15	30		45						3					
29	Clinical diagnosis of animal diseases	150	5	x			75	30	45		75	x				5						
30	Organization and economy of veterinary affairs	120	4	x			75	30	45		45								5			
31	Veterinary toxicology	120	4		x		60	30	30		60					4						
32	Latin language	90	3		x		30			30	60			2								
33	Occupational health and safety of life	120	4	x			30	15		15	90				2							
34	Research Methods	90	3	x			45	15		30	45									3		
35	Informatics in veterinary medicine	90	3	x			60	30		30	30									4		
36	The clinical veterinary pharmacology	90	3	x			60	30	30		30									4		
37	Judicial veterinary medicine	90	3	x			60	30	30		30									4		
Total		4830	161	28	18	6	2565	960	1365	240	2265			26	21	24	30	0	25	15		

2. ELECTIVE ACADEMIC DISCIPLINES

2.1. Disciplines offered by University

1	Business Ukrainian language	30	1				15			15	15			1								
2	Foreign Language	30	1				15			15	15			1								
3	Physical Education	60	2		xx		60			60				2	2							
4	Feeding of animals	60	2		x		30	15	15		30				2							
5	Basics of breeding	60	2		x		30	15	15		30				2							
6	History of veterinary medicine	30	1		x		15			15	15				1							
7	Veterinary radiobiology	60	2		x		30	15	15		30					2						
8	Medical plants	60	2		x		30	15	15		30	x			2							
9	Professional ethics	30	1				30			30									2			
10	Genetics in Veterinary Medicine	60	2		x		30	15	15		30					2						
11	Management and marketing in veterinary medicine	60	2		x		30	15	15		30					2						
12	Philosophy of science and innovative development	90	3		x		45	15		30	45									3		
13	Foreign language in professional activity	90	3		x		60			60	30										3	
Total		720	24		10		420	105	90	225	300			4	9	6	0	0	2	3	3	0

2.2. Disciplines chosen by students

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	Sociology	30	1				15			15	15											
2	Politology	30	1				15			15	15											
3	Economic theory	30	1				15			15	15											
4	Science of law	30	1				15			15	15											
5	Ukrainian business language and culture of speech	30	1				15			15	15											
6	Psychology and Pedagogy	30	1				15			15	15											
7	Culturology	30	1				15			15	15											
8	Anatomy of exotic animals	180	6				90		90		90											
9	Apiculture	150	5				90		90		60											
10	Informatics in veterinary medicine	180	6				90		90		90											
11	Fundamentals of Veterinary Sanitation, microbiology	150	5				90		90		60											
12	Methods of microbiological research	180	5				90		90		60											
13	Biotechnology of reproduction of productive animals	120	4				30	15	15		90											
14	Biotechnology of reproduction of small animals	120	4				30	15	15		90											
15	Biotechnology of reproduction of fur animals	120	4				30	15	15		90											
16	Infectious diseases health of farm animals	120	4				30	15	15		90											
17	Infectious diseases of fur animals	120	4				30	15	15		90											
18	Infectious diseases of bees	90	3				30	15	15		60											
19	Infectious diseases of fishes	90	3				30	15	15		60											
20	Infectious diseases of small animals	120	4				30	15	15		90											
21	Infectious diseases of birds	120	4				30	15	15		90											
22	Infectious diseases of exotic animals	144	4				36	18	18		108											
23	Quality and safety of agricultural products	90	3				30	15	15		60											
24	Standardization and certification of agricultural products	90	3				30	15	15		60											
25	Biotechnology of animal reproduction	90	3				30	15	15		60											
26	Veterinary andrology	90	3				30	15	15		60											
27	Surgical diseases of productive animals	120	4				30	15	15		90											
28	Surgical diseases of exotic animals	120	4				30	15	15		90											
29	Fundamentals of veterinary oftalmology	120	4				30	15	15		90											
30	Basics of veterinary traumatology and orthopedy	120	4				30	15	15		90											
31	Fundamentals of veterinary anesthesiology	120	4				30	15	15		90											

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
32	Fundamentals of veterinary stomatology	120	4				30	15	15		90											
33	Surgical diseases of small animals	120	4				30	15	15		90											
34	Topographic anatomy	120	4				30	15	15		90											
35	Invasive disease of productive animals	120	4				30	15	15		90											
36	Invasive disease of small animals	120	4				30	15	15		90											
37	Invasive disease of fur animals	120	4				30	15	15		90											
38	Invasive diseases of bee	90	3				30	15	15		60											
39	Invasive diseases of fish	90	3				30	15	15		60											
40	Invasive diseases of birds	120	4				30	15	15		90											
41	Invasive disease of exotic animals s	90	3				30	15	15		60											
42	Parazytosenolohiya	90	3				30	15	15		60											
43	Basics of the judicial veterinary medicine	120	4				30	15	15		90											
44	Veterinary oncomorphology	120	4				30	15	15		90											
45	Diagnosis and treatment of internal diseases of productive animals	120	4				30	15	15		90											
46	Diagnosis and treatment of internal diseases of small animals	120	4				30	15	15		90											
47	Diagnosis and treatment of internal diseases of fur animals	120	4				30	15	15		90											
48	Diagnosis and treatment of internal diseases of birds	120	4				30	15	15		90											
49	Diagnosis and treatment of internal diseases of exotic animals	120	4				30	15	15		90											
50	Biotosenolohiya and enzootic diseases	120	4				30	15	15		90											
51	Molecular and biochemical pharmacology	90	3				30	15	15		60											
52	Species veterinary pharmacology	90	3				30	15	15		60											
53	Basics of veterinary business	120	4				30	15	15		90											
54	Fundamentals of international veterinary legislation	120	4				30	15	15		90											
55	Basics of veterinary legislation Ukraine	120	4				30	15	15		90											
56	Basics of legal support of veterinary medicine	120	4				30	15	15		90											

Specializations

1	Veterinary preventive technologies of providing of health of of the animal	1020	34	x	x		405	125	280		615										15	18
2	Veterinary providing of the health of dogs and cats	1020	34	x	x		405	125	280		615										15	18
3	Veterinary and sanitary examination, quality and safety of food and feed	1020	34	x	x		405	125	280		615										15	18

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
4	Veterinary providing of cattle and sheep production	1020	34	x	x		405	125	280		615										15	18
5	Veterinary pharmacy	1020	34	x	x		405	125	280		615										15	18
6	Veterinary providing of pig production	1020	34	x	x		405	125	280		615										15	18
Total selective part		2310	77				860	255	380	225	1450									3	18	18
3. OTHER TRAINING																						
Educational practice		360	12																			
Production practice		210	7																			
Production practice (for master's program)		180	6																			
Preparation and defense of master work (state attestation of contagious and noncontagious disease)		210	7																			
Together for EQL «Master»		8100	270	30	28	6	3425	1215	1745	465	3715	360	390	30	30	30	30	30	27	18	18	18

III. STRUCTURE OF THE CURRICULUM

Educational disciplines	Hours	Credits	%
1. Normative educational disciplines	4830	161	60
2. Selective educational disciplines	2310	77	28
2.1. Elective disciplines by the University	720	24	9
2.2. Disciplines chosen by the student	1590	53	19
3. Other types of workload	960	32	12
Total for EQL	8100	270	100

IV. SUMMARY OF TIME BUDGET, WEEK

Cours	Theoretical training	Examination period	Practical training	Preparation of master work	State attestation	Vacations	Total
IV	30	5	–	4	–	13	52
V	10	1	6	5	2	1	25
Total for EQL	40	6	6	9	2	14	77

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production practice	7	210	7	6

VI. COURSE WORK AND PROJECTS

№	Course Title	Hours	Credits	Coursework	Course project
1	Complex: parasitology, epizootology	30	1		CP
2	Complex: operative, general and special surgery	30	1		CP
3	Complex: clinical diagnostics and internal diseases of animals	30	1		CP
4	Patological anatomy and section	30	1		CP

VII. STATE CERTIFICATION

№	Component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	210	7	7

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF VETERINARY MEDICINE

CURRICULUM

training of specialists since 2015 year of admission to university

Educational and qualification level	The second (Master)
Field of knowledge	1101 «Veterinary science»
Specialty	8.11010101 «Veterinary medicine» (by types)
Master programs	Educational and professional, educational and scientific
Specializations	«Veterinary preventive technologies providing of the animal health»; «Veterinary provision of health of dogs and cats»; «Methods of biochemical research»; «Microbiological diagnostic techniques in animal industries and veterinary medicine»; «Veterinary and sanitary examination of food products»; «Veterinary provision of cattle, of sheep»; «Veterinary pharmacy»; «Veterinary provision of horse industry»; «Provision of pig production»; «Veterinary provision of health of exotic and wild animals veterinary provision of fish production»; «Veterinary hygiene and sanitation»; «Pathomorphological diagnosis of animal diseases»; «Veterinary provision of poultry industry»; «Biomorfolgy and plastynatsiya of vertebrates»; «Cellular technology in veterinary medicine and biology»; «Physiology of higher nervous activity in animals»
Form of training	full-time education
Duration of training (credits)	2 years (120)
Qualification	Doctor of veterinary medicine
Based on	Basic higher education
Higher education degree	«Master»
Qualification	Doctor of veterinary medicine

I. TRAINING PROCESS SCHEDULE

[illegible]

Legend:

-	Theoretical education	X	-	production practice
-	examination period	II	-	preparation of masters work
-	Vacations	//	-	state certification (state examination and protection Master thesis)
		0	-	educational practice

II. PLAN OF EDUCATIONAL PROCESS

№	Disciplines	Total amount		Form of control (by semesters)			Lecture classes (hours)					Independent work		Practical training		Distribution of hours per week by semesters and courses			
		Hours	Credits	Exams	Credit test	Corse work	Total	including			12	13	14	1 kypc		2 kypc			
								Lectures	Laboratory lesson	Practical lesson				semesters					
														1	2	3	4		
number of weeks in semester																			
15 15 15 13																			
18																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
I. STANDARD ACADEMIC DISCIPLINES																			
1	Foreign language in professional activity	60	2		x		15			15	45			1					
2	Information technology in veterinary medicine	60	2		x		30			30	30			2					
3	Philosophy of science and innovative development	60	2		x		15			15	45			1					
4	Occupational safety in veterinary medicine	60	2	x			15			15	45			1					
5	Civil Protection	60	2		x		15			15	45			1					
6	Comparative morphology, education and judicial pathomorphism veterinary medicine	90	3	x			30	15	15		60			2					
7	Veterinary legislation Ukraine and the international veterinary law	90	3	x			30			30	60			2					
8	Obstetrics, gynecology and biotechnology of animal reproduction	90	3	x			30	15	15		60				2				
9	Special propedeutics, therapy and prevention of of internal diseases of animals	90	3	x			30	15	15		60				2				
10	Surgical diseases of anesthesiology	90	3	x			30	15	15		60				2				
11	Special epizootology	90	3	x			30	15	15		60				2				
12	Global parasitology	90	3	x			30	15	15		60				2				
Total		930	31	8	4		300	90	90	120	630			10	10				
2. ELECTIVE ACADEMIC DISCIPLINES																			
2.1. Disciplines offered by University																			
1	Business Foreign Language	90	3				15			15	75			1					
2	Information technology in veterinary medicine	30	1				15			15	15			1					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
3	Philosophy of science and innovative development	30	1				15	15			15			1			
4	Comparative morphology, education and judicial pathomorphism veterinary medicine	60	2				15		15		45			1			
5	Veterinary legislation Ukraine and the international veterinary law	60	2				15	15			45			1			
6	Methodology and organization of scientific research of the basics of intellectual property	90	3		X		15			15	75			3			
7	Obstetrics, gynecology and biotechnology of reproduction	60	2				15		15		45				1		
8	Special propedeutics, therapy and prevention of of internal diseases of animals	60	2				15		15		45				1		
9	Surgical diseases of anesthesiology	60	2				15		15		45				1		
10	Special epizootology	60	2				15		15		45				1		
11	Global parasitology	60	2				15		15		45				1		
12	State veterinary examination	90	3	x			45	15	30		45				3		
Total		750	25				210	45	120	45	540			8	8		
2.2. Disciplines chosen by students																	
1	Foreign language in professional activity	60	2				30			30	30						
2	Information technology in veterinary medicine	60	2				30			30	30						
3	Comparative morphology, education and judicial pathomorphism veterinary medicine	60	2				30			30	30						
4	Veterinary legislation Ukraine and the international veterinary law	60	2				30			30	30						
5	Research methodology	60	2				30			30	30						
6	Obstetrics, gynecology and biotechnology of reproduction	60	2				30			30	30						
7	Special propedeutics, therapy and prevention of of internal diseases of animals	60	2				30			30	30						
8	Surgical diseases of anesthesiology	60	2				30			30	30						
9	Special epizootology	60	2				30			30	30						
10	Global parasitology	60	2				30			30	30						
Total		60	2				30			30	30						
Specialization «Methods of biochemical research»																	
1	Modern methods and devices of biochemical research	600	20	x			180	44	136		516					12	
2	Special biochemistry	600	20	x	x		246	123	123		354					6	12
3	Quality management of laboratory	240	8	x	x	x	78	39	39		162					6	6
Total		1440	48	3	1	1	504	206	298		936					18	18

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Specialization «Microbiological diagnostic techniques in veterinary medicine»																	
1	Biology of microorganisms	540	18	x	x		181	78	103		359					6	7
2	Methods of microbiological research	600	20	x	x		245	80	165		355					12	5
3	Quality management of laboratory	300	10	x		x	78	39	39		222						6
Total		1440	48	3	1	1	504	197	307		936					18	18
Specialization «Veterinary-sanitary examination and biotechnology food»																	
1	Hygiene of food and feed	450	15	x			180	60	120		270					12	
2	Methods of veterinary and sanitary examination of food and feed	300	10	x			90	30	60		210					6	
3	Quality management of laboratory	330	11	x		x	78	39	39		252						6
4	The analysis of microbiological risks in food and feed	360	12	x			156	52	104		204						12
Total		1440	48	3	1	1	504	181	323		936					18	18
Specialization «Veterinary Preventive technologies of providing of the animal health»																	
1	Preventive technologies of providing of health of farm animals	900	30	x	x		299	137	162		601					13	8
2	Preventive technologies of providing of health of small domestic and exotic animals	240	8	x			75	30	45		165					5	
3	Preventive technologies of providing of health of horses	300	10	x			130	65	65		170						10
Total		1440	48	3	1	1	504	232	272		936					18	18
Specialization «Veterinary veterinary provision of cattle and sheep production»																	
1	Innovative technologies of feeding, genetics and breeding in cattle and sheep production	240	8	x			90	34	56		150					6	
2	Preventive veterinary technology of noncontagious diseases of ruminants	750	25	x	x		250	90	160		500					8	10
3	Preventive veterinary technology of contagious diseases of ruminants	450	15	x	x		164	60	104		286					4	8
Total		1440	48	3	1	1	504	184	320		936					18	18
Specialization «Veterinary ensuring the health of dogs and cats»																	
1	Innovative technologies of feeding, genetics and breeding of small animals	240	8	x			90	30	60		150					6	
2	Preventive veterinary technology of noncontagious diseases of dogs and cats	750	25	x	x		276	100	176		474					8	12
3	Preventive veterinary technology of contagious diseases of dogs and cats	450	15	x	x		138	60	78		312					4	6
Total		1440	48	3	1	1	504	190	314		936					18	18
Specialization «Veterinary Pharmacy»																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Pharmacognosy, pharmaceutical and toxicological chemistry	390	13	x			150	50	100		240					10	
2	Pharmacy and pharmaceutical technology	360	12	x		x	120	50	70		240					8	
3	The clinical veterinary pharmacology and clinical veterinary pharmacy	360	12	x		x	117	52	65		243						9
4	Preclinical and clinical studies of drugs	330	11	x			117	52	65		213						9
Total		1440	48	3	1	1	504	204	300		936					18	18
Specialization «Veterinary service of horse industry»																	
1	Innovative technologies of, feeding, genetics and breeding horses	300	10	x			90	30	60		210					6	
2	Preventive veterinary technology of noncontagious diseases of horses	570	19	x	x		207	90	117		363					6	9
3	Preventive veterinary technology of contagious diseases of horses	570	19	x	x		207	90	117		363					6	9
Total		1440	48	3	1	1	504	210	294		936					18	18
Specialization «Veterinary and sanitary examination, quality and safety of food and feed»																	
1	Hygiene of milk and milk products	480	16	x	x		149	49	100		331					3	8
2	Hygiene of primary processing of animals and products of slaughter	360	12	x			120	60	60		240					8	
3	Hygiene products of animal and plant food	600	20	x	x		235	90	145		365					7	10
Total		1440	48	3	1	1	504	199	305		936					18	18
Specialization «Veterinary provision of pig production»																	
1	Innovative technologies of feeding, genetics and breeding of pigs	300	10	x			90	30	60		210					6	
2	Preventive veterinary technology of noncontagious diseases of pigs	570	19	x	x		194	90	104		376					6	8
3	Preventive veterinary technology contagious disease of pigs	570	19	x	x		220	90	130		350					6	10
Total		1440	48	3	1	1	504	210	294		936					18	18
Specialization «Veterinary service of health of exotic and wild animals»																	
1	Housing, feeding and reproduction of exotic and wild animals	180	6	x		x	60	30	30		120					4	
2	Modern diagnostics and treatment of noncontagious diseases exotic and wild animals in the noncontagious pathologies	630	21	x	x		209	70	139		421					7	8
3	Infectious diseases of exotic and wild animals	330	11		x		105	50	55		225					7	
4	Parasitic diseases of exotic and wild animals	300	10	x		x	130	50	80		170					10	
Total		1440	48	3	1	1	504	200	304		936					18	18
Specialization «Veterinary service of fish production»																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Sanitation and hygiene in fish culture	450	15	x	x	x	194	60	134		256					6	8
2	Diseases of fish	420	14	x	x		112	56	56		308					4	4
3	Hygiene and Sanitation of fish processing enterprises	330	11	x			138	60	78		192					4	6
4	Aquaculture	240	8	x	x		60	30	30		180					4	
Total		1440	48	3	1	1	504	206	298		936					18	18
Specialization «Veterinary Hygiene and Sanitation»																	
1	Animal waste and their recycling	360	12	x	x		112	56	56		248					4	4
2	Special animal hygiene	360	12	x	x	x	172	60	112		188					8	4
3	Veterinary sanitation	240	8	x			52	26	26		188						4
4	Animal health	480	16	x	x		168	60	108		312					6	6
Total		1440	48	3	1	1	504	202	302		936					18	18
Specialization «Pathomorphological diagnosis of animal diseases»																	
1	Quality management of laboratory	240	8	x		x	78	39	39		162						6
2	Pathomorphology animals by types	600	20	x	x		276	100	176		324					8	12
3	Histological techniques	600	20	x			150	30	120		450					10	
Total		1440	48	3	1	1	504	169	335		936					18	18
Specialization «Veterinary provision of poultry industry»																	
1	Innovative technologies of housing, feeding, genetics and breeding in the poultry industry	300	10	x			90	30	60		210					6	
2	Preventive veterinary technology of noncontagious diseases of poultry	570	19	x	x		224	100	124		346					8	8
3	Preventive veterinary technology of contagious poultry diseases	570	19	x	x		190	70	120		380					4	10
Total		1440	48	3	1	1	504	200	304		936					18	18
Specialization «Biomorfolgy and plastynatsiya of vertebrates»																	
1	Anatomical museum technique	330	11	x			120	30	90		210					8	
2	Evolutionary biomorfolgy of vertebrates	570	19	x	x		218	80	138		352					5	11
3	Methods of scientific morphological studies	540	18	x	x		166	70	96		374					5	7
Total		1440	48	3	1	1	504	180	324		936					18	18
Specialization «Cellular technology in veterinary medicine and biology»																	
1	Clinical pathophysiology of animals	420	14	x	x		153	60	93		267					5	6
2	Molecular biology of the cell	210	7		x		60	45	15		150					4	
3	Theory and practice of using stem cells in veterinary medicine	390	13	x	x		153	60	93		237					5	6
4	Oncology and Transplantation in veterinary medicine	210	7		x		78	39	39		132						6
5	Molecular mechanisms of cellular and humoral immunity in animals	210	7		x		60	30	30		150					4	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Total		1440	48	3	1	1	504	234	270		936					18	18
Specialization «Physiology of higher nervous activity of animals»																	
1	Physiology of Higher Nervous Activity and zoopsychology	690	23	x	x		237	100	137		453					8	9
2	The pathophysiology of higher nervous activity	420	14	x	x		183	60	123		237					7	6
3	Pharmacodynamics and pharmacokinetics of drugs	180	6		x		45	15	30		135					3	
4	Histology of the nervous and endocrine systems	150	5		x		39	13	26		111						3
Total		1440	48	3	1	1	504	188	316		936					18	18
Total fo selective component		2250	75				744	240	430	74	1506						
3. OTHER TYPES OF WORKLOAD																	
Practical trainings		270	9														
Preparation and defense of masters works		150	5														
Number of course works, projects																	
Number of tests					5												
Number of exams				12													
Together for EQL		3600	120	12	5		1044	336	512	196	2136	120	150	18	18	18	18

III. STRUCTURE OF THE CURRICULUM

Educational disciplines	Hours	Credits	%
1. Normative educational disciplines	930	31	26
2. Selective educational disciplines	2250	75	62
2.1. Elective disciplines by the University	750	25	20
2.2. Disciplines chosen by the student	1500	50	42
3. Other types of workload	420	14	12
Total for EQL	3600	120	100

IV. SUMMARY OF TIME BUDGET, WEEK

Years	Theoretical training	Examination period	Practical training	Preparation of master work	State attestation	Vacations	Total
I	30	5	4	—	—	13	52
II	28	4	5	2	2	4	45
Total for EQL	58	9	9	2	2	17	97

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Obstetrics, gynecology and biotechnology of animal reproduction	2	30	1	1
2	Special propedeutics, therapy and prevention of internal diseases of animals	2	30	1	1
3	Surgical diseases with anesthesiology	2	30	1	1
4	Global parasitology	2	30	1	1
5	Production practice	4	150	5	5

VII. STATE CERTIFICATION

№	Component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	150	5	4

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
FACULTY OF VETERINARY MEDICINE

CURRICULUM

training of specialists since 2015 year of admission to university

Educational and qualification level	The second (Master)
Field of knowledge	1101 «Veterinary science»
Specialty	8.11010102 «Veterinary-sanitary inspection, quality and safety of livestock products»
Master programs	Educational and professional
Form of training	full-time education
Duration of training (credits)	2 years (120)
Qualification	Doctor of veterinary medicine
Based on	Basic higher education
Higher education degree	«Master»
Qualification	Doctor of veterinary medicine

II. PLAN OF EDUCATIONAL PROCESS

№	Disciplines	Total amount		Form of control (by semesters)			Lecture classes (hours)				Independent work		Practical training		Distribution of hours per week by semesters and courses			
		Hours	Credits	Exams	Credit test	Course work	Total	including		Practical lesson	Educational practice	Production practice	number of weeks in semester				1 kypc	2 kypc
								Lectures	Laboratory lesson				1	2	3	4		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
I. STANDARD ACADEMIC DISCIPLINES																		
1	Foreign language in professional activity	90	3		x		15			15				1				
2	Information technology in veterinary medicine	180	6		x		45			45				3				
3	Philosophy of science and innovative development	90	3		x		45			45				3				
4	Comparative morphology, education and judicial pathomorphism in veterinary medicine	180	6	x			45	15	30					3				
5	Veterinary legislation of Ukraine and the International Veterinary Law	180	6	x			45	15		30				3				
6	Hygiene of milk and dairy products	180	6	x			60	30	30								4	
7	Hygiene of products of primary processing of animal slaughter	120	4	x			60	30	30								4	
8	Hygiene of products of animal origin	120	4	x			60	30	30								4	
9	Hygiene of vegetable food products	120	4	x			45	15	30								3	
10	Hygiene of feed and feed additives	120	4	x			45	15	30								3	
Total		1380	46	7	3		465	150	180	135				13	18			
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines offered by University																		
1	Business Foreign Language	180	6				30			30				2				
2	Methodology and organization of scientific research with the fundamentals of intellectual property	180	6		X		45			45				3				
Total		360	12				75			75				5	0			
2.2. Disciplines chosen by students																		
Specialization																		
1	Methods of veterinary and sanitary examination	300	10	x			135	50	85								9	
2	Risk analysis of food and feed	300	10	x			135	50	85								9	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
3	Quality management of laboratory	540	18	x			156	78	78		384						12
4	State veterinary supervision and monitoring of food and feed	180	6	x			52	26	26		128						4
5	Official audit system to ensure the safety of food and feed	120	4	x			26	13	13		94						2
Total		1440	48	5	1		504	217	287		936					18	18
Total fo selective component		1800	60	5	1		579	217	287	75	1221						
3. OTHER TYPES OF WORKLOAD																	
Practical trainings		270	9														
Preparation and defense of of masters works		150	5														
Number of course works, projects																	
Number of tests				4													
Number of exams				12													
Together for EQL		3600	120	12	4		1044	367	467	210	2136			18	18	18	18

III. STRUCTURE OF THE CURRICULUM

Educational disciplines	Hours	Credits	%
1. Normative educational disciplines	1380	46	38
2. Selective educational disciplines	1800	60	50
2.1. Elective disciplines by the University	360	12	10
2.2. Disciplines chosen by the student	1440	48	40
3. Other types of workload	420	14	12
Total for EQL	3600	120	100

IV. SUMMARY OF TIME BUDGET, WEEK

Years	Theoretical training	Examination period	Practical training	Preparation of master work	State attestation	Vacations	Total
I	30	5	4	–	–	13	52
II	28	4	5	2	2	4	45
Total for EQL	58	9	9	2	2	17	97

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Methods of veterinary and sanitary examination	2	30	1	1
2	Risk analysis of food and feed	2	30	1	1
3	Quality management of laboratory	2	30	1	1
4	State veterinary supervision and monitoring of food and feed	2	30	1	1
5	Production practice	4	150	5	5

VII. STATE CERTIFICATION

№	Component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	150	5	4

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
FACULTY OF ALIMENTARY TECHNOLOGIES AND MANAGING OF QUALITY OF PRODUCTS
OF AGRICULTURAL COMPLEX**

**CURRICULUM
of training of specialists joined in 2015**

Level of higher education	Second (Master of Science)
Sphere of knowledge	0517 «Alimentary industries and reprocessing of products of agriculture»
Specialty	8.05170104 «Technologies of storage, preserving and reprocessing of meat»
Level of training	Professional education
Specialization	Technologies of processing of meat and meat products
Form of training	Daytime training
Duration of training (credits)	1,5 years (90)
Initial level of knowledge	OKR «Bachelor»
Grade of higher education	«Master of sciences»
Qualification	Master of sciences specialized in sphere of storage, preservation and reprocessing of meat

I. SCHEDULE PLAN OF PROCESS OF TRAINING
of specialists of the second (master's) level of higher education joined in 2015
by specialty 8.05170104 «Technologies of storage, preserving and reprocessing of meat»

Year of training	2015												2016																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	September				October				November				December				January				February				March				April				May				June				July				August																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	1	7	14	21	IX	5	12	19	2	9	16	23	1	7	14	21	XII	4	11	18	25	1	8	15	22	29	7	14	21	III	4	11	18	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

Conditional labeling:

	-	training by theory	X	-	practical training
:	-	examination session	II	-	preparation of master's thesis
-	-	vacations	//	-	state attestation (presentation of master's diploma)

II. PLAN OF PROCESS OF TRAINING

№	Appellation of training discipline	General capacity		Form of control of level of knowledge by semesters			Training in auditorium (hours)				Self-dependent training		Practical courses		Distribution of training hours spent in a week by courses of training and		
		Hours	Credits	Examination	Test	Term paper (project)	In total		includes						1 course	semester	
							Lectures	Exercise in laboratories	Practical training (workshops)	1	2	3					
													quantity of weeks in the semester				
		15	15	10													

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I. OBLIGATORY TRAINING DISCIPLINES																
1	Modern methods of research used in the branch	120	4	2	-	-	45	15	30	-	75	-	-	-	3	-
2	Protection of labor in the branch	180	6	1	-	-	45	15	30	-	135	-	-	3	-	-
3	Actual problems of functioning of the branch	300	10	1	-	1	90	45	45	-	210	-	-	6	-	-
4	Technology of preservation and storage of meat	300	10	2	-	2	90	45	45	-	210	-	-	-	6	-
5	Biologically active substance made of raw materials of animal origin	120	4	3	-	3	40	20	20	-	80	-	-	-	-	4
6	Exploitation of productive equipment	150	4	3	-	-	45	15	30	-	105	-	-	-	3	-
Totally		1170	39	6	-	3	355	155	200	-	815	-	-	9	12	4
2. TRAINING DISCIPLINES TO BE CHOSEN																
2.1 Disciplines by choose of the University																
1	Policy in agriculture	90	3		3	-	20	20	-	-	70	-	-	-	-	2
2	Businesslike foreign language	90	3	1		-	30	-	-	30	60	-	-	2	-	-
3	Philosophy of science and activities in innovative progress	90	3	1		-	30	15	-	15	60	-	-	2	-	-
4	Agrarian and environmental legislation	90	3		1	-	30	15	-	15	60	-	-	2	-	-
Totally		360	12	2	2	-	110	50	-	60	250	-	-	6	-	2
2.2 Disciplines by choose of students																
1	Supply of energy at enterprises of the branch	120	4	-	3	-	40	20	20	-	80	-	-	-	-	4
2	Optimization of processes of manufacturing	120	4	2	-	-	45	15	30	-	75	-	-	-	3	-
3	Radiation safety	90	3		1	-	30	15	15	-	60	-	-	2	-	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
4	Analysis of microstructure of meat and meat products	120	4		2	-	45	15	30	-	75	-	-	-	3	-
5	International and regional standardization and certification	90	3		1	-	15	15	-	-	75	-	-	1	-	-
Totally		540	18	1	4	-	175	80	95	-	365	-	-	3	6	4
Specialization «Technology of meat of meat products»																
1	Technology of forages for domestic animals	150	5	-	3	-	40	20	20	-	110	-	-	-	-	4
2	Supply of heat for enterprises of the branch	90	3	-	3	-	40	20	20	-	50	-	-	-	-	4
Totally		240	8	-	2	-	80	40	40	-	160	-	-	-	-	8
In total		2310	77	9	7	3	720	325	335	60	1590			18	18	18
3. OTHER TYPES OF TRAINING																
Practical training		150	5	-		-	-	-	-	-	-	-	150			
Preparation and protection of the master's diploma		240	8		-	-	-	-	-	-	-	-	-			240
Quantity of term papers (projects)				-	-	3	-	-	-	-	-	-	-	-	-	
Quantity of examinations				9	-	-	-	-	-	-	-	-	-	-	-	
Quantity of tests				-	7											
Totally by the OKR «Magister»		2700	90	9	7	3	720	325	335	60	1590	-	150	-	-	240

III. STRUCTURE OF PLAN OF TRAINING

Training disciplines	Hours	Credits	%
1. Obligatory training disciplines	1170	39	43,3
2. Training disciplines to be chosen	1140	38	42,2
2.1. Disciplines by choose of the University	360	12	13,4
2.2. Disciplines by choose of students	780	26	28,8
3. Other types of training	390	13	14,5
Totally by the OKR program	2700	90	100

IV. TOTALIZED DATA ON BUDGET OF TIME, WEEKS

Year of training	Theoretical training	Examination session	Practical training	Preparation of the magister's diploma	State attestation	Vacations	In total
1	30	5	9	—	—	8	52
2	10	2	—	5	1	—	18
Totally by the OKR program	40	7	9	5	1	8	70

V. PRACTICAL TRAINING

№	Form of practice	Semester	Hours	Credits	Quantity of weeks
1	Practical training	II	150	5	9

VI. TERM PAPERS AND PROJECTS

№	Appellation of the discipline	Hours	Credits	Term paper	Term project
1	Actual problems of the branch	30	1	—	1
2	Technology of preservation and storage of meat	30	1	—	1
3	Term project by specialty	30	1	—	1

VII. STATE ATTESTATION

№	Constituent of attestation	Hours	Credits	Quantity of weeks
1	Preparation and defense of the master's diploma	240	8	6

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

**FACULTY OF ALIMENTARY TECHNOLOGIES AND MANAGING OF QUALITY OF PRODUCTS
OF AGRICULTURAL COMPLEX**

**CURRICULUM
of training of specialists joined in 2015**

Level of higher education	Second (master of science)
Range of knowledge	0517 «Alimentary industry and reprocessing of products of agriculture»
Specialty	8.05170105 «Technologies of storage and reprocessing of aquatic bioresources»
Master's program	Educational and professional
Specialization	Technologies of storage, preservation and reprocessing of fish and seafood
Form of training	Daytime training
Duration of training (YeKTS quantity)	1,5 years (90)
Initial level of knowledge	OKR «Bachelor»
Grade of higher education	«Master of sciences»
Qualification	Master of sciences specialized in sphere of storage and reprocessing of aquatic biological resources

I. SCHEDULE PLAN OF PROCESS OF TRAINING
of specialists of the second (master's) level of higher education joined in 2015
by specialty 8.05170105 «Technologies of storage and reprocessing of aquatic bioresources»

Year of training	2015												2016																																																
	September				October				November				December				January				February				March				April				May				June				July				August																
	1	7	14	21	IX	5	12	19	2	9	16	23	1	7	14	21	XII	4	11	18	1	8	15	22	29	5	12	19	26	1	8	15	22	29	5	12	19	26	1	8	15	22	29	5	12	19	26														
I																																																													
Year of training	2016												2016												2016												2016																								
	September				October				November				December				January				February				March				April				May				June				July				August																
	1	5	12	19	3	10	17	24	31	7	14	21	28	5	12	19	26																																												
	2	9	16	23	7	14	21	28	4	11	18	25	1	9	16	23	30																																												
II																																																													

Conditional labeling:

	-	training by theory	X	-	practical training
:	-	examination session	II	-	preparation of master's thesis
-	-	vacations	//	-	state attestation (presentation of master's diploma)

II. PLAN OF PROCESS OF TRAINING

№	Appellation of training discipline	General capacity		Form of control of level of knowledge by semesters			Training in auditorium (hours)				Self-dependent training		Practical courses		Distribution of training hours spent in a week by courses of		
		Hours	Credits	Examination	Test	Term paper (project)	In total	Lectures	Exercise in laboratories	Practical training (workshops)	Training course	Industrial training	1 course	2 course	1	2	3
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1. OBLIGATORY TRAINING DISCIPLINES																	
1	Modern methods of research used in the branch	120	4	2	-	-	45	15	30	-	75	-	-	-	3	-	-
2	Protection of labor in the branch	180	6	1	-	-	45	15	30	-	135	-	-	3	-	-	-
3	Actual problems of functioning of the branch	300	10	1	-	1	90	45	45	-	210	-	-	6	-	-	-
4	Modern technologies of storage and preservation of fish products	300	10	2	-	2	90	45	45	-	210	-	-	-	6	-	-
5	Technology of aluminous products produced of fish and seafood	120	4	3	-	3	40	20	20	-	80	-	-	-	-	4	4
6	Exploitation of productive equipment	150	4	2	-	-	45	15	30	-	105	-	-	-	3	-	-
Totally		1170	39	6	-	3	355	155	200	-	815			9	9	4	4
2. TRAINING DISCIPLINES TO BE CHOSEN																	
2.1 Disciplines by choose of the University																	
1	Policy in agriculture	90	3		3	-	20	20	-	-	70	-	-	-	-	-	2
2	Businesslike foreign language	90	3	1		-	20		-	20	70	-	-	2	-	-	
3	Philosophy of science and activities in innovative progress	90	3	1	-	-	30	15	-	15	60	-	-	2	-	-	-
4	Agrarian and environmental legislation	90	3	-	1	-	30	15	-	15	60	-	-	2	-	-	-
Totally		360	12	2	2	-	100	50	-	50	260			6	-	2	2
2.2 Disciplines by choose of students																	
1	Microstructural analysis of fish and seafood	120	4	-	2	-	45	15	30	-	75	-	-	-	3	-	-
2	Optimization of processes of manufacturing	120	4	2	-	-	45	15	30	-	75	-	-	-	3	-	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	Biologically active substances produced of fish and seafood	120	4	3	-	-	30	10	20	-	90	-	-	-	-	3
4	Radiation safety	90	3	-	1	-	30	15	15	-	60	-	-	2	-	-
5	International and regional standardization and certification	90	3	-	1	-	15	15	-	-	75	-	-	1	-	-
Totally		540	18	2	3	-	165	70	95	-	375	-	-	3	6	3
Specialization «Technology of storage, preservation and reprocessing of fish and seafood»																
1	Technology of manufacturing of fish powder	150	5	-	3	-	50	20	30	-	100	-	-	-	-	5
2	Supply of heat for enterprises of the branch	90	3	-	3	-	40	20	20	-	50	-	-	-	-	4
Totally		240	8	-	2	-	90	40	50	-	150	-	-	-	-	9
In total		2310	77				710	315	345	50	1600	-	-	18	18	18
3. OTHER TYPES OF TRAINING																
Practical training		150	5	-		-	-	-	-	-	-	-	150			
Preparation and protection of the master's diploma		240	8		-	-	-	-	-	-	-	-	-			240
Quantity of term papers (projects)				-	-	3	-	-	-	-	-	-	-	-	-	
Quantity of examinations				10	-	-	-	-	-	-	-	-	-	-	-	
Quantity of tests				-	7											
Totally by the OKR «Magister»		2700	90	10	7	3	710	315	345	50	1600	-	150	-	-	240

III. STRUCTURE OF TRAINING PROGRAM

Training disciplines	Hours	Credits	%
1. Obligatory training disciplines	1170	39	43,3
2. Training disciplines to be chosen	1140	41	42,2
2.1. Disciplines by choose of the University	360	12	13,3
2.2. Disciplines by choose of students	780	26	28,9
3. Other types of training	390	13	14,5
Totally by the OKR program	2700	90	100

IV. TOTALIZED DATA ON BUDGET OF TIME, WEEKS

Year of training	Theoretical training	Examination session	Practical training	Preparation of the magister's diploma	State attestation	Vacations	In total
1	30	5	9			8	52
2	10	2		5	1		18
Totally by the OKR program	40	7	9	5	1	8	70

V. PRACTICAL TRAINING

№	Form of practice	Semester	Hours	Credits	Quantity of weeks
1	Practical training	II	150	5	9

VI. TERM PAPERS AND PROJECTS

№	Appellation of the discipline	Hours	Credits	Term paper	Term project
1	Actual problems of the branch	30	1	-	1
2	Modern technologies of storage and preservation of fish products	30	1	-	1
3	Term project by specialty	30	1	-	1

VII. STATE ATTESTATION

№	Constituent of attestation	Hours	Credits	Quantity of weeks
1	Preparation and defense of the master's diploma	240	8	6

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
FACULTY OF ALIMENTARY TECHNOLOGIES AND MANAGING OF QUALITY OF PRODUCTS
OF AGRICULTURAL COMPLEX**

**CURRICULUM
of training of specialists joined in 2015**

Level of higher education	Second (Master of Science)
Sphere of knowledge	1801 «Specific categories»
Specialty	8.18010010 «Quality, standardization and certification»
Master's program	Educational and professional
Specializations	«Managing of quality and safety of foodstuffs»; «Environmental standardization and certification»; «Managing of quality, standardization and certification at enterprises and organizations of forestry»
Form of training	Daytime training
Duration of training (YeKTS quantity)	1,5 years (90)
Initial level of knowledge	OKR «Bachelor»
Grade of higher education	«Master of sciences»
Qualification	Specialist in sphere of standardization, certification and quality management

II. PLAN OF PROCESS OF TRAINING

№	Appellation of training discipline	General capacity		Form of control of level of knowledge by semesters			Training in auditorium (hours)				Self-dependent training		Practical courses		Distribution of training hours spent in a week by courses of training and of semesters		
		Hours	Credits	includes			In total	includes			Training course	Industrial training	1 course	2 course	1	2	3
				Examination	Test	Term paper (project)		Lectures	Exercise in laboratories	Practical training (workshops)							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1. OBLIGATORY TRAINING DISCIPLINES																	
1	Philosophy of science and innovative progress	90	3	1	-	-	30	15	-	15	60			2			
2.	Businesslike foreign language	90	3	1	-	-	30	-	-	30	60			2			
3.	Economical aspects of entrepreneurship	90	3	3	-	-	45	15	-	30	45						3
4	Research and innovative processes	120	4	2	-	-	30	15	-	15	90				2		
5	Fundamental of processual approach and methods of taking of decisions	120	4	3	-	-	40	20	-	20	80						4
6	International and regional standardization and certification	90	3	-	3	-	20	20	-	-	70	-	-	-	-		2
7	Quality management	180	6	1		1	60	30	-	30	120			4			
8	Standardization	120	4	1			45	15	-	30	90			3			
9	Audit and certification	120	4	1			45	15	-	30	75			3			
10	Quality, safety and hygiene of products of agriculture	150	5	2		2	45	15	-	30	105				3		
11	Monitoring and methods of betterment of quality of products of agriculture	120	4		1		30	15	-	15	90			2			
12	Managing of quality of products of agriculture and processes of its production	150	5	2			60	30	-	30	90				4		
13	Standardization and certification of products of agriculture	180	6	2		2	60	30	-	30	120				4		
14	Management of environment	120	4		2		30	15	-	15	90				2		
15	Management of personnel	90	3		2		30	15	-	15	60				2		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
16	Mathematical modeling	90	3		3		30	15	-	15	60					2
Totally		1920	64	11	5	3	620	280	-	340	1300			12	15	10
2. TRAINING DISCIPLINES TO BE CHOSEN																
2.1 Disciplines by choose of the University																
1	Legal support of problems of management	90	3		2		45	15	-	30	45				3	
2	Psychology of management	90	3		1		30	15	-	15	60			2		
3	Information technologies to be taken in systems of quality management, standardization and certification	90	3	3			40	20	-	20	50					4
Totally		270	9	1	3		115	50	-	65	155			2	3	4
2.2 Disciplines by choose of students																
Specialization «Management of safety and quality of foodstuffs»																
1	Veterinarian sanitary and hygiene of processing of products of farming of livestock	90	3		1		40	20		20	50					4
Totally		90	3		1		40	20		20	50					4
Specialization «Environmental standardization and certification»																
1	Environmental standardization and certification	90	3		1		40	20		20	50					4
Totally		90	3		1		40	20		20	50					4
Specialization «Management of quality, standardization and certification at enterprises and organizations of woody industry»																
1	External economic activity in complex of woody industries	90	3		1		40	20		20	50					4
Totally		90	3		1		40	20		20	50					4
In total		360	12	1	4		155	70		85	205			2	3	8
3. OTHER TYPES OF TRAINING																
Preparation and protection of the master's diploma																
	Practical training	180	6													
	Quantity of term papers	240	8													
	Quantity of tests				10											
	Quantity of examinations			12												
Totally by the OKR «Magister»		2700	90	12	12	10	3	775	350	-	425	1505	-	240	18	18

III. STRUCTURE OF PLAN OF TRAINING

Training disciplines	Hours	Credits	%
1. Obligatory training disciplines	1920	64	71,1
2. Training disciplines to be chosen	360	12	13,3
2.1. Disciplines by choose of the University	270	9	10,0
2.2. Disciplines by choose of students	90	3	3,3
3. Other types of training	420	14	15,6
Totally by the OKR program	2700	90	100

IV. TOTALIZED DATA ON BUDGET OF TIME, WEEKS

Year of training	Theoretical training	Examination session	Practical training	Preparation of the master's diploma	State attestation	Vacations	In total
1	30	5	9	–	–	8	52
2	10	2	–	5	1	–	18
Totally by the OKR program	40	7	9	5	1	8	70

V. PRACTICAL TRAINING

№	Form of practice	Semester	Hours	Credits	Quantity of weeks
1	Practical training	1	240	8	9

VI. TERM PAPERS AND PROJECTS

№	Appellation of the discipline	Hours	Credits	Term paper	Term project
1	Standardization and certification of products of agriculture	15	0,5	1	
2	Quality management	15	0,5	1	
3	Quality, safety and hygiene of products of agriculture	15	0,5	1	

VII. STATE ATTESTATION

№	Constituent of attestation	Hours	Credits	Quantity of weeks
1	Preparation and defense of the master's diploma	180	6	6

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF CONSTRUCTION AND DESIGN

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0505 «Mechanical engineering and processing of materials»
Specialty	8.05050303 «Equipment of Forest Complex»
Master's program	Educational and Professional
Specialization	«Constructing machines, designing and testing of Equipment of Forest Complex»
Master's program	Educational and Scientific
Specialization	«Mechatronic systems of Equipment of Forest Complex»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
Educational and Professional	2 years (120)
Educational and Scientific	the first level of higher education (bachelor)
on the basis of	«Master»
Educational degree	M.Sc. Mechanical Engineering
Qualification	

I. SCHEDULE OF TRAINING

Master's program Educational and Professional

[illegible]

Master's program Educational and Scientific

[illegible]

Year of training	2016 year												2017 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Conventions:

- | | | |
|---|---|----------------------|
| | - | Theoretical training |
| : | - | Examination period |
| - | - | Holidays |

- | | |
|-----------|---|
| X | - Scientific-practical training |
| II | - Preparation of master thesis |
| // | - State certification (state examination and diploma defence) |

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)				Audience employments (hours)				Individual work			Practical training		Distribution of hours per week within an acad. year and semesters				
		Hours	Credit	Semesters		Exam	Test	Course paper	Total	Including		13	14	15	16	17	1 year		2 year		
										Lectures	Laboratory classes						Practical classes	1	2	3	4
1. COMPULSORY ACADEMIC DISCIPLINES																					
1	Applied computer technologies of equipment of forest complexes	90	3	+				45	15	30							3				
2	Measuring devices and methods of measurement	90	3		+			20	10	10								2			
3	CAD of equipment of forest complexes	180	6	+	+	30		60	30	30					2	2					
4	Engineering to using of life resources	90	3		+			30	15	15						2					
5	Theory and designing of equipment of forest complexes	120	4	+				60	30	30				4							
6	Mechatronic systems of equipment of forest complexes	150	5		+			60	30	30							4				
7	Automation of technical systems of equipment of forest complexes	90	3		+			30	15	15				2							
8	Reliability of equipment of forest complexes	120	4	+		30		30	30	15	15				2						
Total		930	31	4	5	60	175	0	535	0	10	11	2	0							
2. ELECTIVE ACADEMIC DISCIPLINES																					
2.1. Disciplines chosen by University																					
1	Business Foreign Language	150	5	+				45	15		30	105			3						
2	Philosophy of Science	90	3	+				30	15		15	60			2						
3	Patent Science and Copyright	120	4		+			45	15	15	15	75			3						
Total		360	12	2	1	0	120	45	15	60	240	0	0	8	0	0	0	0	0		
2.2. Disciplines chosen by students																					
Educational and Professional specialization																					
Master's program «Constructing machines, designing and testing of equipment of forest complexes»																					
1	Theory and designing of vehicles for forestry	240	8	+				80	40	40		160				4		2			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2	Methods of designing of equipment of forest complexes	120	4	+			40	20	20		80					4	
3	Testing of equipment of forest complexes	90	3	+			20	10	10		70					2	
4	Design of vibration machines for forestry	90	3		+		20	10	10		70					2	
5	Design woodworking machinery	120	4	+			45	15	30		75			3			
6	Mechanics of materials and timbers	90	3		+		20	10	10		70					2	
7	Dynamics of equipment of forest complexes	120	4		+	30	20	10	10		70					2	
8	Designing of technical systems for forestry	90	3	+			20	10	10		70					2	
Total		960	32	5	3	30	265	125	140	0	665	0	0	0	7	16	0
Educational and Scientific specialization																	
Master's program «Mechatronic systems of equipment of forest complexes»																	
1	Testing and certification of equipment of forest complexes	90	3	+			20	10	10		70					2	2
2	Vibration processes in equipment of forest complexes	90	3		+		20	10	10		70					2	2
3	Nanotechnology	90	3		+		30	15	15		60				2		
4	Reliability of technical systems for equipment of forest complexes	90	3	+			45	15	30		45			3			
5	Newest design methods of equipment of forest complexes	120	4	+			40	20	20		80					4	4
6	Optimization of technical systems for forestry	90	3	+			30	15	15		60				2		
7	Optimizing of designs for woodworking equipment	90	3	+			20	10	10		70					2	2
8	Dynamics of technical systems of equipment of forest complexes	120	4	+		30	20	10	10		70					2	4
9	Mathematical modeling of technical systems for forestry	90	3		+		20	10	10		70					2	2
10	Mechanics of contact interaction of machines with timber	90	3		+		20	10	10		70					2	2
Total		1860	62	9	8	30	579	282	297	0	1251	0	0	0	7	16	18
3. OTHER FORMS OF TRAINING																	
State examination																	
Practical training		300	10									180	120				
Course work		150	5														
Tests						3											
Exams				12													
Total (Educational and Professional specialization)		2700	90	12	12	90	720	330	330	60	1440	180	120	18	18	18	0
Total (Educational and Scientific specialization)		3600	120	15	14	90	1034	487	487	60	2026	180	120	18	18	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines			
Educational and Professional specialization	930	31	34
Educational and Scientifičal specialization	930	31	26
2. Elective academic disciplines			
2.1. Disciplines chosen by University			
Educational and Professional specialization	360	12	13
Educational and Scientifičal specialization	360	12	10
2.2. Disciplines chosen by students			
Educational and Professional specialization	960	32	36
Educational and Scientifičal specialization	1860	62	52
3. Other form of training			
Educational and Professional specialization	450	15	17
Educational and Scientifičal specialization	450	15	12
Total for the specialty			
Educational and Professional specialization	2700	90	100
Educational and Scientifičal specialization	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of bachelor thesis	State Certification	Holidays	Total
Educational and Professional specialization							
1	30	5	11	-	-	10	56
2	10	2	-	4	1	-	17
Total for the specialty	40	7	11	4	1	10	73
Educational and Scientifičal specialization							
1	30	5	11	-	-	10	56
2	30	6	-	4	1	3	44
Total for the specialty	60	11	11	4	1	13	100

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Design and engineering practice	1	144	4	4
2	Production practice	2	216	6	7

VI. COURSE PAPER AND PROJECTS

Nº	Discipline	Hours	Credits	Course paper	Course projects
1	Reliability of Agricultural Machines (Reliability of Technical Systems)	30	1	-	1
2	CAD of equipment of forest complexes	30	1	-	1
3	Dynamics of equipment of forest complexes (Dynamics of technical systems of equipment of forest complexes)	30	1	-	1

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis preparation and defense	150	5	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF CONSTRUCTION AND DESIGN

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0505 «Mechanical engineering and processing of materials»
Specialty	8.05050312 «Machinery and Equipment of Agricultural Production»
Master's program	Educational and Professional
Specialization	«Constructing machines, designing and testing of agricultural machines»
Master's program	Educational and Scientific
Specialization	«Mechatronic systems of machines of agricultural production»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
Educational and Professional	2 years (120)
Educational and Scientific	the first level of higher education (bachelor)
on the basis of	«Master»
Educational degree	Engineer-Designer
Qualification	

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work		Practical training		Practical training		Distribution of hours per week within an acad. year and semesters						
		Hours		Credit		Semesters		Exam		Test		Course paper		Total		Including		Laboratory classes		Practical classes		Number of weeks in semester	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18						
1. COMPULSORY ACADEMIC DISCIPLINES																							
1	Automation of Technical Systems of Agricultural Machines	90	3		+		30	15	15		60			2									
2	Applied Computer Technologies	90	3		+		45	15	30		45				3								
3	Mechanics of Technical Systems Constructions	90	3	+			45	15	30		45				3								
4	Measuring Devices and Methods of Measurement	90	3		+		20	10	10		70					2							
5	Engineering of Systems of Nature Using	90	3		+		30	15	15		60				2								
6	CAD	210	7	+	+	30	60	30	30		120			2	2								
7	Theory of Designing of Agricultural Machines	180	6	+			60	30	30		120			4									
8	Mechatronic Systems of Agricultural Machines	90	3		+		30	15	15		60				2								
Total		930	31	3	6	30	320	145	175	0	580	0	0	8	12	2	0						
2. ELECTIVE ACADEMIC DISCIPLINES																							
2.1. Disciplines chosen by University																							
1	Business Foreign Language	150	5	+			45	15	30		105			3									
2	Philosophy of Science	90	3	+			30	15		15	60			2									
3	Patent Science and Copyright	90	3		+		30	15	15		60			2									
Total		330	11	2	1	0	105	45	45	15	225	0	0	7	0	0	0						
2.2. Disciplines chosen by students																							
Educational and Professional specialization																							
Master's program «Constructing machines, designing and testing of agricultural machines»																							
1	Design of Vibration Machines	90	3	+			30	15	15		60				2								
2	Design of Machines and Equipment in Bioenergetics	90	3	+			20	10	10		70					2							

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
3	Testing of Agricultural Machinery	90	3	+			20	10	10		70					2	
4	Reliability of Agricultural Machines	120	4	+		30	45	15	30		45			3			
5	Mechanics of Environments	90	3		+		30	15	15		60				2		
6	Methods of Construction of Agricultural Workers Machines	90	3	+			40	20	20		50						
7	Mechatronics	120	4	+	+		50	25	25		70				2	2	
8	Design of Machines and Equipment in Animal Husbandry	90	3	+			20	10	10		70					2	
9	Theory of Technical Systems	210	7		+	30	40	20	20		140					4	
Total		990	33	7	3	60	295	140	155	0	635	0	0	3	6	16	0
Educational and Scientific specialization																	
Master's program «Mechatronic systems of machines of agricultural production»																	
1	Mathematical Modelling of Technical Systems	90	3		+		20	10	10		70					2	2
2	Vibrational Processes in Agricultural Machinery	90	3	+			20	10	10		70					2	2
3	Testing and Certification of Agricultural Machinery	90	3	+			20	10	10		70					2	2
4	Reliability of Technical Systems	120	4	+		30	45	15	30		45			3			
5	Experimental Research Methods and Design Agricultural Machinery	90	3	+			40	20	20		50					4	4
6	History of Techniques	90	3	+			30	15	15		60				2		
7	Theory of Mechatronic Systems of Agricultural Machines	120	4	+	+		50	25	25		70				2	2	3
8	Mechanics of Contact Interaction of Operational Devices with Agricultural Materials	90	3		+		20	10	10		70					2	2
9	Dynamics and Optimization of Machines	210	7	+	+	30	50	25	25		130				2	2	3
Total		1890	63	8	8	60	609	310	299	0	1221	0	0	3	6	16	18
3. OTHER FORMS OF TRAINING																	
State examination																	
Practical training		300	10									180	120				
Course work		150	5														
Tests						3											
Exams					10												
Total (Educational and Professional specialization)		2700	90	12	12	90	720	330	330	60	1440	180	120	18	18	18	0
Total (Educational and Scientific specialization)		3600	1200	15	14	90	1034	487	487	60	2026	180	120	18	18	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines			
Educational and Professional specialization	930	31	34
Educational and Scientific specialization	930	31	26
2. Elective academic disciplines			
2.1. Disciplines chosen by University			
Educational and Professional specialization	360	12	13
Educational and Scientific specialization	360	12	10
2.2. Disciplines chosen by students			
Educational and Professional specialization	960	32	36
Educational and Scientific specialization	1860	62	52
3. Other form of training			
Educational and Professional specialization	450	15	17
Educational and Scientific specialization	450	15	12
Total for the specialty			
Educational and Professional specialization	2700	90	100
Educational and Scientific specialization	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of bachelor thesis	State Certification	Holidays	Total
Educational and Professional specialization							
1	30	5	11	-	-	10	56
2	10	2	-	4	1	-	17
Total for the specialty	40	7	11	4	1	10	73
Educational and Scientific specialization							
1	30	5	11	-	-	10	56
2	30	6	-	4	1	3	44
Total for the specialty	60	11	11	4	1	13	100

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Design and engineering practice	1	144	4	4
2	Production practice	2	216	6	7

VI. COURSE PAPER AND PROJECTS

Nº	Discipline	Hours	Credits	Course paper	Course projects
1	Reliability of Agricultural Machines (Reliability of Technical Systems)	30	1	-	1
2	CAD	30	1	-	1
3	Theory of Technical Systems (Dynamics and Optimization of Machines)	30	1	-	1

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis preparation and defense	150	5	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF CONSTRUCTION AND DESIGN

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0601 «Building and Architecture»
Specialty	8.06010101 «Industrial and Civil Construction»
Master's program	Educational and Professional
Specialization	«Innovative projects of industrial and civil construction of agricultural and environmental systems»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
on the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Researcher of Industrial and Civil Construction

I. SCHEDULE OF TRAINING

2016 year

Conventions:

-	Theoretical training	X
-	Examination period	II
-	Holidays	//

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines		Total amount		Forms of knowledge control (for sem.)		Audience employments (hours)				Individual work			Practical training		Practical training		Distribution of hours per week within an acad. year and semesters			
																		1 year		2 year	
	Semesters		Course paper		Lectures		Laboratory classes		Practical classes		Number of weeks in semester										
	Hours	Credit	Exam	Test	Total	9	10	11	12	13	14	15	16	17							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17				
1. COMPULSORY ACADEMIC DISCIPLINES																					
1	Building Normes of Ukraine (OF, MC, IB)	150	5		+		45	15	30		45			4							
2	Business Foreign Language	120	4		+		20	10	10		70			2	2						
3	Organization of Construction	90	3	+	+	30	60	30	30		90					2					
4	Basic of Systems Analysis	150	5		+		30	15	15		60					4					
5	Theory and Methodology of Research	120	4	+			60	30	30		60			4							
6	Mechatronic Systems in Construction	120	4		+		60	30	30		90			3							
7	Budget and Contract Documentation	180	6	+			40	20	20		80					4					
8	Engineering protection and preparation area (OF, IB)	150	5		+		30	15	15		60			3							
9	CAD in Construction	150	5	+		30	30	15	15		60				4						
Total		1230	41,0	0	0	60	375	180	195	0	615	0	0	16	6	10					
2. ELECTIVE ACADEMIC DISCIPLINES																					
2.1. Disciplines chosen by University																					
1	Tests of Building Construction (OF)	120	4	+			45	15		30	105			2							
2	Tests of Building Construction (IB)	90	3	+			30	15		15	60				2						
3	Tests of Building Construction (MC)	120	4		+		45	15	15	15	75				2						
Total		330	11	0	0	0	120	45	15	60	240	0	0	2	4	0					
2.2. Disciplines chosen by students																					
1	Innovative Engineering and Construction Technologies in Agrarian Building	120	4	+			45	15	10		70				2						
2	Development of Efficient Building Construction (OF, MC, IB)	150	5		+	30	20	10	10		70				3						

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	Designing Buildings Agrarian Purpose (OF, MC, IB)	180	6	+			20	10	10		70				3	3
4	Environmental Security Processes	120	4	+			80	40	40		160					2
5	Occupational Safety in Construction	120	4	+			20	10	10		70					3
Total		690	23	0	0	30	160	80	80	0	440	0	0	0	8	8
Total		2250	75	0	0	90	655	305	290	60	1295	0	0	18	18	18
3. OTHER FORMS OF TRAINING																
Practical training		210	7									180	120			
State examination		240	8													
Course work						3										
Tests					8											
Exams				10												
Total		2700	90	11	7	3	699	289	30	380	1311	60	300	18	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1230	41	45
2. Elective academic disciplines	1020	34	40
2.1. Disciplines chosen by University	330	11	15
2.2. Disciplines chosen by students	690	23	25
3. Other form of training	450	15	15
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of bachelor thesis	State Certification	Holidays	Total
1	30	5	11	-	-	10	56
2	10	2	-	4	1	-	17
Total for the specialty	40	7	11	4	1	10	73

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Design and engineering practice	1	144	4	4
2	Production practice	2	216	6	6

VI. COURSE PAPER AND PROJECTS

№	Discipline	Hours	Credits	Course paper	Course projects
1	Mechatronic systems in construction	30	1	-	1
2	CAD in construction	30	1	-	1
3	Designing buildings at agrarian appointment	30	1	-	1

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis preparation and defense	240	8	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL UKRAINE**

MECHANICS AND TECHNOLOGY FACULTY

**CURRICULUM
training specialists in 2015 entry**

The level of higher education	second (Master)
Branch of knowledge	0701 «Transport and transport infrastructure»
Specialty	8.07010102«Organization of Transportation and Management in Transport (road transport)»
training program	educational and professional
Specialization	«Management of road transport of agricultural products in terms of environmental and economic constraints»
Form of study	daily
Apprenticeship (volume ECTS)	1,5 years (90)
Based on	the educational degree «Bachelor»
Higher education degree	«Master»
Qualification	Researcher (in transport)

I. SCHEDULE OF TRAINING

training specialists second (master's) level of higher education in 2015 entry specialty 8.07010102 «Organization of Transportation and Management in Transport (road transport)»

[illegible]

Legend:

-	theoretical study	X	-	internship
-	examination period	II	-	preparation of master's work
-	holiday	//	-	state certification (protection of master's thesis)

II. CURRICULUM

No	Subjects	The total amount		The forms of knowledge control				Lecture classes				Independent work				Average weekly hours by years of study and semesters			
		hours	credits	examination	test	course		Total	including		10	11	12	13	14	15	16	17	
						projects	coursework		lectures	laboratory classes									practical classes (seminars)
1. MANDATORY TRAINING COURSE																			
1	Quality management technology	150	5	1				46	22		24	104	3						
2	Project Analysis	150	5		1			46	22		24	104	3						
3	Freight forwarding activity	150	5	2				46	22	24		104				3			
4	Roads farm appointment	120	4		2			46	22	24		74	2						
5	Navigation systems in transport	150	5	2				46	22	24		104			3				
6	Supply chain management	180	6	2				60	30		30	120			4				
7	transport Economics	180	6	3				60	30		30	120				4			
8	Recycling vehicles	180	6	3				60	30	30		120				4			
Together		1260	42					410	200	102	108	850	6	12	8	0			
2. SELECTIVE COURSES																			
2.1. Disciplines elective university																			
1	Methodology and organization of scientific research of the basics of intellectual property	90	3	1				46	22		24	44	3						
2	Business Foreign Language	150	5	1				60	30	30		90	4						
3	Agricultural policy	90	3		3			46	22	24		44				3			
Result		330	11					152	74	54	24	178	7	0	3	0			
2.2. Subjects chosen by the student																			
Specialization «Management of road transport of agricultural products in terms of environmental and economic constraints»																			
1	Loads agriculture	90	3	1				46	22	24		44	3						
2	Sanitation and hygiene vehicles	90	3		1			30	15		15	60	2						
3	Testing and certification of vehicles	90	3		2			46	22	24		44			3				
4	Occupational Health in	90	3	2				46	22		24	44			3				
5	Technical service vehicles	90	3		3			46	22	24		44				3			
6	Resource vehicle	120	4	3				60	30		30	60				4			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total student's choice		570	19					274	133	72	69	296	5	6	7	0
Just a selective part		900	30					426	207	126	93	474	12	6	10	0
3. OTHER STUDIES																
Internship		360	12		1, 2			360								
Preparation and defense of master's work		180	6		3			180								
Results		540	18					540								
Total on specialty		2700	90					1376	407	228	201	1324	18	18	18	0

III. STRUCTURE OF CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory subjects	1260	42	47
2. Selective Courses	900	30	33
2.1.Disciplines elective university	330	11	12
2.2. Subjects chosen by the student	570	19	21
3. Other training	540	18	20
Results by specialty	2700	90	100

IV. SUMMARY OF BUDGET SINCE WEEK

Academic year	Theoretical study	Examination period	Practical training	Preparation of master's work	State attestation	Holiday	Result
1	30	5	10	–	–	11	56
2	10	3	–	3	2	–	18
Result	40	8	10	3	2	11	74

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Internship	1, 2	360	12	10

VI. STATE ATTESTATION

№	Component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	180	6	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL UKRAINE**

MECHANICS AND TECHNOLOGY FACULTY

**CURRICULUM
training specialists in 2015 entry**

The level of higher education	second (Master)
Branch of knowledge	0701 «Transport and transport infrastructure»
Specialty	8.07010104 «Organization and regulation of traffic»
training program	educational and professional
Specializations	«Technology of traffic»
Form of study	daily
Apprenticeship (volume ECTS)	1,5 years (90)
Based on	the educational degree «Bachelor»
Higher education degree	«Master»
Qualification	Researcher (in transport)

I. SCHEDULE OF TRAINING
training specialists second (master's) level of higher education in 2015 entry
specialty 8.07010104 «Organization and regulation of traffic»

[illegible]

Legend:

	-	theoretical study	X
	-	examination period	II
	-	holiday	//

II. CURRICULUM

No	Subjects	The total amount		The total amount				Lecture classes				Independent work				Average weekly hours by years of study and semesters				
		hours	credits	examination	test	Course		result	including		13	14	15	16	17	Academic year				
						projects	coursework		lectures	laboratory classes						practical training ^a (seminar)	semesters			
																	1	2	3	4
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17				
1. MANDATORY TRAINING COURSE																				
1	Quality management technology	120	4	1					46	22	24		74	3						
2	Automated Traffic Management	150	5		2				46	22	24		104		3					
3	Transport planning of large and major cities	150	5	2					46	22		24	104		3					
4	Special methods of traffic	180	6	2					46	22	24		134		3					
5	Navigation systems in transport	150	5	2					46	22	24		104		3					
6	Monitoring and inspection of vehicles	150	5	3					46	22		24	104				3			
7	Traffic Systems	180	6	3					60	30	30		120				4			
8	Economics of traffic	180	6	3					60	30		30	120				4			
Together		1260	42					396	192	126	78	864	3	12	11	0				
2. SELECTIVE COURSES																				
2.1. Disciplines elective university																				
1	Methodology and organization of scientific research of the basics of intellectual property	90	3	1					46	22		24	44	3						
2	Business foreign language	150	5	1					60	30	30		90	4						
3	Agricultural policy	90	3		3				46	22	24		44				3			
Result		330	11					152	74	54	24	178	7	0	3	0				
2.2. Subjects chosen by the student																				
Specialization «Technology of Traffic»																				
1	Transport planning of rural areas	90	3		1				46	22		24	44	3						
2	Loads agriculture	90	3	1					46	22	24		44	3						
3	Sanitation and hygiene vehicles	90	3		1				30	15	15		60	2						
4	Occupational Health in	90	3	2					46	22	24		44		3					
5	Testing and certification of vehicles	90	3		2				46	22	24		44		3					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6	Transport planning of rural areas	120	4	3				60	30		30	60			4	
Total student's choice		570	19					274	133	87	54	296	8	6	4	0
Just a selective part		900	30					426	207	141	78	474	18	18	18	0
3. OTHER STUDIES																
Internship		360	12		1, 2			360								
Preparation and defense of master's work		180	6		3			180								
Results		540	18					540								
Total on specialty		2700	90					1362	399	267	156	1338	18	18	18	0

III. STRUCTURE OF CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory subjects	1260	42	47
2. Selective Courses	900	30	33
2.1. Disciplines elective university	330	11	12
2.2. Subjects chosen by the student	570	19	21
3. Other training	540	18	20
Results by specialty	2700	90	100

IV. SUMMARY OF BUDGET SINCE WEEK

Academic year	Theoretical study	Examination period	Practical training	Preparation of master's work	State attestation	Holiday	Result
1	30	5	10	–	–	11	56
2	10	3	–	3	2	–	18
Results	40	8	10	3	2	11	74

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Internship	1, 2	360	12	10

VI. STATE ATTESTATION

Nº	component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	180	6	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL UKRAINE**

MECHANICS AND TECHNOLOGY FACULTY

**CURRICULUM
training specialists in 2015 entry**

The level of higher education	second (Master)
Branch of knowledge	1001 «Techniques and Energetics of agricultural production»
Specialty	8.10010203 «Mechanization of agriculture»
training program	educational and professional
Specializations	«Technology and technology in crop», «Technology and techniques in animal husbandry», «Technology and technique of processing industries», «Technology and equipment service enterprises», «Pratseohoronni principles ahrobioinzheneriyi», «Technology and equipment in biological systems»
Form of study	daily
Apprenticeship (volume ECTS)	1,5 years (90)
Based on	the educational degree «Bachelor»
Higher education degree	«Master»
Qualification	research engineer with the Agricultural Mechanization

I. SCHEDULE OF TRAINING

Legend:

II. CURRICULUM

№	Subjects	The total amount		The total amount				Lecture classes				Independent work				Average weekly hours by years of study and semesters			
		hours	credits	examination	test	Course		result	including		practical classes (seminars)	1	2	3	4	Academic year			
						projects	projects		lectures	laboratory classes						1	15	15	2
1. MANDATORY TRAINING COURSE																			
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17			
1	Legislation and Law in agriculture	120	4	1				46	22		24	74	3						
2	Mechatronic system engineering APC	120	4	1				46	22	24		74	3						
3	Logistics in mechanization SG	150	5	2				60	30	30		90		4					
4	Innovative engineering technologies	120	4		2			46	22		24	74		3					
5	Environmental security processes	150	5	3				60	30	30		90			4				
6	Economy of technological systems	150	5	3				60	30		30	90			4				
7	Precision Agriculture	150	5		3			60	30		30	90			4				
Together		960	32					378	186	84	108	582	6	7	12	0			
2. SELECTIVE COURSES																			
2.1. Disciplines elective university																			
1	Methodology and organization of scientific research of the basics of intellectual property	120	4		1			46	22		24	74	3						
2	Agricultural policy	150	5		1			46	22		24	104	3						
3	Business Foreign Language	210	7	2				76	38		38	134		5					
Result		480	16					168	82	0	86	312	6	5	0	0			
2.2. Subjects chosen by the student																			
Specialization «Technologies and techniques in crop»																			
1	Design and calculation of technological systems in crop	240	8	1				90	44		46	150	6						
2	Design processes in plant	240	8	2				90	44		46	150		6					
3	Process control in crop	240	8	3				90	44		46	150			6				
Result		720	24					270	132	0	138	450	6	6	6	0			
Specialization «Technologies and techniques in animal husbandry»																			
1	Design and calculation of technological systems in animal husbandry	240	8	1				90	44		46	150	6						

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Design processes in livestock	240	8	2				90	44		46	150		6		
3	Process control in livestock	240	8	3				90	44		46	150			6	
Result		720	24					270	132	0	138	450	6	6	6	0
Specialization «Technology and technique of processing industries»																
1	Design and calculation systems of technological processing industries	240	8	1				90	44		46	150	6			
2	Design processes processing industries	240	8	2				90	44		46	150		6		
3	Process control processing industries	240	8	3				90	44		46	150			6	
Result		720	24					270	132	0	138	450	6	6	6	0
Specialization «Technologies and equipment service companies»																
1	Design and calculation of service of process systems	240	8	1				90	44		46	150	6			
2	Design processes service machines	240	8	2				90	44		46	150		6		
3	Corporate Governance Technical Service	240	8	3				90	44		46	150			6	
Result		720	24					270	132	0	138	450	6	6	6	0
Specialization «Pratseohorronni system in bioengineering»																
1	Organization of labor agro bioengineering	240	8	1				90	44		46	150	6			
2	Theory safety ahroinzheneriyi	240	8	2				90	44		46	150		6		
3	Safety productions agro bioengineering	240	8	3				90	44		46	150			6	
Result		720	24					270	132	0	138	450	6	6	6	0
Specialization «Technologies and techniques in biological systems»																
1	Design and calculation of technological systems	240	8	1				90	44		46	150	6			
2	Design of biotechnological processes	240	8	2				90	44		46	150		6		
3	Office biotechnological processes	240	8	3				90	44		46	150			6	
Result		720	24					270	132	0	138	450	6	6	6	0
Together		2160	72					816	400	84	332	1344	18	18	18	0
3. OTHER STUDIES																
Internship		360	12	1,2								360				
Preparation and defense of master's work		180	6	3								180				
Results		540	18									540				
Total on specialty		2700	90					816	400	84	332	1884	18	18	18	0

III. STRUCTURE OF CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory subjects	960	32	36
2. Selective Courses	1200	40	44
2.1. Disciplines elective university	480	16	18
2.2. Subjects chosen by the student	720	24	26
3. Other training	540	18	20
Results by specialty	2700	90	100

IV. SUMMARY OF BUDGET SINCE WEEK

Academic year	Theoretical study	Examination period	Practical training	Preparation of master's work	State attestation	Holiday	Result
1	30	5	10	–	–	11	56
2	10	3	–	3	2	–	18
Results	40	8	10	3	2	11	74

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Internship	1, 2	360	12	10

VI. STATE ATTESTATION

Nº	Component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	180	6	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL UKRAINE**

MECHANICS AND TECHNOLOGY FACULTY

**CURRICULUM
training specialists in 2015 entry**

The level of higher education	second (Master)
Branch of knowledge	1001 «Techniques and Energetics of agricultural production»
Specialty	8.10010202 «Transport technologies and facilities in agroindustrial complex»
training program	educational and professional
Specializations	«Technology and technology in crop production»
Form of study	daily
Apprenticeship (volume ECTS)	1,5 years (90)
Based on	the educational degree «Bachelor»
Higher education degree	«Master»
Qualification	research engineer with transport technologies in agriculture

I. SCHEDULE OF TRAINING

training specialists second (master's) level of higher education in 2015 entry
8.10010202 specialty «Transport technologies and facilities in agroindustrial complex»

[illegible]

Legend:

- | | | |
|---|---|--------------------|
| | - | theoretical study |
| : | - | examination period |
| - | - | holiday |

- | | |
|-----------|---|
| X | - internship |
| II | - preparation of master's work |
| // | - state certification (protection of master's thesis) |

II. CURRICULUM

No	Subjects	The total amount		The total amount				Lecture classes				Independent work				Average weekly hours by years of study and semesters			
		hours	credits	examination	test	Course		result	including		practical classes (seminars)		Academic year						
						projects	projects		lectures	laboratory classes									
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17					
1. MANDATORY TRAINING COURSE																			
1		180	6	1				60	30		30	120	4						
2		90	3		1			30	15	15		60	2						
3		120	4		2			46	22	24		74		3					
4		120	4	2				46	22		24	74		3					
5		120	4	2		2		46	22		24	74		3					
6		90	3		2			46	22		24	74		3					
7		180	6	2				30	15	15		60		2					
8		180	6	2				60	30	30		120				4			
9		90	3		3			30	15			60				4			
10		90	3		3			30	15			60				2			
Together		1260	42					438	216	84	138	822	6	11	12	0			
2. SELECTIVE COURSES																			
2.1. Disciplines elective university																			
1	Methodology and organization of scientific research of the basics of intellectual property	90	3		1			46	22		24	44	3						
2	Agricultural policy	90	3		1			46	22		24	44	3						
3	Business Foreign Language	150	5	2				76	38		38	74		5					
Result		330	11					168	82	0	86	162	6	5	0	0			
2.2. Subjects chosen by the student																			
Specialization "Technologies and techniques in crop"																			
1	Innovative engineering and transport technology	120	4	1				46	22	24		74	3						
2	Security transport processes	120	4	1				46	22	24		74	3						
3	Hygiene and features of the transport of animals and animal products	90	3		2			30	15	15		60		2					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
4	Occupational Health in	150	5	2				60	30	30		90			4	
5	Transportation of perishable goods	90	3		2			30	15	15		60			2	
Results		570	19					212	104	108		358	6	2	6	0
Together		2160	72					818	402	192	224	1342	18	18	18	0
3. OTHER STUDIES																
Internship		360	12	1, 2								360				
Preparation and defense of master's work		180	6	3								180				
Results		540	18									540				
Total on specialty		2700	90					818	402	192	224	1882	18	18	18	0

III. STRUCTURE OF CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory subjects	1260	42	47
2. Selective Courses	900	30	33
2.1. Disciplines elective university	330	11	12
2.2. Subjects chosen by the student	570	19	21
3. Other training	540	18	20
Results by specialty	2700	90	100

IV. SUMMARY OF BUDGET SINCE WEEK

Academic year	Theoretical study	Examination period	Practical training	Preparation of master's work	State attestation	Holiday	Result
1	30	5	10	–	–	11	56
2	10	3	–	3	2	–	18
Results	40	8	10	3	2	11	74

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Internship	1, 2	360	12	10

VI. STATE ATTESTATION

Nº	component certification	Hours	Credits	Number of weeks
1	Preparation and defense of master's work	180	6	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF ENERGETICS, AUTOMATICS AND ENERGY SAVING**

CURRICULUM of training specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	0502 «Automation and Control»
Specialty	8.05020201 «Automated Control of Technological Processes»
Master's program	Educational and Professional
Specialization	«Computer-Integrated process control systems of livestock breeding production», «Computer-Integrated process control systems of crop growing production», «Computer-Integrated systems of technological processes of recycling and storage of agricultural products»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
on the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	engineer-researcher of computer systems and automation

I. SCHEDULE OF TRAINING
Specialists for second (master) level of higher education in 2015
in specialty 8.05020201 «Automated Control of Technological processes»

Year of training	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Symbols:

X	-	Scientific-practical training
II	-	Preparation of master thesis
//	-	State certification (state examination and diploma defence)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work		Practical training		Practical training		Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	Semesters			Total	Including		10	11	12	13	14	1 year		2 year		
				Exam	Test	Course paper		Lectures	Laboratory classes						Seminars	1	2	3	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	15	16	17		
1. STANDARD ACADEMIC DISCIPLINES																			
1	Philosophy of Science and Innovation	90	3	1			36	12		24	54				3				
2	Civil Protection	90	3		1		24	12		12	66				2				
3	Automated Accounting of Energy and Material Resources	120	4		1		36	12	24		84				3				
4	Computer-Simulation Control Systems in Agriculture	150	5		2		44	11	22	11	106					4			
5	Technological Processes Automation	150	5	1		15	44	11	22	11	106					4			
6	Installation, Commissioning and Maintenance of Automation Systems	120	4	2			33	11	22		87				3				
7	Special Sections of High Mathematics	150	5	2		30	33	11	22		117					3			
8	CAD of Automation Systems in Agriculture	120	4	1		15	33	11	22		87					3			
9	ACS of Technological Processes in Agriculture	90	3	2			48	24		24	42				4				
10	Safety in the Area	90	3	1			36	12	24		54				3				
Total		1170	39				367	127	158	82	803	0	0	0	12	20	0	0	
2. ELECTIVE ACADEMIC DISCIPLINES																			
2.1. Disciplines offered by University																			
1	Agricultural Policy	90	3		1		36	12		24	54				3				
2	Methodology and Organization of Scientific Research on the Basics of Intellectual Property	90	3		1		20	10		10	70							2	
3	Business Foreign Language	150	5	1			36			36	114				3				
Total		330	11				92	22	0	70	238	0	0	0	6	0	0	2	
2.2. Disciplines chosen by students																			
1	Calculations of Economic Efficiency of Scientific Developments	90	3		3		20	10		10	70							2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Neuro Information Control Networks of Biotechnical Objects	120	4	3			40	20	20		80					4
3	Object-Oriented Programming	90	3		3		30	10	20		60					3
4	Robotic Complex and Systems in Agriculture	150	5		2		66	22	44		84			6		
5	Modeling and Identification of Biotechnical Objects in Agriculture	90	3		2		44	22	22		46				4	
Specialization «Computer-Integrated Process Control Systems of Livestock Production»																
6	Methods and Tools of Modern Automated Control of Technological Processes and Productions in Livestock	90	3	3		15	40	20	20		50					4
7	Features Computer Integrated Control Systems in Livestock	90	3	3			30	10	20		60					3
Total		720	24				270	114	146	10	450	0	0	6	4	16
Specialization «Computer-Integrated Process Control Systems of Crop Production»																
6	Methods and Tools of Modern Automated Control of Technological Processes and Productions in Crop	90	3	3		15	40	20	20		50					4
7	Features Computer Integrated Control Systems in Crop Production	90	3	3			30	10	20		60					3
Total		720	24				270	114	146	10	450	0	0	6	4	16
3. OTHER FORMS OF TRAINING																
Writing and Defense of Master's Thesis		180	6								480					
Practical Training		300	10									180	180			
Course work				x	x	3								1	1	1
Tests					9									4	4	3
Exams				12										3	3	3
Total		2700	90				729	263	304	162	1971	180	180	24	24	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1170	39	43
2. Elective academic disciplines	1050	35	39
2.1. Disciplines offered by University	330	11	12
2.2. Disciplines chosen by students	720	24	27
3. Other form of training	480	16	18
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master's thesis	State Certification	Holidays	Total
1	19	4	16	–	–	13	52
2	10	2	–	4	1	–	17
Total for the specialty	29	6	16	4	1	13	69

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Operational Training of Computer Systems	1	150	5	8
2	Research Training of Master's Thesis	2	150	5	8

VI. COURSE PAPER AND PROJECTS

№	Discipline	Hours	Credits	Course paper	Course projects
1	Complex course project in discipline: «Technological Processes Automation» та «Installation, Commissioning and Maintenance of Automation Systems»	30	1		CP
2	CAD of Automation Systems in Agriculture	30	1		CP
3	Methods and Tools of Modern Automated Control of Technological Processes	15	0,5	CP	
4	Computer-Simulation Control Systems in Agriculture	15	0,5	CP	

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis writing and defense	180	6	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF ENERGETICS, AUTOMATICS AND ENERGY SAVING**

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0502 «Automation and Control»
Specialty	8.05020201 «Automated Control of Technological Processes»
Master's program	Educational and Scientific
Specialization	«Energy Efficient Control Systems of Biotechnological Objects»
Form of training	full-time
Term of study (Credits)	2 years (120 ECTS)
on the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	engineer-researcher of computer systems and automation

**Specialists for second (master) level of higher education in 2015
in specialty 8.05020201 «Automated Control of Technological processes»**

Symbols:

- | | | |
|---|----------------------|-----------|
| - | Theoretical training | X |
| - | Examination period | II |
| - | Holidays | // |

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work	Practical training		Practical manufacturing practice	Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	Semesters			Total	Including				13	14		1 year semester		
				Exam	Test	Course paper		Lectures	Laboratory classes	Seminars					1	2	3
Number of weeks in semester			15	15	8	15											

1	2	3	4	5	6	7	8	9	10	11	12	15	16	17	18		
1. STANDARD ACADEMIC DISCIPLINES																	
1	Philosophy of Science and Innovation	90	3	1			36	12		24	54		3				
2	Civil Protection	90	3		1		24	12		12	66		2				
3	Automated Accounting of Energy and Material Resources	120	4		1		36	12	24		84		3				
4	Computer-Simulation Control Systems in Agriculture	150	5		2		44	11	22	11	106			4			
5	Technological Processes Automation	150	5	1		15	44	11	22	11	106			4			
6	Installation, Commissioning and Maintenance of Automation Systems	120	4	2			33	11	22		87		3				
7	Special Sections of High Mathematics	150	5	2		30	33	11	22		117			3			
8	CAD of Automation Systems in Agriculture	120	4	1		15	33	11	22		87			3			
9	ACS of Technological Processes in Agriculture	90	3	2			48	24		24	42		4				
10	Safety in the Area	90	3	1			36	12	24		54		3				
Total		1170	39				367	127	158	82	803	0	0	12	20	0	0
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines offered by University																	
1	Agricultural Policy	90	3		1		36	12		24	54			3			
2	Methodology and Organization of Scientific Research on the Basics of Intellectual Property	360	12		1		20	10		10	70				2	2	
3	Business Foreign Language	150	5	1			36			36	114			3			
Total		600	20				92	22	0	70	238	0	0	6	0	2	2
2.2. Disciplines chosen by students																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Calculations of Economic Efficiency of Scientific Developments	90	3		3		20	10		10	70					2	
2	Neuro Information Control Networks of Biotechnical Objects	90	3		2		44	22	22		46				4		
3	Object-Oriented Programming	120	4		3		30	10	20		60					3	
4	Robotic Complex and Systems in Agriculture	360	12	4			120	40	80		240						
5	Modeling and Identification of Biotechnical Objects in Agriculture	90	3	2			33	11		22	57					3	
6	Computer Integrated Control Systems	150	5		2		66	22	44		84			6			
7	Intelligent Control Systems of Biotechnical Objects	120	4	3			40	20	20		50					4	12
Specialization «Energy Efficient Control Systems of Biotechnological Objects»																	
8	Methods and Tools of Modern Automated Control of Technological Processes and Productions in Livestock	180	6	3		15	40	20	20		140					4	
9	Features Computer Integrated Control Systems in Livestock	150	5		4		20	10	10		130						
Total		1350	45				413	165	216	32	877	0	0	6	4	16	14
3. OTHER FORMS OF TRAINING																	
Writing and Defense of Master's Thesis		300	10									180	180				
Practical Training		180	6								480						
Course work				x	x	3								1	1	1	1
Tests					9									4	4	3	1
Exams				12										3	3	3	2
Total		3600	120				912	334	404	174	2688	180	180	24	24	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1170	39	33
2. Elective academic disciplines	1950	65	54
2.1. Disciplines offered by University	660	22	18
2.2. Disciplines chosen by students	1290	43	36
3. Other form of training	480	16	13
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master's thesis	State Certification	Holidays	Total
1	19	4	16	–	–	13	52
2	25	4	2	6	1	3	41
Total for the specialty	44	8	18	6	1	16	93

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Operational Training of Computer Systems	1	150	5	9
2	Research Training of Master's Thesis	2	150	5	9

VI. COURSE PAPER AND PROJECTS

Nº	Discipline	Hours	Credits	Course paper	Course projects
1	Complex course project in discipline: «Technological Processes Automation», «Installation, Commissioning and Maintenance of Automation Systems»	30	1		CP
2	CAD of Automation Systems in Agriculture	30	1		CP
3	Methods and Tools of Modern Automated Control of Technological Processes	15	0,5	CP	
4	Computer-Simulation Control Systems in Agriculture	15	0,5	CP	

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis writing and defense	180	6	7

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NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF ENERGETICS, AUTOMATICS AND ENERGY SAVING**

CURRICULUM of training specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	0507 «Electrical engineering and Electromechanics»
Specialty	8.05070103 «Electrotechnical systems of power consumption»
Master's program	Educational and Professional
Specialization	«Electrical Networks and Systems»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
on the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master of Electrotechnical systems of power consumption

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work			Practical training		Practical training	Distribution of hours per week within an acad. year and semesters		
																	1 year		2 year
		Hours	Credit	Semesters			Total	Including			practical training			semester					
				Exam	Test	Course paper		Lectures	Laboratory classes	Seminars				1	2	3			
											Number of weeks in semester								
				15	15	8													

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. STANDARD ACADEMIC DISCIPLINES																
1	Safety in the Area (Electrical Safety)	120	4	2			36	12	24		84			3		
2	Energy Management and Energy Audit	90	3		3		20	10		10	70				2	
3	Forecasting and Planning of Energy	90	3		2		22	11		11	68				2	
4	Philosophy of Science and Innovation	90	3	1			24	12		12	66			2		
5	Civil Protection	90	3		1		24	12		12	66			2		
6	Information-Computing Systems in the Energy Sector	90	3		2		33	11	22		57				3	
7	Basics of Patent and Copyright	90	3		1		36	12		24	54			3		
8	Power Control and Experimental Methods of Electric Regimes	90	3	1			36	12	24		54			3		
9	Progressive Methods of Energy Saving and Power Supply Systems	90	3		2		33	11	22		57				3	
10	Power Saving Modes of Power Supply	120	4	2		36	55	22	22	11	65				5	
11	Typical Electric Drives	90	3		2		33	11	22		57				3	
12	Energy Saving in Technological Processes and Plants	90	3	3			20	10		10	70					2
Total		1140	38				372	146	136	90	768	360		13	16	4
2. ELECTIVE ACADEMIC DISCIPLINES																
2.1. Disciplines offered by University																
1	Agricultural Policy	90	3		1		36	12		24	54			3		
2	Methodology and Organization of Scientific Research on the Basics of Intellectual Property	90	3		1		20	10		10	70					2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	Business Foreign Language	150	5	1			36			36	114			3		
Total		330	11				92	22	0	70	238	0	0	6	0	2
2.2. Disciplines chosen by students																
Specialization «Electrical networks and systems»																
1	Automated Control Systems of Power Consumption	90	3		3		30	20	10		60					3
2	Mathematical Models of Optimization Problems in Power Supply	90	3		2		44	22		22	46				4	
3	Relay Protection and Automation of Electrical Distribution Networks	90	3	3			30	10	10	10	60					3
4	Telemechanics and ACS of Power Supply Systems	90	3	2			44	22	22		46				4	
5	Energy Supply of Industry	120	4	1		36	60	24	24	12	60			5		
6	Design of Power Consumption Systems	90	3	3		36	30	20		10	60					3
7	Technology of Maintenance and Repair of Electrical Plants of Power Systems	90	3		3		30	10	20		60					3
8	Mathematical and Simulation Modeling of Processes in Electrical Networks and Systems	90	3		3		20	10		10	80					2
9	Small Power Stations with Renewable Energy Sources	90	3		3		20	10	10		90					2
10	Grid-Systems and Artificial Intelligence in the Electricity	90	3	3		36	20	10		10	44					2
11	Electromechanical Transients in Electrical Systems	90	3	3			20	10	10	10	80					3
Total		720	750	25				288	138	86	64	472	0	0	5	8
3. OTHER FORMS OF TRAINING																
Practical Training																
		300	10									360				
Writing and Defense of Master's Thesis																
		180	6													
Course work																
				x	x	3								1	1	1
Tests																
				9										5	5	5
Exams																
				15										4	3	2
Total		2700	90				731	307	222	202	1499	360	0	24	24	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1140	38	42
2. Elective academic disciplines	1080	36	40
2.1. Disciplines offered by University	330	11	12
2.2. Disciplines chosen by students	750	25	28
3. Other form of training	480	16	18
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master's thesis	State Certification	Holidays	Total
1	19	4	16	–	–	13	52
2	10	2	–	4	1	–	17
Total for the specialty	29	6	16	4	1	13	69

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Operational Training at the enterprise	1	150	5	8
2	Practical Training of Master's Thesis	2	150	5	8

VI. COURSE PAPER AND PROJECTS

Nº	Discipline	Hours	Credits	Course paper	Course projects
1	Energy Supply of Industry	30	1		CP
2	Power Saving Modes of Power Supply	30	1		CP
3	Design of Power Consumption Systems	30	1		CP
4	Grid-Systems and Artificial Intelligence in the Electricity	30	1		CP

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis writing and defense	180	6	5

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EDUCATION AND RESEARCH INSTITUTE OF ENERGETICS, AUTOMATICS AND ENERGY SAVING

CURRICULUM of training specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	0507 «Electrical engineering and Electromechanics»
Specialty	8.05070103 «Electrotechnical systems of power consumption»
Master's program	Educational and Scientific
Specialization	«Electrical networks and systems»
Form of training	full-time
Term of study (Credits)	2 years (120)
on the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master of Electrotechnical systems of power consumption

**Specialists for second (master) level of higher education in 2015
in specialty 8.05070103 «Electrotechnical systems of power consumption»**

Symbols:

- Theoretical training
Examination period
Holidays

II. CURRICULUM OF THE EDUCATIONAL PROCESS

№	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Practical training		Distribution of hours per week within an acad. year and semesters					
		Credit		Semesters		Course paper		Total		Lectures		Laboratory classes		Seminars				
		Hours		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1. STANDARD ACADEMIC DISCIPLINES																		
1	Safety in the Area (Electrical Safety)	120	4	2			36	12	24		84			3				
2	Energy Management and Energy Audit	90	3		3		20	10		10	70					2		
3	Forecasting and Planning of Energy	90	3		2		22	11		11	68				2			
4	Philosophy of Science and Innovation	90	3	1			24	12		12	66			2				
5	Civil Protection	90	3		1		24	12		12	66			2				
6	Information-Computing Systems in the Energy Sector	90	3		2		33	11	22		57				3			
7	Basics of Patent and Copyright	90	3		1		36	12		24	54			3				
8	Power Control and Experimental Methods of Electric Regimes	90	3	1			36	12	24		54			3				
9	Progressive Methods of Energy Saving and Power Supply Systems	90	3		2		33	11	22		57				3			
10	Power Saving Modes of Power Supply	120	4	2		36	55	22	22	11	65				5			
11	Typical Electric Drives	90	3		2		33	11	22		57				3			
12	Energy Saving in Technological Processes and Plants	90	3	3			20	10		10	70					2		
Total		1140	38				372	146	136	90	768	360		13	16	4	0	
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines offered by University																		
1	Agricultural Policy	90	3		1		11	11			79			1				
2	Methodology and Organization of Scientific Research on the Basics of Intellectual Property	90	3		1		24	12		12	66			2				
3	Business Foreign Language	150	5	1			36			36	114			3				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Total		330	11				71	23	0	48	259	0	0	6	0	0	0
2.2. Disciplines chosen by students																	
Specialization «Electrical networks and systems»																	
1	Modeling Parameters of Electrical Networks	180	6		2		40	20		20	140						4
2	Mathematical Models of Optimization Problems in Power Supply	90	3		2		44	22		22	46				4		
3	Research of New Switching Systems in Distributed Electrical Networks	180	6	3			40	20	10	10	140						4
4	Relay Protection and Automation of Electrical Distribution Networks	90	3	3			30	10	10	10	60					3	
5	Automated Control Systems of Power Consumption	90	3		3		30	20	10		60					3	
6	The Use of Functional Alloys in Electrical Vehicles	180	6	2			30	10	20		150						3
7	Modeling of Power Distribution Networks Modes with Distributed Generation Sources	180	6		2		40	20		20	140						4
8	Telemechanics and ACS of Power Supply Systems	90	3	2			44	22	22		46				4		
9	New System of Relay Protection and Automation in Distributed Electrical Networks	180	6	2			30	10	20		150						3
10	Energy Supply of Industry	120	4	1		36	60	24	24	12	60			5			
11	Design of Power Consumption Systems	90	3	3		36	30	20		10	60					3	
12	Technology of Maintenance and Repair of Electrical Plants of Power Systems	90	3		3		30	10	20		60					3	
13	Mathematical and Simulation Modeling of Processes in Electrical Networks and Systems	90	3		3		20	10		10	80					2	
14	Small Power Stations with Renewable Energy Sources	90	3		3		20	10	10		90					2	
15	Grid-Systems and Artificial Intelligence in the Electricity	90	3	3		36	20	10		10	44						2
16	Electromechanical Transients in Electrical Systems	90	3	3			20	10	10	10	80					3	
Total		1650	55				468	218	136	114	1192	0	0	5	8	14	18
3. OTHER FORMS OF TRAINING																	
Practical Training		300	10									360					
Writing and Defense of Master's Thesis		180	6											1	1	1	1
Course work				x	x	3								5	5	5	5
Tests					9									4	3	2	2
Exams				15													
Total		3600	120				911	387	272	252	2219	360	0	24	24	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1140	38	32
2. Elective academic disciplines	1980	66	55
2.1. Disciplines offered by University	330	11	9
2.2. Disciplines chosen by students	1650	55	46
3. Other form of training	480	16	13
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master's thesis	State Certification	Holidays	Total
1	19	4	16	–	–	13	52
2	25	4	2	6	1	3	41
Total for the specialty	44	8	18	6	1	16	93

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Operational Training at the enterprise	1	150	5	9
2	Practical Training of Master's Thesis	2	150	5	9

VI. COURSE PAPER AND PROJECTS

Nº	Discipline	Hours	Credits	Course paper	Course projects
1	Energy Supply of Industry	30	1		CP
2	Power Saving Modes of Power Supply	30	1		CP
3	Design of Power Consumption Systems	30	1		CP

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis writing and defense	180	6	7

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

EDUCATION AND RESEARCH INSTITUTE OF ENERGETICS, AUTOMATICS AND ENERGY SAVING

CURRICULUM of training specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	1001 «Techniques and Energetics of Agricultural production»
Specialty	8.10010101 «Energetics of Agricultural Production»
Master's program	Educational and Professional
Specialization	«Computer-integrated Process Control Systems in the Fields of Agriculture», «Energy Engineering in Agriculture», «Automation of Technological Processes and Computer-integrated Control Systems of Information and Technological Resources in Agriculture», «Electrical Networks and Systems», «Energy supply in Agriculture»
Form of training	full-time
Term of study (Credits) on the basis of	1,5 years (90)
Educational degree	the first level of higher education (bachelor)
Qualification	«Master» Research engineer in energetics of agriculture production

I. SCHEDULE OF TRAINING
Specialists for second (master) level of higher education in 2015
in specialty 8.10010101 «Energetics of agricultural production»

Year of training	2014 year												2015 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Symbols:

X	-	Theoretical training
II	-	Scientific-practical training
:	-	Preparation of master thesis
-	-	State certification (state examination and diploma defense)
-	-	Holidays

II. CURRICULUM OF THE EDUCATIONAL PROCESS

№	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work		Practical training		Practical training practice	Distribution of hours per week within an acad. year and semesters		
				Semesters			Total	Including		1 year semester								
		Hours	Credit	Exam	Test	Course paper		Lectures	Laboratory classes	Seminars	1	2	3					
		1. STANDARD ACADEMIC DISCIPLINES																
1		3	4	5	6	7	8	9	10	11	12	66			2			
2		90	3	2			48	24	24		12	66				4		
3		90	3	1		Cp*	36	12		24	54				3			
4		90	3		1		36	12	24		54				3			
5		90	3		1		24	12	12		66				2			
6		120	4	1			48	12	24	12	72				4			
7		120	4	2			48	24	12	12	72					4		
8		90	3		2		20	12		12	70					2		
9		90	3		2		24	12	12		66					2		
10		90	3		2		20	6		6	70					1		
11		90	3	1			48	24	24		42				4			
12		90	3		2		24	12	12		66					2		
Total		1140	38	6	6	0	400	174	144	78	740	0	0	0	18	15	0	
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines offered by University																		
1	Agricultural Policy	90	3		1		24	12		12	66						2	
2	Methodology and Organization of Scientific Research on the Basics of Intellectual Property	90	3		2		24	12		12	66					2		
3	Business Foreign Language	150	5	1			48			48	102				4			
Total		330	11	1	3		96	24	0	72	234	0	0	0	4	2	2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2.2. Disciplines chosen by students																
Specialization «Computer-integrated Process Control Systems in the Fields of Agriculture»																
1	Automated Control Systems in the Area	120	4		2	CP	84	36	36	12	36				7	
2	Engineering-Service of Automation Systems	90	3		3		30	10		20	60					3
3	Economic calculations in Engineering Activities	90	3		3		20	10		10	70					2
4	Typical Technological Objects and Processes in the Fields of Agriculture	90	3		3		30	10		20	60					3
5	Modeling of Biotechnical Objects in the Field of Agriculture	90	3		3		30	10		20	60					3
6	Methods and Tools of Modern Automated Control of Technological Processes in Area	90	3	3			30	10	20		60					3
7	Technical Means of Automation and Equipment of Automated Control Systems	90	3		3		20	10	10		70					2
8	Microprocessor Control Systems	90	3		3		20	10	10		70					2
9	Optimal Automated Control Systems	90	3		3		20	10		10	70					2
10	Information Technologies of Control Systems	90	3	2			48	24	12	12	42				4	
Total		750	25	2	5	1	244	96	66	82	416	0	0	0	7	16
Specialization «Energy Engineering in Agriculture»																
1	Technical Service of Energy Equipment	120	4	2		CP	84	36	36	12	36				7	
2	Energy Audit and Management in Agriculture	90	3		3		50	30		20	40					5
3	Engineering-Service of Energy Systems	90	3		3		20	10		10	70					2
4	Reliability of Technical Systems, Technogenic Risks	90	3		3		40	30		10	50					4
5	Technologies of Energy Engineering	90	3	3			30	10	20		60					3
6	Operational Reliability of Electrical Equipment in Agriculture	90	3		3		20	10		10	70					2
7	Accounting and Regulation of Energy Resources Costs	90	3		3		20	10	10		70					2
8	Quality of energy resources	90	3		3		20	10		10	70					2
9	Economics of Energy Consumption	90	3		3		20	10		10	70					2
Total		750	25	1	3	1	194	106	36	52	196	0	0	0	7	18
Specialization «Automation of Technological Processes and Computer-integrated Control Systems of Information and Technological Resources in Agriculture»																
1	Automated Control Systems in the Area	120	4		2	CP	84	36	36	12	36				7	
2	Engineering Service of Automation Systems	90	3		3		30	10		20	60					3
3	Economic Calculations in Engineering Activities	90	3		3		20	10		10	70					2
4	Typical Technological Objects and Processes in the Fields of Agriculture	90	3		3		30	10		20	60					3
5	Modeling of Biotechnical Objects in the Fields of Agriculture	90	3		3		30	10		20	60					3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6	Methods and Tools of Modern Automated Control of Technological Processes in Area	90	3	3		CP	30	10	20		60					3
7	Technical Means of Automation and Equipment of Automated Control Systems	90	3		3		20	10	10		70					2
8	Microprocessor Control Systems	90	3		3		20	10	10		70					2
9	Optimal Automated Control Systems	90	3		3		20	10		10	70					2
10	Information Technologies of Control Systems	90	3	2			48	24	12	12	42				4	
Total		750	25	1	3	1	194	106	36	52	196	0	0	0	7	18
Specialization «Electrical Networks and Systems»																
1	Electrical Networks and Systems	120	4	2		CP	84	36	36	12	36				7	
2	Design of Power Supply Systems in Agriculture	90	3		3		50	30	20		40					5
3	Automated Control Systems of Power Consumption	90	3		3		40	30		10	50					4
4	Transients in Power Supply Systems	90	3		3		20	10	10		70					2
5	Relay Protection and Automation of Energy Supply Systems	90	3	3			40	10	20	10	50					3
6	Automation and Telemechanics of Energy Supply Systems	90	3		3		20	10	10		70					2
7	Electrical Plants and Systems of Energy Supply	90	3		3		20	10		10	70					2
8	Small Power Stations in Agriculture	90	3		3		20	10	10		70					2
Total		750	25	2	5		194	106	66	22	196	0	0	0	7	18
Specialization «Energy Supply in Agriculture»																
1	Thermal Power Plants and Systems	120	4	2		CP	84	36	36	12	36				7	
2	Accounting and Control of Energy Resources Distribution and Costs	90	3		3		40	20	20		50					4
3	Alternative and Renewable Energy Sources in Agriculture	90	3		3		50	20		30	40					5
4	Energy Efficiency of Energy Equipment of Agricultural Production	90	3		3		20	10		10	70					2
5	Energy Saving in Heating Technologies	90	3	3			30	10	10	10	60					3
6	Biofuels	90	3		3		20	10		10	70					2
7	Gas Supply	90	3		3		20	10		10	70					2
8	Small Hydro and Wind Power Stations in Agriculture	90	3		3		20	10		10	70					2
9	Heating Technologies of Production and Processing of Agricultural Product	90	3		3		20	10		10	70					2
Total		750	25	2	6	1	264	116	66	82	396	0	0	0	7	18
3. OTHER FORMS OF TRAINING																
Writing and Defense of Master's Thesis		180	6								180					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Practical Training		180	6									180				
Course work				3	x	x								1	1	
Practical Training		120	4										120			
Tests				x		16								3	5	6
Exams				x	10	x								5	3	1
Total		2700	90	9	14	1	740	294	210	232	1570	180	120	22	24	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1140	38	42
2. Elective academic disciplines	1080	36	40
2.1. Disciplines offered by University	330	11	12
2.2. Disciplines chosen by students	750	25	28
3. Other form of training	480	16	18
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master's thesis	State Certification	Holidays	Total
1	19	4	16	–	–	13	52
2	10	2	–	4	1	–	17
Total for the specialty	29	6	16	4	1	13	69

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Training of electrical equipment operation at the enterprise	1	120	4	6
2	Training on Master's Thesis	2	180	6	10

VI. COURSE PAPER AND PROJECTS

№	Discipline	Hours	Credits	Course paper	Course projects
1	Integrated Course Project in disciplines «Design of Electrification, Automation and Energy Supply Systems», «Technologies of Service and Repair of Power Equipment and Means of Automation» and «Electric Drive of Production Machines and Mechanisms»	30	1	1	CP
2	In discipline chosen by students	30	1	1	CP

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis writing and defense	180	6	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF ENERGETICS, AUTOMATICS AND ENERGY SAVING**

CURRICULUM of training specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	1001 «Techniques and Energetics of Agricultural production»
Specialty	8.10010101 «Energetics of Agricultural Production»
Master's program	Educational and Professional
Specialization	«Energy Efficient Control Systems of Biotechnical Objects», «Scientific and Technical Principles of Electromechanical Energy Conversion», «Electrical Networks and Systems», «Energy supply in Agriculture»
Form of training	full-time
Term of study (Credits)	2 years (120)
on the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Research engineer in energetics of agriculture production

I. SCHEDULE OF TRAINING

	-	Theoretical training	X	-	Scientific-practical training
:	-	Examination period	II	-	Preparation of master thesis
-	-	Holidays	//	-	State certification (state examination and diploma defence)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

№	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work	Practical training		Practical training	Distribution of hours per week within an acad. year and semesters			
		Semesters			Total			Including		Seminars	12	13	14	1 year			2 year	
		Hours	Credit	Exam	Test	Course paper	Lectures	Laboratory classes	0					1	2	3	4	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1. STANDARD ACADEMIC DISCIPLINES																		
1	Philosophy of Science and Innovation	90	3	1			24	12		12	66			2				
2	Energy Supply of Industry	90	3	2			48	24	24		42				4			
3	Design of Electrification, Automation and Energy Supply Systems	90	3	1		CP*	36	12		24	54			3				
4	Heat and Water Supply in Agriculture	90	3		1		36	12	24		54			3				
5	Electrical Technologies in Agriculture	90	3		1		24	12	12		66			2				
6	Technologies of Service and Repair of Power Equipment and Means of Automation	120	4	1			48	12	24	12	72			4				
7	Safety in the Area (Electricity Safety)	120	4	2			48	24	12	12	72				4			
8	Mathematical Software for Master's Programs	90	3		2		20	12		12	70				2			
9	Information Technologies	90	3		2		24	12	12		66				2			
10	Staff Management	90	3		2		20	6		6	70				1			
11	Electric Drive of Production Machines and Mechanisms	90	3	1			48	24	24		42			4				
12	Energy Saving and Using of Renewable Energy Sources	90	3		2		24	12	12		66				2			
Total		1140	38	6	6	0	400	174	144	78	740	0	0	18	15			
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines offered by University																		
1	Agricultural Policy	90	3		1		24	12		12	66					2		
2	Methodology and Organization of Scientific Research on the Basics of Intellectual Property	90	3		2		24	12		12	66				2			
3	Business Foreign Language	150	5	1			48			48	102			4				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Всего		330	11	1	3		96	24	0	72	234	0	0	4	2	2	
2.2. Disciplines chosen by students																	
Specialization «Energy Efficient Control Systems of Biotechnical Objects»																	
1	Automated Control Systems of the Area	120	4		2	CP	84	36	36	12	36				7		
2	Typical Technological Objects and Processes in Agriculture	120	4		3		30	10		20	90					3	
3	Modeling of Biotechnical Objects in the Field of Agriculture	120	4		3		30	10		20	90					3	
4	Methods and Tools of Modern Automated Control of Technological Processes in Area	120	4	3			30	10	20		90					3	
5	Technical Means of Automation and Equipment of Automated Control Systems	120	4		3		20	10	10		100					2	
6	Microprocessor Control Systems	120	4		4		92	46	46		28					2	4
7	Engineering Service of Automation Systems	120	4		4		56	28		28	64					3	2
8	Economic Calculations in Engineering Activities	120	4		4		56	28		28	64					2	2
9	Optimal Automated Control Systems	120	4		4		92	46		46	28					2	4
10	Information Technology of Control Systems	120	4	2			48	24	12	12	72					4	
11	Automated Control Systems in the Area	120	4		4		36	18	18		84						3
12	Neural Networks in Control Systems	120	4		4		36	18		18	84						3
13	Computer Simulation Control Systems in Agriculture	120	4	4			36	18		18	84						2
Total		1530	51	2	5	1	194	76	66	52	406	0	0	0	7	16	18
Specialization «Scientific and Technical Principles of Electromechanical Energy Conversion»																	
1	Technical Service of Energy Equipment	120	4	2		CP	84	36	36	12	36				7		
2	Energy Audit and Management in Agriculture	90	3		3		50	30		20	40					5	
3	Engineering Service of Energy Systems	90	3		3		20	10		10	70					2	
4	Reliability of Technical Systems, Technogenic Risks	90	3		3		40	30		10	50					4	
5	Technologies of Energy Engineering	90	3	3			30	10	20		60					3	
6	Operational Reliability of Electrical Equipment in Agriculture	90	3		3		20	10		10	70					2	
7	Accounting and Regulation of Energy Resources Costs	90	3		3		20	10	10		70					2	
8	Quality of Energy Resources	90	3		3		20	10		10	70					2	
9	Economics of Energy Consumption	90	3		3		20	10		10	70					2	
10	Modern Scientific Problems in the Field of Energetics	120	4	4		CP	72	36	18	18	48						4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
11	Patent Engineering and Theory of Experiment	120	4		4		36	18		18	84						2
12	Modern Theory of Electromechanical Energy Conversion	120	4	4			36	18	18		84						2
13	Asynchronous Machines with High Energy Efficiency and Electromagnetic and Electromechanical Processes in Compensated Asynchronous Motors	120	4	3		CP	36	18		18	84						2
14	Mathematical Modeling of Electromagnetic Devices and Electromechanical Energy Converters	120	4		4		36	18		18	84						2
15	Calculations of Electromagnetic Devices and Electromechanical Energy Converters	120	4		4		36	18		18	84						2
16	Reliability of Electromagnetic Devices and Electromechanical Energy Converters	90	3		4		36	18		18	54						2
17	Research Methods for Electromagnetic Devices and Electromechanical Energy Converters	90	3		4		36	18	18		54						2
18	Testing of Electromagnetic Devices and Electromechanical Energy Converters	90	3		4		36	18	18		54						2
Total		1530	51	1	3	1	194	106	36	52	196	0	0	0	7	16	18
Specialization «Electrical Networks and Systems»																	
1	Electrical Networks and Systems	120	4	2		CP	84	36	36	12	36				7		
2	Design of Power Supply Systems in Agriculture	90	3		3		50	30	20		40					5	
3	Automated Control Systems of Power Consumption	90	3		3		40	30		10	50					4	
4	Transients in Power Supply Systems	90	3		3		20	10	10		70					2	
5	Relay Protection and Automation of Energy Supply Systems	90	3	3			40	10	20	10	50					3	
6	Automation and Telemechanics of Energy Supply Systems	90	3		3		20	10	10		70					2	
7	Electrical Plants and Systems of Energy Supply	90	3		3		20	10		10	70					2	
8	Small Power Stations in Agriculture	90	3		3		20	10	10		70					2	
9	Economic Efficiency of Energy Systems in Agriculture	150	5	4			54	36		18	96						3
10	Reliability of Energy Supply Systems	150	5		4		54	36		18	96						3
11	Criteria Problems of Energy Supply in Agriculture	150	5	4			54	36		18	96						3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
12	Modeling and Optimization of Energy Supply Systems	150	5	4		KPI	72	36	18	18	78						4
13	Alternative and Renewable Energy Sources	150	5		4		54	36		18	96						3
14	Information Control Systems in Electrical Networks	150	5		4		36	18		18	114						2
15	Functional Alloys in Electrical Vehicles	150	5		4		36	18		18	114						2
Total		1530	51	2	5		194	106	66	22	196	0	0	0	7	16	18
Specialization «Energy Supply in Agriculture»																	
1	Thermal Power Plants and Systems	120	4	2		KPI	84	36	36	12	36				7		
2	Accounting and Control of Energy Resources Distribution and Costs	90	3		3		40	20	20		50					4	
3	Alternative and Renewable Energy Sources in Agriculture	90	3		3		50	20		30	40					5	
4	Energy Efficiency of Energy Equipment of Agricultural Production	90	3		3		20	10		10	70					2	
5	Energy Saving in Heating Technologies	90	3	3			30	10	10	10	60					3	
6	Biofuel	90	3		3		20	10		10	70					2	
7	Gas Supply	90	3		3		20	10		10	70					2	
8	Small Hydro and Wind Power Stations in Agriculture	90	3		3		20	10		10	70					2	
9	Heating Technologies of Production and Processing of Agricultural Product	90	3		3		20	10		10	70					2	
10	Economic Efficiency of Energy Systems in Agriculture	150	5	3			54	36		18	96						3
11	Optimization of Energy Supply and Energy Saving Systems	150	5	3			54	36		18	96						3
12	Nanotechnology of Intensification of Heat and Mass Transfer Processes	150	5		3		54	36		18	96						3
13	Modeling of Heat and Hydrodynamic Processes	150	5	3		KPI	72	36	18	18	78						4
14	Integrated Using of Alternative and Renewable Energy Sources	150	5		3		54	36		18	96						3
15	Heat and Mass Transfer of Production and Processing of Agricultural Product	150	5		3		36	18		18	114						2
16	Cogeneration Plants	150	5		3		36	18		18	114						2
Total		1530	51	2	6	1	264	116	66	82	396	0	0	0	7	16	18
3. OTHER FORMS OF TRAINING																	
Writing and Defense of Master's Thesis		180	6								180						
Research Training		300	10									300					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Course work				3	x	x								1	1		
Practical Training		120	4										120				
Tests				x		16								3	5	6	6
Exams				x	10	x								5	3	1	1
Total		3600	120	9	10	16	690	274	210	202	1560	300	120	22	24	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1140	38	32
2. Elective academic disciplines	1860	62	52
2.1. Disciplines offered by University	330	11	9
2.2. Disciplines chosen by students	1530	51	43
3. Other form of training	600	20	16
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master's thesis	State Certification	Holidays	Total
1	19	4	16	–	–	13	52
2	25	4	2	6	1	3	41
Total	44	8	18	6	1	16	93

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Training of electrical equipment operation at the enterprise	1	120	4	7
2	Training on Master's Thesis	2	180	6	11

VI. COURSE PAPER AND PROJECTS

№	Discipline	Hours	Credits	Course paper	Course projects
1	Integrated Course Project in disciplines «Design of Electrification, Automation and Energy Supply Systems», «Technologies of Service and Repair of Power Equipment and Means of Automation» and «Electric Drive of Production Machines and Mechanisms»	30	1	1	KП
2	In discipline chosen by students	30	1	1	KП

VII. STATE CERTIFICATION

№	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis writing and defense	180	6	7

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EDUCATION AND RESEARCH INSTITUTE OF ENERGETICS, AUTOMATICS AND ENERGY SAVING**

CURRICULUM of training specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	1001 «Techniques and Energetics of Agricultural production»
Specialty	8.10010103 «Electrification and Automation of Agriculture»
Master's program	Educational and Professional
Specialization	«Computer-Integrated Control Systems of Technological Processes in the Fields of Agriculture», «Automation of Technological Processes and Computer-integrated Control Systems of Information and Technological Resources in Agriculture», «Electrified Technologies and Electrical Equipment in Animal Husbandry», «Electrified Technologies and Electrical Equipment in Seed and Crop Production»
Form of training	full-time
Term of study (Credits) on the basis of	1,5 years (90)
Educational degree	the first level of higher education (bachelor)
Qualification	«Master» research engineer with the electrification and automation of agriculture

I. SCHEDULE OF TRAINING
Specialists for second (master) level of higher education in 2015
in specialty 8.10010103 «Electrification and Automation of Agriculture»

Year of training	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Symbols:

X	-	Scientific-practical training
II	-	Preparation of master thesis
//	-	State certification (state examination and diploma defence)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

№	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work	Practical training		Distribution of hours per week within an acad. year and semesters		
				Semesters			Total	Including								
		Hours	Credit	Exam	Test	Course paper		Lectures	Laboratory classes	Seminars						
				1	2	3										
					Number of weeks in semester											
					15	15	15									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. STANDARD ACADEMIC DISCIPLINES																
1	Philosophy of Science and Innovation	90	3	1			24	12		12	66			2		
2	Energy Supply of Industry	90	3	2			36	24	12		54				3	
3	Design of Electrification, Automation and Energy Supply Systems in Agriculture	90	3	1		Cp*	36	24		12	54			3		
4	Alternative Energy Sources in Agriculture	90	3		1		36	24	12		54			3		
5	Electrical Technologies in Agriculture	90	3	2			36	24	12		54				3	
6	Technologies of Service and Repair of Power Equipment and Means of Automation	120	4	1			48	24	24		72			4		
7	Safety in the Area (Electricity Safety)	120	4	2			48	24	12	12	72				4	
8	Mathematical Ensuring for Master's Programs	90	3		2		12	6		6	78				1	
9	Information Technologies	90	3		2		24	12	12		66				2	
10	Computer-integrated Technologies of Electrification and Automation in Agriculture	90	3		2		24	12		12	66				2	
11	Electric Drive of Agricultural Machines, Aggregates and Production Lines	90	3	1			36	24	12		54			4		
12	Instrument Ensuring of Scientific Researches	90	3		1		36	24	12		54			3		
Total		1140	38	7	5	1	396	234	108	54	744	0	0	19	15	0
2. ELECTIVE ACADEMIC DISCIPLINES																
2.1. Disciplines offered by University																
1	Agricultural Policy	90	3		1		24	12		12	66					2
2	Methodology and Organization of Scientific Research on the Basics of Intellectual Property	90	3		2		24	12		12	66				2	
3	Business Foreign Language	150	5	1			36			36	114			3		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total		330	11	1	3	0	84	24	0	60	246	0	0	3	2	0
2.2. Disciplines chosen by students																
Specialization «Computer-integrated Control Systems of Technological Processes in the Fields of Agriculture»																
1	Automated Control Systems in the Area	210	7		2	CP	84	36	36	12	126				7	
2	Engineering-Service of Automation Systems	90	3		3		30	10		20	60					3
3	Economic Calculations in Engineering Activities	90	3		3		20	10		10	70					2
4	Typical Technological Objects and Processes in the Fields of Agriculture	90	3		3		30	10		20	60					3
5	Modeling of Biotechnical Objects in the Fields of Agriculture	90	3		3		30	10		20	60					3
6	Methods and Tools of Modern Automated Control of Technological Processes in Area	90	3	3		CP	30	10	20		60					3
7	Technical Means of Automation and Equipment of Automated Control Systems	90	3		3		20	10	10		70					2
8	Microprocessor Control Systems	90	3		3		20	10	10		70					2
9	Optimal Automated Control Systems	90	3		3		20	10		10	70					2
10	Information Technologies of Control Systems	90	3	2			48	24	12	12	42				4	
Total		750	25	2	5	1	224	86	56	82	436	0	0	0	7	18
Specialization «Automation of Technological Processes and Computer-integrated Control Systems of Information and Technological Resources in Agriculture»																
1	Automated Control Systems in the Area	210	7		2	CP	84	36	36	12	126				3	
2	Engineering Service of Automation Systems	90	3		3		30	10		20	60					3
3	Economic Calculations in Engineering Activities	90	3		3		20	10		10	70					2
4	Typical Technological Objects and Processes in the Fields of Agriculture	90	3		3		30	10		20	60					3
5	Modeling of Biotechnical Objects in the Fields of Agriculture	90	3		3		30	10		20	60					3
6	Methods and Tools of Modern Automated Control of Technological Processes in Area	90	3	3		CP	30	10	20		60					3
7	Technical Means of Automation and Equipment of Automated Control Systems	90	3		3		20	10	10		70					2
8	Microprocessor Control Systems	90	3		3		20	10	10		70					2
9	Optimal Automated Control Systems	90	3		3		20	10		10	70					2
10	Information Technologies of Control Systems	90	3	2			48	24	12	12	42				4	
Total		750	25	1	5		194	76	36	82	376	0	0	0	3	18
Specialization «Electrified Technologies and Electrical Equipment in Animal Husbandry»																
1	Electric Drive of Actuators in Automated Plants	120	4	2		CP	84	36	36	12	36				7	
2	Modeling of Adjustable Electric Drives, Aggregates and Production Lines	90	3	3			50	30	20		40					5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	Electrotechnologies of Agricultural Products Processing	90	3		3		40	20	10	10	50					4
4	Engineering Activities for Maintenance of Electrical Power Systems	90	3		3		20	10		10	70					2
5	Electromagnetic Processing of Agricultural Products	90	3	3			30	10	10	10	60					3
6	Design of Electrical Power Installations and Networks	90	3		3		20	10		10	70					2
7	Design of Lighting Systems and Networks	90	3		3		20	10		10	70					2
8	Optical Electrotechnologies	90	3		3		20	10	10		70					2
Total		750	25	3	4	1	264	126	76	62	396	0	0	0	7	18
Specialization «Electrified Technologies and Electrical Equipment in Seed and Crop Production»																
1	Electric Drive of Actuators in Automated Plants	120	4	2		CP	84	36	36	12	36				7	
2	Modeling of Adjustable Electric Drives, Aggregates and Production Lines	90	3	3			50	30	20		40					5
3	Electrotechnologies of Agricultural Products Processing	90	3		3		40	20	10	10	50					4
4	Engineering Activities for Maintenance of Electrical Power Systems	120	4		3		20	10		10	100					2
5	Electromagnetic Processing of Agricultural Products	120	4	3			30	10	10	10	90					3
6	Electron-ion Technologies in Agriculture	120	4		3		20	10		10	100					2
7	Optical Electrotechnologies	120	4		3		20	10	10		100					2
Total		750	25	3	4	1	244	116	76	52	416	0	0	0	7	16
3. OTHER FORMS OF TRAINING																
Writing and Defense of Master's Thesis																
Practical Training		180	6								216					
Course work		300	10									120	180			
Tests						3								1	1	
Exams					16											
Total		2700	90	10	13	2	704	344	164	196	1642	120	180	22	24	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1140	38	42
2. Elective academic disciplines	1080	36	40
2.1. Disciplines offered by University	330	11	12
2.2. Disciplines chosen by students	750	25	28
3. Other form of training	480	16	18
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master's thesis	State Certification	Holidays	Total
1	19	4	16	–	–	13	52
2	10	2	–	4	1	–	17
Total for the specialty	29	6	16	4	1	13	69

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Training of electrical equipment operation at the enterprise	1	120	4	6
2	Training on Master's Thesis	2	180	6	10

VI. COURSE PAPER AND PROJECTS

№	Discipline	Hours	Credits	Course paper	Course projects
1	Complex course project in discipline «Design of Electrification, Automation and Energy Supply Systems», «Technologies of Service and Repair of Power Equipment and Means of Automation» and «Electric Drive of Agricultural Machines, Aggregates and Production Lines»	30	1	1	CP
2	In discipline chosen by students	30	1	1	CP

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis writing and defense	180	6	6

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF ENERGETICS, AUTOMATICS AND ENERGY SAVING**

CURRICULUM of training specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	1001 «Techniques and Energetics of Agricultural production»
Specialty	8.10010103 «Electrification and Automation of Agriculture»
Master's program	Educational and Scientific
Specialization	«Energy Efficient Control Systems of Biotechnical Objects», «Electrified Technologies and Electrical Equipment in Agricultural Production»
Form of training	full-time
Term of study (Credits) on the basis of	2 years (120)
Educational degree	the first level of higher education (bachelor)
Qualification	«Master» research engineer with the electrification and automation of agriculture

I. SCHEDULE OF TRAINING

	-	Theoretical training			
	-	Examination period	:		
	-	Holidays	-		

Symbols:

	-	Scientific-practical training	X
	-	Preparation of master thesis	II
	-	State certification (state examination and diploma defence)	//

II. CURRICULUM OF THE EDUCATIONAL PROCESS

№	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work	Practical training		Practical training	Distribution of hours per week within an acad. year and semesters			
		Hours	Credit	Semesters			Total	Including				13	14		1 year semester			
				Exam	Test	Course paper		Lectures	Laboratory classes	Seminars	1			2	3	4		
1. STANDARD ACADEMIC DISCIPLINES																		
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1	Philosophy of Science and Innovation	90	3	1			24	12		12	66			2				
2	Energy Supply of Industry	90	3	2			36	24	12		54				3			
3	Design of Electrification, Automation and Energy Supply Systems in Agriculture	90	3	1		CP*	36	24		12	54			3				
4	Alternative Energy Sources in Agriculture	90	3		1		36	24	12		54			3				
5	Electrical Technologies in Agriculture	90	3	2			36	24	12		54				3			
6	Technologies of Service and Repair of Power Equipment and Means of Automation	120	4	1			48	24	24		72			4				
7	Safety in the Area (Electricity Safety)	120	4	2			48	24	12	12	72				4			
8	Mathematical Ensuring for Master's Programs	90	3		2		12	6		6	78				1			
9	Information Technologies	90	3		2		24	12	12		66				2			
10	Computer-integrated Technologies of Electrification and Automation in Agriculture	90	3		2		24	12		12	66				2			
11	Electric Drive of Agricultural Machines, Aggregates and Production Lines	90	3	1			36	24	12		54			4			11	
12	Instrument Ensuring of Scientific Researches	90	3		1		36	24	12		54			3			12	
Total		1140	38	7	5	1	396	234	108	54	744	0	0	19	15	0	0	
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines offered by University																		
1	Agricultural Policy	90	3		1		24	12		12	66					2		
2	Methodology and Organization of Scientific Research on the Basics of Intellectual Property	90	3		2		24	12		12	66				2			
3	Business Foreign Language	150	5	1			36			36	114			3				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Total		330	11	1	3	0	84	24	0	60	246	0	0	3	2	2	0
2.2. Disciplines chosen by students																	
Specialization «Energy Efficient Control Systems of Biotechnical Objects»																	
1	Automated Control Systems of the Area	150	5		2	CP	84	36	36	12	66				7		
2	Typical Technological Objects and Processes in the Fields of Agriculture	120	4		3		30	10		20	90					3	
3	Modeling of Biotechnical Objects in the Fields of Agriculture	120	4		3		30	10		20	90					3	
4	Methods and Tools of Modern Automated Control	150	5	3			30	10	20		120					3	
5	Technical Means of Automation and Equipment of Automated Control Systems	150	5		3		20	10	10		130					2	
6	Microprocessor Control Systems	120	4		4		92	46	46		28					2	4
7	Engineering Service of Automation Systems	120	4		4		56	28		28	64					3	2
8	Economic Calculations in Engineering Activities	120	4		4		56	28		28	64					2	2
9	Optimal Automated Control Systems	120	4		4		92	46		46	28					2	4
10	Information Technologies of Control Systems	120	4	2			48	24	12	12	72					4	
11	Automated Control Systems in the Area	120	4		4		36	18	18		84						3
12	Neural Networks in Control Systems	120	4		4		36	18		18	84						3
13	Computer Simulation Control Systems in Agriculture	120	4	4			36	18		18	84						2
Total		1650	55	2	5	1	194	76	66	52	496	0	0	0	7	16	18
Specialization «Electrified Technologies and Electrical Equipment in Agricultural Production»																	
1	Electric Drive of Actuators in Automated Plants	120	4	2		CP	84	36	36	12	36				7		
2	Modeling of Adjustable Electric Drives, Aggregates and Production Lines	90	3	3			50	30	20		40					5	
3	Electrotechnologies of Agricultural Products Processing	90	3		3		40	20	10	10	50					4	
4	Engineering Activities for Maintenance of Electrical Power Systems	90	3		3		20	10		10	70					2	
5	Electromagnetic Processing of Agricultural Products	90	3	3			30	10	10	10	60					3	
6	Design of Electrical Power Installations and Networks	90	3		3		20	10		10	70					2	
7	Design of Lighting Systems and Networks	90	3		3		20	10		10	70					2	
8	Optical Electrotechnologies	90	3		3		20	10	10		70					2	
9	Electron-ion Technologies in Agriculture	120	4		3		20	10		10	100					2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
10	Electro-technological Methods of Research and Processing of Agricultural Products	210	7	2		CP	72	36	18	18	138						4
11	Mathematical Modeling of Technological Processes in Agriculture	180	6	3			54	36		18	126						3
12	Methods and Means of Efficiency Monitoring of Electrical Processing of Agricultural Products	180	6		3		54	36		18	126						3
13	Electrified Technology in Agriculture	180	6	3			36	18	18		144						2
14	Energy Efficiency of Closed Biosystems	150	5		3		36	18	18		114						2
15	Spectrographic Methods of Processing Quality Researching of Agricultural Products	150	5		3		36	18	18		114						2
Total		1650	55	3	4	1	264	126	76	62	396	0	0	0	7	18	18
3. OTHER FORMS OF TRAINING																	
	Writing and Defense of Master's Thesis	180	6								216						
	Practical Training	300	10									120	180				
	Course work					3								1	1		
	Tests				16												
	Exams			11													
Total		3600	120	11	16	2	674	334	174	166	1702	120	180	22	24	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1140	38	32
2. Elective academic disciplines	1980	66	55
2.1. Disciplines offered by University	330	11	9
2.2. Disciplines chosen by students	1650	55	46
3. Other form of training	480	16	13
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master's thesis	State Certification	Holidays	Total
1	19	4	16	–	–	13	52
2	25	4	2	6	1	3	41
Total for the specialty	44	8	18	6	1	16	93

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Training of electrical equipment operation at the enterprise	1	120	4	7
2	Training on Master's Thesis	2	180	6	11

VI. COURSE PAPER AND PROJECTS

№	Discipline	Hours	Credits	Course paper	Course projects
1	Complex course project in discipline «Design of Electrification, Automation and Energy Supply Systems», «Technologies of Service and Repair of Power Equipment and Means of Automation» and «Electric Drive of Agricultural Machines, Aggregates and Production Lines»	30	1	1	CP
2	In discipline chosen by students	30	1	1	CP

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis writing and defense	180	6	7

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF FORESTRY AND PARK GARDENING**

CURRICULUM	
of training specialists in 2015 academic year	
Level of higher education	The second (Master)
Area of knowledge	0518 «Wood processing»
Specialty	8.05180101 «Wood processing technologies»
Master's program	Educational and Professional
Specialization	«Modern woodworking technologies»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
on the basis of	EL «Bachelor»
Educational degree	«Master»
Qualification	Master of woodworking technologies

I. SCHEDULE OF EDUCATIONAL PROCESS
training of the educational and qualification EQL «Master» of the 2015 year entry
speciality 8.05180101 «Wood processing technologies»

Year of training	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Legend:

X	-	Scientific-practical training
II	-	Preparation of master thesis
//	-	State certification (state examination and diploma defence)
A	-	intermediate attestation

II. CURRICULUM

№	Name of Academic Discipline	Total		Forms of control knowledge semester			Auditorium classes				Independent work			Practical training		Average weekly hours for courses and semesters							
		hours	Credit	Examination	Test	Coursework	Total	including			12	13	14	15	16	17	18	19	20	21	22		
								lectures	laboratory	practical													
							Number of weeks in a semester																
							1s.	2s.	3s.	4s.												5s.	6s.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. STANDARD ACADEMIC DISCIPLINES																					
1	Labor protection (in the production industry and educational and research institutions)	90	3	3			20	10		10	70					2					
2	Pedagogy and teaching methods in higher education	60	2		2		30	15		15	30				2						
3	Intellectual property	60	2		1		30	15		15	30				2						
4	Theory and Practice of Wood Cutting	180	6	1			60	30		30	120				4						
5	Theory of Thermal Treatment Of Wood	180	6	2			60	30		30	120				4						
6	Theory and Technology for Agglutination of Wood	180	6	2			60	30		30	120				4						
7	Actual Problems of Mechanical Wood Working	180	6	1		1	60	30		30	120				4						
8	Philosophy of Science	90	3	1			30	15		15	60				2						
Total		1020	34	6	2	1	350	175	0	175	670	0	0	12	10	2	0	0	0	0	0
2. ELECTIVE ACADEMIC DISCIPLINES																					
2.1. Disciplines offered by University																					
1	Forest policy	90	3		1		30	15		15	60				2						
2	Foreign language (professional orientation) .	180	6	2	1		60			60	120				2	2					
3	Methodology and organization of scientific research on the basics of intellectual property	90	3		2		30	15		15	60				2						
Total		360	12	1	3	0	120	30	0	90	240	0	0	4	4	0	0	0	0	0	0
2.2. Disciplines offered by students																					
1	Planning at the Woodworking Industry	120	4	3		3	40	20	20		80					4					
2	Simulation and Optimization of Manufacturing Processes	120	4	3			40	20	20		80					4					
3	Planning and design of wood	180	6	2		2	60	30		30	120				4						
4	Ergonomics of furniture products	90	3		1		30	15	15		60				2						

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
5	Technology of Special Woodworking Industries	90	3		3		20	10	10		70					2					
6	Management of Timber Drying Quality	90	3		3		20	10		10	70					2					
7	Innovative woodworking machinery	90	3		3		20	10	10		70					2					
8	Foreign trade in the wood-processing enterprises	90	3		3		20	10	10		70					2					
Total		870	29	2	5	2	250	125	85	40	620	0	0	2	4	16	0	0	0	0	0
3. OTHER LOAD																					
Production Practice		270	9																		
Preparation of master's thesis		180	6																		
Total of EQL		2700	90											18	18	18	0	0	0	0	0

III. STRUCTURE OF CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1020	34	38
2. Elective academic disciplines	1230	41	45
2.1. Disciplines offered by University	360	12	13
2.2. Disciplines offered by students	870	29	32
3. Other load	450	15	17
Together for EQL	2700	90	100

IV. SUMMARY OF BUDGET SINCE, WEEK

Year of study	Theoretical training	Examinations	Practical training	Preparation of master's work	State attestation	Holiday	Total
1	30	5	9	–	–	12	56
2	10	2	–	3	1	–	16
Together for EQL	40	7	9	3	1	12	72

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production Practice	1,2	270	9	9

VI. COURSE WORK AND PROJECTS

Nº	Disciplines	Hours	Credits	Course work	Course project
1	Actual problems of mechanical wood processing	30	1		CP
2	Modern methods of design of mechanical wood processing	30	1		CP
3	Planning for the woodworking industry	30	1		CP

VII. STATE ATTESTATION

Nº	Component of attestation	Hours	Credits	Number of weeks
1	Defence of master's thesis	180	6	4

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF FORESTRY AND PARK GARDENING**

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0901 «Agriculture and Forestry»
Specialty	8.09010301 «Forestry»
Master's program	Professional
Specialization	«Sylvics and practical silviculture», «Forest melioration», «Renewal and breeding of the forest», «Forest Protection», «Management of forest resources and forest business», «Forest management»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
on the basis of	EL «Bachelor»
Educational degree	«Master»
Qualification	Master of Forestry

I. SCHEDULE OF EDUCATIONAL PROCESS

2016 year

Legend:

- Theoretical training
Examination period
Holidays

- | | | | |
|---|----|----|---|
| X | II | // | A |
|---|----|----|---|

II. CURRICULUM

№	Name of Academic Discipline	Total		Forms of control knowledge semester		Auditorium classes			Independent work				Practical training		Average weekly hours for courses and semesters															
		hours	Credit	Examination	Test	Coursework	Total	including			Production practice				I course				II course				III course				IV course			
								lectures	laboratory	practical																				
											Number of weeks in a semester																			
								15	15	10	15	15	15	13																

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
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1. STANDARD ACADEMIC DISCIPLINES																					
1	Philosophy of Science	120	4	1			30	15		15	90			2							
2	Office of Forestry	120	4		1		30	15		15	90			2							
3	Regulation of forest productivity	150	5	1		1	45	15		30	105			3							
4	Safety labor	120	4	1			30	15		15	90			2							
5	Information technology in forestry	120	4		1		30	15		15	90			2							
6	Planning Forestry	180	6	2	1	2	60	30		30	120			3	2						
7	Psychology of Management	120	4		3		20	10		10	100					2					
Total		930	31	4	4	2	245	115	105	25	685	0	0	14	2	2	0	0	0	0	0

2. ELECTIVE ACADEMIC DISCIPLINES																					
2.1. Disciplines offered by University																					
1	Forest policy	90	3		1		30	15		15	60										
2	Business foreign language	90	3	1			30	0		30	60			2							
3	Methodology and organization of scientific research on the basics of intellectual property	90	3		2		30	15		15	60					2					
Total		270	9	1	2		90	30	0	60	180	0	0	4	2	0	0	0	0	0	0

2.2. Disciplines offered by students																					
Specialization «Sylvics and practical silviculture»																					
1	Forest logging	150	5	3	2		60	25	10	25	90					2	3				
2	Forest roads and forest vehicles	90	3	2			30	15		15	60					2					
3	Forestry products study	90	3		2		30	15		15	60					2					
4	Wood processing	90	3		2		30	15		15	60					2					
5	Game science	90	3		2		30	15		15	60					2					
6	Forest tapping	90	3		2		30	15		15	60					2					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
7	Forest Ecology and typology	90	3		3		30	20		10	60					3					
8	Increasing the productivity of forests by forestry methods	120	4	3		3	40	20		20	80					4					
9	Industrial methods of forest growing	60	2	3			20	10		10	40					2					
10	Non- wood products and adverse use of forests	90	3		2		30	15		15	60				2						
11	Biological bases of thinning	90	3		3		30	20		10	60					3					
Total		1050	35	4	8	1	360	185	25	150	690	0	0	0	14	15	0	0	0	0	0
Specialization «Forest melioration»																					
1	Inventory of protective plantations	90	3		2		30	15		15	60				2						
2	Erosion science	90	3	2			30	15		15	60				2						
3	Forest land reclamation	90	3		2		30	15		15	60				2						
4	Forest-agricultural landscapes	90	3		2		30	15		15	60				2						
5	Systems of erosion soils control	180	6	3	2	3	60	25		35	120				2	3					
6	Protective afforestation	120	4		3		40	20		20	80					4					
7	Optimization of forest-agricultural landscapes	120	4	3			40	20		20	80					4					
8	Zonal anti-erosion systems	90	3		3		30	20		10	60					3					
9	Protective plantations in the ways vehicles	90	3	2			30	15		15	60				2						
10	Hydrotechnical reclamation	90	3		2		30	15		15	60				2						
Total		1050	35	4	7	1	350	175	0	175	700	0	0	0	14	14	0	0	0	0	0
Specialization «Forest Protection»																					
1	Forest pathology	120	4	2			45	30		15	75				3						
2	Mathematical modeling of pest and pathogen populations	90	3		3		30	20		10	60					3					
3	Forest nematology	90	3		2		30	15		15	60				2						
4	Technology integrated protection	240	8	3	2	3	80	45		35	160				2	5					
5	Diagnosis of pests and pathogens	90	3		2		30	15		15	60				2						
6	Woody plants immunity to pathogens	120	4	2			45	30		15	75				3						
7	Forecast pathogens and pests	120	4	3			40	20		20	80					4					
8	Bacterioses forest tree species	90	3		2		30	15		15	60				2						
9	Mycotrophy woody plants	90	3		3		30	20		10	60					3					
Total		1050	35	4	6	1	360	210	0	150	690	0	0	0	14	15	0	0	0	0	0
Specialization «Renewal and breeding of the forest»																					
1	Modern technologies of nursery	180	6	2			60	30	15	15	120				4						
2	Microclonal propagation of woody plants	150	5		2		45	15	15	15	105				3						
3	Forestry methods of rehabilitation of the technogenic-broken earth	90	3		3		30	20		10	60					3					
4	Forest plantations	120	4	3			40	20		20	80					4					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
5	Ecological bases of reforestation and afforestation	120	4	2			45	15		30	75				3						
6	Increase of the productivity of the forests by forestry	120	4	3		3	40	20		20	80					4					
7	Forestry sort study	90	3		2		30	15	15		60				2						
8	Forest plants of green belts	90	3		2		30	15		15	60				2						
9	Application of fertilizers in forestry	90	3		3		30	10	20		60					3					
Total		1050	35	4	5	1	350	160	65	125	700	0	0	0	14	14	0	0	0	0	0
Specialization «Management of forest resources and forestry business»																					
1	Management of forest resources	150	5	3	2		50	25		25	100				2	2					
2	Forest commodity science	90	3		2		30	15	15		60				2						
3	Information systems in forestry	120	4	2			45	15	30		75				3						
4	Finances	90	3		2		30	15		15	60				2						
5	Economics of nature use	90	3		2		30	15		15	60				2						
6	Foreign trade in forest sector	90	3	3	2		35	25		10	55				1	2					
7	GIS in forestry	120	4		3	3	40	20		20	80					4					
8	Forest Productivity Modeling	120	4	3			40	20		20	80					4					
9	Marketing in forestry	90	3		2		30	15		15	60				2						
10	Computer technology in forestry	90	3		3		30	10		20	60					2					
Total		1050	35	4	8	1	360	175	45	140	690	0	0	0	14	14	0	0	0	0	0
Specialization «Forest management»																					
1	Special types of forest inventory	120	4		2		45	15		30	75				3						
2	Forest monitoring	120	4		2		45	30		15	75				3						
3	Special types of forests ordering	240	8	2, 3			85	50		35	155				3	4					
4	Information systems in forestry	120	4	2			45	15	30		75				3						
5	GIS technology in forestry	120	4		3	3	40	20		20	80					4					
6	Modelling of forest productivity	120	4	3			40	20		20	80					4					
7	Environmental Economics	90	3		2		30	15		15	60				2						
8	Computer technologies in forestry	90	3		3		30	10		20	60					3					
Total		1020	34	4	5	1	360	175	30	155	660	0	0	0	14	15	0	0	0	0	0
3. OTHER LOAD																					
Production Practice		270	9																		
Preparation and defence of master's thesis		180	6																		
Total of EQL		2700	90				695	330	130	235	1555	0	0	18	18	17	0	0	0	0	0

III. STRUCTURE OF CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	930	31	34
2. Elective academic disciplines	1320	44	49
2.1. Disciplines offered by University	270	9	10
2.2. Disciplines offered by students	1050	35	39
3. Other load	450	15	17
Together for EQL	2700	90	100

IV. SUMMARY OF BUDGET SINCE, WEEK

Year of study	Theoretical training	Examinations	Practical training	Preparation of master's work	State attestation	Holiday	Total
1	30	5	9	–	–	12	56
2	10	2	–	3	1	–	16
Together for EQL	40	7	9	3	1	12	72

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Internship in manufacturing	1	120	4	4
2	Production pre-diploma practice	2	150	5	5

VI. COURSE WORK AND PROJECTS

Nº	Disciplines	Hours	Credits	Course work	Course project
1	Regulation of forest productivity	30	1		CP
2	Planning Forestry	30	1		CP
3	Course project on the chosen master's program	30	1		CP

VII. STATE ATTESTATION

Nº	Component of attestation	Hours	Credits	Number of weeks
1	Defence of master's thesis	150	5	4

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF FORESTRY AND PARK GARDENING**

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0901 «Agriculture and Forestry»
Specialty	8.09010302 «Hunting industry»
Master's program	Professional
Specialization	«Game management»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
on the basis of	EL «Bachelor»
Educational degree	«Master»
Qualification	Master of game management

I. SCHEDULE OF EDUCATIONAL PROCESS
training of the educational and qualification EQL «Master» of the 2015 year entry
speciality 8.09010302 «Hunting industry»

Year of training	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Legend:

	-	Theoretical training	X	-	Scientific-practical training	X
:	-	Examination period	II	-	Preparation of master thesis	II
-	-	Holidays	//	-	State certification (state examination and diploma defence)	//
	-		A	-	intermediate attestation	A

II. CURRICULUM

№	Name of Academic Discipline	Total		Forms of control knowledge semester		Auditorium classes				Independent work			Practical training		Average weekly hours for courses and semesters							
		hours	Credit	Examination	Test	Coursework	Total	including			Academic practice	Production practice	Semesters									
								lectures	laboratory	practical			Number of weeks in a semester									
													1s.	2s.	3s.	4s.	5s.	6s.	7s.	8s.		
																					15	15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1. STANDARD ACADEMIC DISCIPLINES																						
1	Philosophy of Science	90	3	1			30	15		15	60			2								
2	Information technology in game management	120	4	1			45	30	15		75			3								
3	Re-acclimatization and resettlement of game animals	120	4		1		45	30		15	75			3								
4	Breeding and selection of game animals	180	6	2	1	2	60	30	15	15	120			2	2							
5	Labor protection	90	3	2			30	15		15	60				2							
6	Innovative technologies in game management	120	4	2			45	15		30	75				3							
7	Population management	90	3	2			30	15		15	60				2							
8	Management and marketing in game management	90	3	3			20	10		10	70					2						
9	Pedagogy and teaching methods in higher education	90	3		3		20	10		10	70					2						
10	Rational use and optimization of hunting grounds	90	3	3			20	10		10	70					2						
11	Hunting and environmental law	90	3		3		20	10		10	70					2						
12	Range management of wild ungulates	90	3	3		3	30	10		20	60					3						
13	Standardization and certification of hunting products	90	3	3			30	20		10	60					3						
Total		1350	45	10	4	2	425	220	30	175	925	0	0	10	9	14	0	0	0	0	0	
2. ELECTIVE ACADEMIC DISCIPLINES																						
2.1. Disciplines offered by University																						
1	Forest policy	90	3		1		30	15		15	60			2								
2	Foreign language (for professional purposes)	90	3	1			30	0		30	60			2								
3	Methodology and organization of scientific research on the basics of intellectual property	90	3		2		30	15		15	60				2							
Total		270	9	1	2	0	90	30	0	60	180	0	0	4	2	0	0	0	0	0	0	
2.2. Disciplines offered by students																						
1	Zoogeographical and hunting zoning	90	3		1		30	15		15	60			2								
2	Hunting resources of Ukraine and the world	90	3		1		30	15		15	60			2								

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
3	Immobilization and transport of animals	90	3		2		30	15	15		60				2						
4	The evolution of the animal world	90	3		2		30	15		15	60				2						
5	Zoo management	120	4		2		45	30		15	75				3						
6	Regional game management industry in Ukraine	90	3		3		20	10		10	70					2					
7	Hunting tourism	90	3		3		20	10		10	70					2					
Total		660	22	0	7	0	205	110	15	80	455	0	0	4	7	4	0	0	0	0	0
3. OTHER LOAD																					
Production Practice		270	9																		
Preparation of master's thesis		150	5																		
Total of EQL		270	90											18	18	18	0	0	0	0	0

III. STRUCTURE OF CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1350	45	50
2. Elective academic disciplines	930	31	44
2.1. Disciplines offered by University	270	9	10
2.2. Disciplines offered by students	660	22	34
3. Other load	420	14	16
Together for EQL	2700	90	100

IV. SUMMARY OF BUDGET SINCE, WEEK

Year of study	Theoretical training	Examinations	Practical training	Preparation of master's work	State attestation	Holiday	Total
1	30	5	9	–	–	12	56
2	10	2	–	3	1	–	16
Together for EQL	40	7	9	3	1	12	72

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Internship in manufacturing	1	120	4	4
2	Production pre-diploma practice	2	150	5	5

VI. COURSE WORK AND PROJECTS

Nº	Disciplines	Hours	Credits	Course work	Course project
1	Breeding and selection of hunting animals	30	1		CP
2	Keeping wild ungulates	30	1		CP

VII. STATE ATTESTATION

Nº	Component of attestation	Hours	Credits	Number of weeks
1	Defence of master's thesis	150	5	4

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF FORESTRY AND PARK GARDENING**

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0901 «Agriculture and Forestry»
Specialty	8.09010303 «Park and Gardening Management»
Master's program	Professional
Specialization	«Landscape architecture», «Ornamental Nursery», «Ornamental horticulture», «Landscape building»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
on the basis of	level «Bachelor»
Educational degree	«Master»
Qualification	Master of Park Gardening

I. SCHEDULE OF EDUCATIONAL PROCESS
training of the educational and qualification level «Master» of the 2015 year entry
speciality 8.09010303 «Park and Gardening Management»

Year of training	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Legend:

X	-	Scientific-practical training
II	-	Preparation of master thesis
//	-	State certification (state examination and diploma defence)
A	-	intermediate attestation

II. CURRICULUM

№	Name of Academic Discipline	Total		Forms of control knowledge semester				Auditorium classes, hours				Independent work		Practical training		Average weekly hours by years of study and semesters		
		hours	credits	Examination	Test	Coursework (project)	Total	including			practical	Production practice	Research practice	1 year of study	2 year of study	3 sem.	Number of weeks in a semester	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
1. STANDARD ACADEMIC DISCIPLINES																		
1	Computer design technologies	150	5		10	30	45	15	30			75				3		
2	Greenhouse facility	90	3		11	30	20	10	10			70					2	
3	Ornamental horticulture	120	4	9			60	30	30			60		4				
4	Park and gardens planning	90	3		10		30	15		15		60			2			
5	Reconstruction and restoration of landscape-gardening objects	150	5		9	30	60	30	30			90		4				
6	Dendrological projecting	150	5	9			75	30	45			75		5				
7	Forest-parks management	90	3	10			30	15		15		60			2			
8	Inner phytodesign	90	3		11		20	10		10		70				2		
9	Landscape-gardening objects exploitation	90	3	11			20	10		10		70				2		
10	Soils and soils compounds	90	3		10		30	15	15			60			2			
Total		1110	37	5	6	72	416	203	130	83	534			16	9		6	
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines offered by University																		
1	Business foreign language	150	5	9			45			45	105				3			
2	Methodology and organization of scientific research on the basics of intellectual property	90	3		9		30	15		15	60			2				
3	Management and marketing in Park-gardening	90	3		11		20	10		10	70					2		
4	Accounting and audit	90	3		10		45	15		30	45			3				
Total		420	14	0	4	36	146	64	54	28	253			2	3		2	
Specialization «Landscape architecture»																		
2.1. Disciplines offered by University																		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Landscape design	150	5	10			45	15		30	105				3	
2	Recultivation of affected landscapes	150	5		10		45	30		15	105				3	
3	Park studies	90	3	11			30	20		10	60					3
Total		390	13	2	1	0	120	65	0	55	270			0	6	3
2.2. Disciplines offered by students																
1	Landscape planning	90	3	11			20	10	10		70					2
2	Form diversity of ornamental woody plants	90	3		11		30	10	20		60					3
3	Ecological examination	90	3		11		20	10	10		70					2
Total		270	9	1	2	0	60	30	30	0	120			0	0	7
Total for elective part		495	21	3	3	0	180	104	30	46	315			0	18	18
Specialization «Landscape building»																
2.1. Disciplines offered by University																
1	Vertical planning of landscape objects	150	5		10		45	30		15	105				3	
2	Agricultural engineering in park-garden building	150	5	10			45	15		30	105				3	
3	Parks and garden constructions, mechanisms and equipment	90	3	11			30	20		10	60					3
Total		390	13	2	1	0	120	65	0	55	270			0	6	3
2.2. Disciplines offered by students																
1	Landscape planning	60	2	11			30	20		10	30					2
2	Recultivation of affected landscapes	60	2		11		20	10		10	40					2
3	Ornamental plants protection	60	2		11		30	20	10		30					2
Total		216	6	1	2	0	80	50	10	20	100			0	0	6
Total for elective part		495	19	3	3	0	200	124	10	66	295			0	18	18
Specialization «Ornamental Nursery»																
2.1. Disciplines offered by University																
1	Modern technologies in ornamental nursery	150	5		10		45	30		15	105				3	
2	Woody plants growth and mineral nutrition regulation	150	5	10			45	15		30	105				3	
3	Potted woody plants growing	90	3	11			30	20		10	60					3
Total		390	13	2	1	0	120	65	0	55	270			0	6	3
2.2. Disciplines offered by students																
1	Nurseries rules and regulations	60	2	11			30	20		10	30					2
2	Biotechnology methods in decorative nursery	60	2		11		20	10	10		40					2
3	Planting stock quality and methods of its estimation	60	2		11		30	20	10		30					2
Total		180	6	1	2	0	80	50	20	10	100			0	0	6
Total for elective part		495	19	3	3	0	200	124	66	10	295			0	18	18

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Specialization «Ornamental horticulture»																
2.1. Disciplines offered by University																
1	Plant breeding and seed study	150	5	10			45	15		30	105				3	
2	Recultivation of affected landscapes	150	5		10		45	30		15	105				3	
3	Ornamental plants protection	90	3	11			30	20		10	60					3
Total		390	13	2	1	0	120	65	0	55	270			0	6	3
2.2. Disciplines offered by students																
1	Ornamental horticulture	90	3	11			20	10	10		70					2
2	Form diversity of ornamental woody plants	90	3		11		30	10	20		60					3
3	Modern technologies in ornamental nursery	90	3		11		20	10	10		70					2
Total		180	6	9	1	2	0	60	30	30	0	120			0	0
Total for elective part		495	19	3	3	0	180	104	30	46	315			0	18	18
Total for elective part		930	31													
3. OTHER LOAD																
Production Practice		270	90													
Preparation and defence of master's thesis		300	10													
Number of term papers (projects)						3										
Number of credits					13											
Number exams				10												
Total for qualification level «Master»		2700	90											18	18	18

III. STRUCTURE OF CURRICULUM

Disciplines	Hours	Credits	%
1. Standard academic disciplines	1200	40	44,4
2. Elective academic disciplines	930	31	34,4
2.1. Disciplines offered by University	750	25	27,8
2.2. Disciplines offered by students	180	6	6,7
3. Other load	570	19	21,1
Together for EQL	2700	90	100

IV. SUMMARY OF BUDGET SINCE, WEEK

Year of study	Theoretical training	Examinations	Practical training	Preparation of master's work	State attestation	Holiday	Total
1	30	5	9	–	–	12	56
2	10	2	–	3	1	–	16
Together for EQL	40	7	9	3	1	12	72

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Number of weeks
1	Internship in manufacturing	1	120	4	4
2	Production pre-diploma practice	2	150	5	5

VI. COURSE WORK AND PROJECTS

Nº	Disciplines	Hours	Credits	Course work	Course project
1	Reconstruction and restoration of landscape-gardening objects	30	1		CP
2	Computer design technologies	30	1		CP
3	Greenhouse facility	30	1		CP

VII. STATE ATTESTATION

Nº	Component of attestation	Hours	Credits	Number of weeks
1	Defence of master's thesis	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

LAW FACULTY

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0304 «Law»
Specialty	8.03040101 «Law science»
Master's program	Educational and Professional
Specialization	«Agrarian Law», «Land Law», «Environmental Law», «Administrative law», «The Court. Office of Public Prosecutor. The legal profession», «International Commercial Law», «International consumer law»
Form of training	full-time
Term of study (Credits) on the basis of	1,5 years (90)
Educational degree	the first level of higher education (bachelor)
Qualification	«Master» Master of Law

I. SCHEDULE OF TRAINING
Specialists for second (master) level of higher education in 2015
in specialty 8.03040101 «Law science»

Year of training	2015 year												2016 year																										
	September			October			November			December			January			February			March			April			May			June			July			August					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6		
I	1	7	14	21	IX	5	12	19	2	9	16	23	1	7	14	21	XII	4	11	18	25	1	8	15	22	29	5	12	19	26	1	8	15	22	29	5	12	19	26
II	4	11	18	25	X	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26	1	8	15	22	29	5	12	19	26	1	8	15	22
III	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8
IV																																							
V																																							
VI																																							
VII																																							
VIII																																							
IX																																							
X																																							
XI																																							
XII																																							

Legend:

I	-	Theoretical training	X	-	Scientific-practical training
II	-	Examination period	II	-	Preparation of master thesis
III	-	Holidays	III	-	State certification (state examination and diploma defence)
IV	-	Pedagogical (assistance) training	IV	-	

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work			Practical training		Practical training		Distribution of hours per week within an acad. year and semesters					
		Semesters			Including		Lectures		Laboratory classes		Seminars		practical training		manufacturing practice		1 year semester		2 year semester				
		Credit		Exam		Test		Course paper		Total		Lectures		Laboratory classes		Seminars		1		2		3	
		Hours		5	6	7	8	9	10	11	12	13	14	15	16	17	15	15	10	15	15	10	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17							
1. COMPULSORY ACADEMIC DISCIPLINES																							
1	Philosophy of Law	120	4	1			30	15		15	90			2									
2	Rule-Making Technicality	120	4	1			30	15		15	90			2									
3	Civil Procedure Document	120	4	1			45	30		15	75			3									
4	International legal regulation of food security	90	3		1		30	15		15	6			2									
5	International treaty law	90	3		1		30	15		15	60			2									
6	Problems of Information Law	90	3		1		45	15		30	45			3									
7	The law of international organizations	120	4	2			30	15		15	90			2									
8	Interpretation of Law	90	3		2		30	15		15	60			2									
9	The problems of ownership	120	4	2			60	30		30	60			2									
10	Theoretical issues of civil law	120	4	2		2	60	30		30	60			2									
11	Current issues preventing and combating corruption in Ukraine	90	3		2		45	30		15	45			3									
12	Current issues of agrarian law	120	4	2			45	15		30	75			3									
13	Current problems of natural resource law	120	4		2		30	15		15	90			2									
14	The law on environmental safety	90	3		3		20	10		10	70									2			
15	Advisory activities of a lawyer	90	3	3			30	10		20	60									3			
Total		1590	53	8	7	1	560	275		285	976	0	0	14	16	15	15	10					
2. ELECTIVE ACADEMIC DISCIPLINES																							
2.1. Disciplines chosen by University																							
1	Business Foreign Language	120	4	1			30	15		15	90			2									
2	Methodology and Organization of Scientific Research with Fundamentals of Intellectual Property	90	3		1		30	15		15	60			2									
3	Pedagogical Technologies	120	4		2		30	15		15	90			2									

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total		330	11	1	2	0	60	45		45	240	0	0	4	2	0
2.2. Disciplines chosen by students																
Specialization «Agrarian Law»																
1	Features of legal regulation of labor relations in agriculture	90	3	3			20	10		10	70					2
2	Problems of legal regulation of the agricultural market	90	3		3		20	10		10	70					2
3	The legal quality and safety of agricultural products	90	3	3		3	20	10		20	70					2
4	Legal protection of the environment in agriculture	90	3		3		20	10		10	70					2
5	The agrarian law of foreign countries	120	4	3			30	10		10	90					3
6	Legal regulation of financial activity of industrial agriculture	90	3		3		20	10		10	70					2
Total		570	19	3	3	1	130	60		70	440	0	0	0	0	13
Specialization «Land Law»																
1	Features of legal regulation of labor relations in agriculture	90	3	3			20	10		10	70					2
2	Problems of legal regulation of the agricultural market	90	3		3		20	10		10	70					2
3	The legal quality and safety of agricultural products	90	3	3		3	20	10		20	70					2
4	Legal protection of the environment in agriculture	90	3		3		20	10		10	70					2
5	The agrarian law of foreign countries	120	4	3			30	10		10	90					3
6	Legal regulation of financial activity of industrial agriculture	90	3		3		20	10		10	70					2
Total		570	19	3	3	1	130	60		70	440	0	0	0	0	13
Specialization «Environmental Law»																
1	International and European environmental law	90	3	3			20	10		10	70					2
2	Legal problems of landscape law formation	90	3		3		20	10		10	70					2
3	Problems fauna and flora law	90	3	3		3	20	10		20	70					2
4	Actual problems of water law	90	3		3		20	10		10	70					2
5	Rights biotechnology	120	4	3			30	10		10	90					3
6	Legal problems of forest law	90	3		3		20	10		10	70					2
Total		570	19	3	3	1	130	60		70	440	0	0	0	0	13
Specialization «Administrative law»																
1	Administrative jurisdiction in the agricultural sector	90	3	3			20	10		10	70					2
2	Administrative responsibility	90	3		3		20	10		10	70					2
3	Current issues of administrative law	90	3	3		3	20	10		20	70					2
4	Legal support public administration	90	3		3		20	10		10	70					2
5	Rights of public revenues and expenditures in Ukraine	120	4	3			30	10		10	90					3

1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6	Administrative and legal regulation of nature	90	3	3	3	3		20	10		10	70					2
Total		570	19	3	3	3	1	130	60		70	440	0	0	0	0	13
Specialization «The Court. Office of Public Prosecutor. The legal profession»																	
1	Modern problems of the judicial system in Ukraine	90	3	3	3			20	10		10	70					2
2	The Prosecutor's Office of Ukraine	90	3		3			20	10		10	70					2
3	Actual problems of reforming law enforcement bodies of Ukraine	90	3	3			3	20	10		20	70					2
4	Current issues of criminal proceedings in Ukraine	90	3		3			20	10		10	70					2
5	Actual problems of criminal legal qualifications	120	4	3				30	10		10	90					3
6	Actual problems of forensic activities	90	3		3			20	10		10	70					2
Total		570	19	3	3	3	1	130	60		70	440	0	0	0	0	13
Specialization «International Commercial Law»																	
1	Commercial law	90	3	3				20	10		10	70					2
2	International Commercial Arbitration	90	3		3			20	10		10	70					2
3	Legal regulation of FEA	90	3	3			3	20	10		20	70					2
4	International food law	90	3		3			20	10		10	70					2
5	WTO Law	120	4	3				30	10		10	90					3
6	Consumer protection in the EU and Ukraine	90	3		3			20	10		10	70					2
Total		570	19	3	3	3	1	130	60		70	440	0	0	0	0	13
Specialization «International consumer law»																	
1	International food legislation	90	3	3				20	10		10	70					2
2	European consumer rights	90	3		3			20	10		10	70					2
3	International legal regulation of trade in food products	90	3	3			3	20	10		20	70					2
4	International insurance law	90	3		3			20	10		10	70					2
5	Legal liability in the field of consumer protection	120	4	3				30	10		10	90					3
6	International economic law	90	3		3			20	10		10	70					2
Total		570	19	3	3	3	1	130	60		70	440	0	0	0	0	13
3. OTHER FORMS OF TRAINING																	
Total for elective part		900	30	4	5			220	105		115	680					
Writing and defense of master's thesis		90	3														
Practical training		120	4									60	60				
Course work		2															
Tests		12															
Exams		12															
Total		2700	90	12	12	2	2	780	380		400	1656	60	60	18	18	10

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1590	53	60
2. Elective academic disciplines	900	30	34
2.1. Disciplines chosen by University	330	11	14
2.2. Disciplines chosen by students	570	19	20
3. Other form of training	210	7	6
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Year of study	Theoretical training	Examination period	Practical training	Preparation of master's work	State Certification	Holiday	Total
1	30	5	6	-	-	11	52
2	10	2	-	3	2		17
Total for the specialty	40	7	6	3	2	11	69

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Production Practice	2	60	2	2
2	Pedagogical practice	2	60	2	4

VI. COURSE PAPER AND PROJECTS

Nº	Discipline	Hours	Credits	Course paper	Course projects
1	Theoretical issues of civil law	30	1	+	
2	In accordance with to specialization	30	1	+	

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	State exam	30	1	1
2	Protection of master's work	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF LAND MANAGEMENT

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0801 «Geodesy and Land Management»
Specialty	8.08010103 «Land Management and Cadastre»
Master's program	Educational and Professional
Specialization	«Land Management and Cadastre», «Land Conservation», «GIS in Land Management», «Assessment of Land and Property», «Geodetic-cartographic technology in Land Management»
Form of training	full-time
Term of study (Credits) on the basis of	1,5 year (90)
Educational degree	the first level of higher education (bachelor)
Qualification	«Master»
	Master of Science in Land Management and Cadastre

I. SCHEDULE OF TRAINING
Specialists for second (master) level of higher education in 2015
in specialty 8.08010103 «Land Management and Cadastre»

Year of training	2015 year												2016 year																												
	September			October			November			December			January			February			March			April			May			June			July			August							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6				
I																																									
2015 year												2016 year												2016 year												2016 year					
Year of training	September			October			November			December			January			February			March			April			May			June			July			August							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6				
II																																									

Legend:

- Theoretical training
- Examination period
- Holidays

- Scientific-practical training
- Preparation of master thesis
- State certification (state examination and diploma defence)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work			Practical training		Practical training practice	Distribution of hours per week within an acad. year and semesters		
		Semesters			Including			Lectures		Laboratory classes		Seminars		Number of weeks in semester					
		Hours	Credit	Exam	Test	Course paper	Total			9	10	11	12	13	14	15	16	17	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. COMPULSORY ACADEMIC DISCIPLINES																
1	State Examination of Land Management decisions	90	3		1		30	15		15	60			2		
2	Agricultural, land and environmental law	90	3		1		30	15		15	60			2		
3	Land Resources Management	120	4	1		1	30	15		15	90			2		
4	Organization of land surveying works	90	3	1			30	15		15	60			2		
5	Land Monitoring and Conservation	180	6		2		45	15		30	135					3
6	The legal process of Land Management	150	5	2			45	15		30	105					3
7	The land market and real estate	120	4		2		30	15		15	90					2
8	Design engineering	180	6	2		2	45	15		30	135					3
9	Commercial and Labor Law	90	3		2		30	15		15	60					2
10	Legislative Support of Real Estate Cadastre	120	4	3			30	10		20	90					3
11	Licensing and patenting of research output	90	3		3		10	0		10	80					1
12	Information technologies in scientific research	90	3		3		20	0		20	70					2
13	GIS in cadastral systems	90	3	3			30		30		60					3
14	Economics of land use and land management	120	4	3			30	10		20	90					3
Total		1620	54	7	7	2	435	155	30	250	1185	0	0	8	13	12
2. ELECTIVE ACADEMIC DISCIPLINES																
2.1. Disciplines chosen by University																
1	Methodology and organization of scientific research on the basics of intellectual property	90	3		1		30	15	15		60			2		
2	Business foreign language	150	5	1			60			60	90			4		
3	Agricultural Policy	90	3		2		30	15		15	60				2	
Total		330	11	1	2		120	30	15	75	210	0	0	6	2	0

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2.2. Disciplines chosen by students																
Specialization «Land Management and Cadastre»																
1	Automation in land management	120	4	1			30	15	15		90			2		
2	Planning Development of Territories	120	4	1			30	15	15		90			2		
3	Standardization and Regulation of Land Management	150	5	2			45	15	30		105			3		
4	Quality Management of Land Management Projects	90	3		3		20	10	10		70					2
5	Management of Municipal Lands	90	3	3			20	10	10		70					2
6	Computer technology in Land Management	90	3	3			20	10	10		70					2
Total		660	22	5	1		165	75	90	0	495	0	0	4	3	6
Specialization «Land Conservation»																
1	Formation of agrolandscapes	120	4	1			30	15	15		90			2		
2	Evaluation and forecast of land quality	120	4	1			30	15	15		90			2		
3	Environmental impact assessment of land use planning decisions	150	5	2			45	15	30		105			3		
4	Technological aspects of land use	90	3		3		20	10	10		70					2
5	Prediction of land use	90	3	3			20	10	10		70					2
6	Engineering and technology regulation of land protection	90	3	3			20	10	10		70					2
Total		660	22	5	1		165	75	90	0	495	0	0	4	3	6
Specialization «GIS in Land Management»																
1	Information Modeling and programming in land management	120	4	1			30	15	15		90			2		
2	Methods of remote sensing in Land Management	120	4	1			30	15	15		90			2		
3	GIS analysis and geostatistics applied to Land Management	150	5	2			45	15	30		105			3		
4	Geoprocessing tools	90	3		3		20	10	10		70					2
5	GIS of Natural Resources	90	3	3			20	10	10		70					2
6	Global Navigation Satellite Systems	90	3	3			20	10	10		70					2
Total		660	22	5	1		165	75	90	0	495	0	0	4	3	6
Specialization «Assessment of Land and Property»																
1	Information support of monetary evaluation of land	120	4	1			30	15	15		90			2		
2	Registration of ownership	120	4	1			30	15	15		90			2		
3	Landscape science basics of Land Management	150	5	2			45	15	30		105			3		
4	Real Estate Evaluation	90	3		3		20	10	10		70					2
5	Regulatory and expert assessment of land parcels	90	3	3			20	10	10		70					2
6	Land market and land activities	90	3	3			20	10	10		70					2
Total		660	22	5	1		165	75	90	0	495	0	0	4	3	6

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Specialization «Geodetic-cartographic technology in Land Management»																
1	Computer technologies of mapping	120	4	1			30	15	15		90			2		
2	Cartographic supply of land management	120	4	1			30	15	15		90			2		
3	Topographic, geodetic and cartographic supply of land management	150	5	2			45	15	30		105				3	
4	Thematic Mapping: maps of land cover and use	90	3		3		20	10	10		70					2
5	Modeling in Cartography	90	3	3			20	10	10		70					2
6	National geospatial data infrastructure	90	3	3			20	10	10		70					2
Total		660	22	5	1		165	75	90	0	495	0	0	4	3	6
Total elective academic disciplines		990	33	6	3	0	285	105	105	75	705	0	0	10	5	6
3. OTHER FORMS OF TRAINING																
State examination		45	1,5													
Practical training		45	1,5										45			
Course work						2										
Tests					10											
Exams				13												
Total		2700	90	13	10	2	720	260	135	325	1890	0	45	18	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1620	54	60
2. Elective academic disciplines	990	33	36,7
2.1. Disciplines chosen by University	330	11	12,2
2.2. Disciplines chosen by students	660	22	24,4
3. Other form of training	90	3	3,3
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	6	2	-	9	52
2	10	3	-	3	2	-	18
Total for the specialty	40	8	6	5	2	9	70

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Professional internship	2	45	1,5	6

VI. COURSE PAPER AND PROJECTS

№	Discipline	Hours	Credits	Course paper	Course projects
1	Land Resources Management	30	1	+	
2	Design engineering	30	1		+

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis preparation and defense	45	1,5	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

ECONOMIC FACULTY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0305 «Economics and entrepreneurship»
Specialty	8.03050401 «Economics of Enterprise»
Master's program	Educational and Professional
Specialization	«Business planning productive activities in agriculture», «Organization of production services for enterprises of agrarian sphere», «Socio-economic development of rural areas», «The economy of the agricultural sector», «Exchange activity in the agricultural market»
Form of training	full-time
Term of study (Credits)	1,5 year (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master in Enterprise Economics

**I. SCHEDULE OF EDUCATION PROCESS
for Training Specialists for second (master) level of higher education in 2015
in specialty 8.03050401 «Economics of Enterprise»**

[illegible]

Year of training	2016 year																	
	September			October			26	November			30	December			28			
							X				X				XII			
	1	7	14	21	4	5	12	19	1	2	9	16	23	7	14	21	3	
	6	13	20	27	X	11	18	25	XI	8	15	22	29	13	20	27	1	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	II										:	:	:	II	//	//	//	

Legend:

-	Theoretical training	X	-	Practical training (internship)
-	Examination period	II	-	Preparation of master thesis
-	Holidays	//	-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes				Individual work		Practical training		Practical training (internship)	Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	due to semesters			Total	including								15	15	10
				Exam	Test	Course project		Lectures	Laboratory classes	Seminars								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
1. THE OBLIGATORY ACADEMIC DISCIPLINES																		
1	Economic governance enterprise	150	5	E			60	30		30	90				1			
2	competitiveness of enterprises	150	5	E			60	30		30	90				1			
3	Modeling in the management of socio-economic systems	150	5	E			60	30	30		90				2			
4	Intellectual business	150	5	E			60	30		30	90					2		
5	project management	120	4	E			60	30		30	60					2		
6	Business Planning entrepreneurship in agriculture	120	4	E			60	30		30	60					2		
7	Global Economy	150	5	E			30	20		10	120						3	
8	Social responsibility	120	4	E			30	10		20	90						3	
9	Innovative development company	120	4	E			30	10		20	90						3	
10	State economic policy	120	4	E			30	10		20	90						3	
11	Stock market	120	4		T		40	10		30	80						3	
Total		1470	49				520	240	30	250	950							
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines chosen by University																		
1	Methodology and organization of research	90	3	E			45	15		30	45				1			
2	Intellectual Property	90	3		T		10			10	80						3	
3	Agricultural policy	120	4		T		30	20		10	90						3	
4	Business Foreign Language	120	4		T		30		30		90					2		
Total		420	14				115	35	30	50	305							
2.2. Disciplines chosen by students																		
Specialization «Business planning productive activities in agriculture»																		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Design entrepreneurship in agriculture	180	6	E	T	K	90	60		30	90		X		2	3
2	Agribusiness: development and evaluation	180	6		T		60	30		30	120		X		2	
Total		360	12				150	90	0	60	210					
Specialization «Organization of production services for enterprises of agrarian sphere»																
1	Economy and organization serving areas in agriculture	180	6	E		K	90	60		30	90		X	1	2	
2	Economic relations between the serving and the manufacturing sector	180	6		T		60	30		30	120		X	1		
Total		360	12				150	90	0	60	210					
Specialization «Socio-economic development of rural areas»																
1	Socio-economic development of rural areas	180	6	E		K	90	60		30	90		X	1	2	
2	The organization of local government	180	6		T		60	30		30	120		X	1		
Total		360	12				150	90	0	60	210					
Specialization «The economy of the agricultural sector»																
1	The economy of the agricultural sector	180	6	E		K	90	60		30	90		X	1	2	
2	Economy Cooperative Sector	180	6		T		60	30		30	120		X	1		
Total		360	12				150	90	0	60	210					
Specialization «Exchange activity in the agricultural market»																
1	Technology futures trading	90	3	E		K		45		30			X	1	2	
2	Brokering	90	3	E				15		30			X	1		
3	Organization of commodity exchange market	90	3		T			15		15			X	1		
4	Price and pricing	90	3		T			15		15			X	1		
Total		360	12				180	90		90						
Total		780	26				450	270	0	180						
3. OTHER FORMS OF TRAINING																
Preparing and defense of Master paper			5													
Practical training (internship)			10													
Number of Course Projects		1														
Number of passes																
Number of Exams				12	5											
Total for the specialty		2700	90				935	455	60	420						

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1470	49	54
2. Elective academic disciplines	780	26	29
2.1. Disciplines chosen by University	420	14	15
2.2. Disciplines chosen by students	360	12	14
3. Other form of training	450	15	17
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	—	—	—	9	44
2	10	2	8	2	2	—	24
Total for the specialty	40	7	8	2	2	9	68

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	3	300	10	8

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Design entrepreneurship in agriculture	30	1	X	
2	Economy and organization serving areas in agriculture	30	1	X	
3	Socio-economic development of rural areas	30	1	X	
4	The economy of the agricultural sector	30	1	X	
5	Technology futures trading	30	1	X	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	150	5	4

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

ECONOMIC FACULTY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0305 «Economics and entrepreneurship»
Specialty	8.03050401 «Economics of Enterprise»
Master's program	Educational and Professional
Specialization	«Sustainable development of agribusiness enterprises in the global economic instability»
Form of training	full-time
Term of study (Credits)	2 years (120)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master in Enterprise Economics

I. SCHEDULE OF EDUCATION PROCESS

Year of training ^a	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Legend:

-	Theoretical training	X	-	Practical training (internship)
-	Examination period	II	-	Preparation of master thesis
-	Holidays	//	-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes				Individual work		Practical training		Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	due to semesters			Total	including		Seminars	13	14	Practical training (internship)		I year		II year
				Exam	Test	Course project		Lectures	Laboratory classes						1	2	3
1	2	3	4	5	6	7	8	9	10	11	12	13	14		15	16	17
1. THE OBLIGATORY ACADEMIC DISCIPLINES																	
1	Economic governance enterprise	150	5	E			60	30		30	90				1		
2	Competitiveness of enterprises	150	5	E			60	30		30	90				1		
3	Modeling in the management of socio-economic systems	150	5	E			60	30	30		90					2	
4	Intellectual business	150	5	E			60	30		30	90					2	
5	Project management	120	4	E			60	30		30	60					2	
6	Business Planning entrepreneurship in agriculture	120	4	E			60	30		30	60					2	
7	Global Economy	150	5	E			30	20		10	120						3
8	Social responsibility	120	4	E			30	10		20	90						3
9	Innovative development company	120	4	E			30	10		20	90						3
10	State economic policy	120	4	E			30	10		20	90						3
11	Stock market	120	4		3		40	10		30	80						3
Total		1470	49				520	240	30	250	950						
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Methodology and organization of research	90	3	E			45	15		30	45				1		
2	Intellectual Property	90	3		3		10			10	80						3
3	Agricultural policy	120	4		3		30	20		10	90						3
4	Business Foreign Language	120	4		3		30		30		90					2	
Total		420	14				115	35	30	50	305						
2.2. Disciplines chosen by students																	
Specialization «Sustainable development of agribusiness enterprises in the global economic instability»																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Sustainable development of agribusiness enterprises	180	6	E	3	K	90	60		30	90		X		2	3
2	Ensuring the efficiency of farms	180	6		3		60	30		30	120		X		2	
3	Scientific principles of formation of self-sufficiency of rural communities	150	5													
Total I		510	17				150	90		60	210					
Total II		930	31				265	125		110	515					
3. OTHER FORMS OF TRAINING																
Preparing and defense of Master paper		30	1													
Practical training (internship)		1170	39													
Number of Course Projects		1														
Number of passes																
Number of Exams				12	5											
Total for the specialty		3600	120			1	730	290	60	380	1100	1		18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1470	49	41
2. Elective academic disciplines	930	31	26
2.1. Disciplines chosen by University	420	14	12
2.2. Disciplines chosen by students	510	17	14
3. Other form of training	1200	40	33
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	–	–	–	9	44
2	15	3	20	4	1	3	46
Total for the specialty	45	8	20	4	1	12	90

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	3	420	14	8
		4	750	25	12

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Sustainable development of agribusiness enterprises	30	1	x	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

ECONOMIC FACULTY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0305 «Economics and entrepreneurship»
Specialty	8.03050801 «Finance and Credit»
Master's program	Educational and Professional
Specialization	«Banking agricultural enterprises», «Insurance Business», «Corporate Finance», «Financial Analyst in business», «Exchange activity in the stock market»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master in Finances and Credit

**for Training Specialists for second (master) level of higher education in 2015
in specialty 8.03050801 «Finance and Credit»**

Year of training		2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
		September			October			November			December			January			February			March			April			May			June			July			August																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
I	1	7	14	21	4	IX	5	12	19	1	X	2	9	16	23	6	7	14	21	3	XII	4	11	18	25	1	8	15	22	6	II	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16	23	5	V	6	13	20	3	VI	4	11	18	25	1	7	14	21	3	III	4	11	18	25	1	IV	2	9	16

Year of training	2016 year																																			
	September			October			November			December			30	28 XII 3																						
	1	7	14	21	4	5	12	19	1	X	2	9			16	23	6	7	14	21																
													6	13							20	27	X	11	18	25	XI	8	15	22	29	XI	13	20	27	1
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18																			
II											:	:	:	II	II	//	//																			

Legend:

-	Theoretical training	X	-	Practical training (internship)
-	Examination period	II	-	Preparation of master thesis
-	Holidays	//	-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes				Individual work	Practical training		Practical training (internship)	Distribution of hours per week within an acad. year and semesters			
		Hours	Credit	due to semesters		Total	including		Practical training	13		14	I year					
				Exam	Test		Course project	Lectures					Laboratory classes		Seminars	semester		
																1	2	3
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
1. THE OBLIGATORY ACADEMIC DISCIPLINES																		
1	Tax Management	120	4	E			45	30		15	75				1			
2	financial management	120	4	E			45	30		15	75				1			
3	Financial Services Market	120	4	E			30	15		15	90				1			
4	Applied Econometrics (except exchange activity)	90	3		3		30	15		15	60					2		
5	Management of financial sanitation enterprises (except exchange activity)	120	4	E			45	15		30	75					2		
6	Exchange activity in the stock market (for stock activity)	90	3		3		30	15		15	60					2		
7	Financial risk management (for exchange activities)	120	4		3		60	30		30	60					2		
8	Insurance Management	120	4	E			45	15		30	75					2		
9	Budget management	90	3	E			60	30		30	30					2		
10	Mortgages	90	3		3		30	15		15	60					2		
11	Environmental Finances	90	3		3		30	15		15	60					2		
12	Global Economy	120	4	E			30	20		10	90						3	
13	Social responsibility	90	3	E			30	10		20	60						3	
14	Innovative development company	90	3	E			30	10		20	60						3	
15	Investment management	120	4	E			20	10		10	100						3	
16	International payments and foreign currency transactions	120	4		3		30	10	20		90						3	
Total		1500	50				590	285	20	285	1120							
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines chosen by University																		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Business Foreign Language	120	4		3		30		30		90			1		
2	Methodology and organization of research	90	3		3		30	15		15	60			1		
3	Intellectual Property	90	3		3		10		10		80					3
4	Agricultural policy	120	4		3		30	20		10	90					3
Total		420	14				100	35	40	25	320					
2.2. Disciplines chosen by students																
Specialization «Banking agricultural enterprises»																
1	Banking Management	300	10	E		K	60	30		30	240		X		2	3
2	Monetary policy and NBU	180	6		3		30	15		15	150		X		2	
Total		480	16				90	45	0	45	390					
Specialization «Insurance Business»																
1	Financial support insurance liabilities	150	5		3	K	30	15		15	120		X		2	
2	Agricultural insurance	180	6		3		30	15		15	150		X		2	
3	Office reinsurance operations	150	5	E			20	15		15	130		X			3
Total		480	16				90	45	0	45	390					
Specialization «Corporate Finance»																
1	corporate governance	330	11	E		K	60	30		30	270		X		2	3
2	Analysis of investment projects	150	5		3		30	15		15	120		X		2	
Total		480	16				90	45	0	45	390					
Specialization «Financial Analyst in business»																
1	Business Intelligence	330	11	E		K	60	30		30	270		X		2	3
2	Business Valuation	150	5		3		30	15		15	120		X		2	
Total		480	16				90	45	0	45	390					
Specialization «Exchange activity in the stock market»																
1	Analysis and forecasting the stock market	300	10	E		K	60	30		30	240		X		2	3
2	Technology futures trading	180	6		3		30	15		15	150		X		2	
Total		480	16				90	45	0	45	390					
Total		900	30				190	80	40	70	710					
3. OTHER FORMS OF TRAINING																
Preparing and defense of Master paper																
		150	5													
Practical training (internship)																
		150	5													
Number of Course Projects																
						1										
Number of passes																
					10											
Number of Exams																
				11												
Total for the specialty																
		2700	90				780	365	60	355	1830					

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1500	50	55
2. Elective academic disciplines	900	30	34
2.1. Disciplines chosen by University	420	14	16
2.2. Disciplines chosen by students	480	16	18
3. Other form of training	300	10	11
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	–	–	–	9	44
2	10	2	8	2	2	–	24
Total for the specialty	40	7	8	2	2	9	68

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	3	150	5	8

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Banking Management	30	1	X	
2	Financial support insurance liabilities	30	1	X	
3	Corporate governance	30	1	X	
4	Business Intelligence	30	1	X	
5	Analysis and forecasting the stock market	30	1	X	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	150	5	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
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ECONOMIC FACULTY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0305 «Economics and entrepreneurship»
Specialty	8.03050801 «Finance and Credit»
Master's program	educational and scientific
Specialization	«Scientific support financial management and financial services to agribusiness»
Form of training	full-time
Term of study (Credits)	2 years (120)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master in Finance and Credit

**I. SCHEDULE OF EDUCATION PROCESS
for Training Specialists for second (master) level of higher education in 2015
in specialty 8.03050801 «Finance and Credit»**

Year of training		2015 year												2016 year																							
		September			October			November			December			January			February			March			April			May			June			July			August		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5
I																																					
II																																					

Year of training		2016 year												2017 year												2018 year												
		September			October			November			December			January			February			March			April			May			June			July			August			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	
I																																						
II																																						

Legend:

	-	Theoretical training		-	Practical training (internship)
:	-	Examination period		-	Preparation of master thesis
-	-	Holidays		-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes				Individual work	Practical training		Practical training (internship)	Distribution of hours per week within an acad. year and semesters					
		Hours	Credit	due to semesters			Total	including				13	14		I year					
				Exam	Test	Course project		Lectures	Laboratory classes	Seminars					semester					
															1	2	3			
																		Number of weeks in semester		
																		15	15	10
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17				
1. THE OBLIGATORY ACADEMIC DISCIPLINES																				
1	Tax Management	120	4	E			45	30		15	75				1					
2	Financial management	120	4	E			45	30		15	75				1					
3	Financial Services Market	120	4	E			30	15		15	90				1					
4	Applied Econometrics (except exchange activity)	90	3		3		30	15		15	60					2				
5	Management of financial sanitation enterprises (except exchange activity)	120	4	E			45	15		30	75					2				
6	Exchange activity in the stock market (for stock activity)	90	3		3		30	15		15	60					2				
7	Financial risk management (for exchange activities)	120	4		3		60	30		30	60					2				
8	Insurance Management	120	4	E			45	15		30	75					2				
9	Budget management	90	3	E			60	30		30	30					2				
10	Mortgages	90	3		3		30	15		15	60					2				
11	Environmental Finances	90	3		3		30	15		15	60					2				
12	Global Economy	120	4	E			30	20		10	90						3			
13	Social responsibility	90	3	E			30	10		20	60						3			
14	Innovative development company	90	3	E			30	10		20	60						3			
15	Investment management	120	4	E			20	10		10	100						3			
16	International payments and foreign currency transactions	120	4		3		30	10	20		90						3			
Total		1500	50				590	285	20	285	1120									
2. ELECTIVE ACADEMIC DISCIPLINES																				
2.1. Disciplines chosen by University																				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Business Foreign Language	120	4		3		30		30		90			1		
2	Methodology and organization of research	90	3		3		30	15		15	60			1		
3	Intellectual Property	90	3		3		10		10		80					3
4	Agricultural policy	120	4		3		30	20		10	90					3
Total		420	14				100	35	40	25	320					
2.2. Disciplines chosen by students																
Specialization «Sustainable development of agribusiness enterprises in the global economic instability»																
1	Banking Management	150	5	E		K	60	30		30	240		X		2	3
2	Analysis of investment projects	180	6		3		30	15		15	150		X		2	
3	Office reinsurance operations	150	5	E			20	15		15	130		X			3
Total		480	16				110	60		60	520					
Total		900	30				210	95	40	85	840					
3. OTHER FORMS OF TRAINING																
Preparing and defense of Master paper																
		30	1													
Practical training (internship)																
		1050	35													
Number of Course Projects																
						1										
Number of passes																
					10											
Number of Exams																
				12												
Total for the specialty																
		3600	120				800	380	60	370	1960					

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1500	50	42
2. Elective academic disciplines	900	30	25
2.1. Disciplines chosen by University	420	14	12
2.2. Disciplines chosen by students	480	16	13
3. Other form of training	2100	40	33
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	–	–	–	9	44
2	15	3	20	4	1	3	46
Total for the specialty	45	8	20	4	1	12	90

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	3	150	5	8
		4	870	29	12

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Banking Management	30	1	x	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

ECONOMIC FACULTY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0305 «Economics and entrepreneurship»
Specialty	8.03050803 «Taxation»
Master's program	Educational and Professional
Specialization	«Theoretical and methodological basis of taxation and tax regulation»
Form of training	full-time
Term of study (Credits)	1,5 year (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master in Taxation

I. SCHEDULE OF EDUCATION PROCESS

[illegible]

Year of training	2016 year																																		
	September				October			26	November				30	December			28																		
	1	7	14	21	4	IX	5	12	19	1	X	2	9	16	23	6	X	7	14	21	3	XII													
																							6	13	20	27	X	8	15	22	29	XI	13	20	27
											:	:	:	:	:	II	//	//																	
II																																			

Legend:

-	Theoretical training	X	-	Practical training (internship)
-	Examination period	II	-	Preparation of master thesis
-	Holidays	//	-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)				Auditorium classes				Individual work		Practical training		Practical training (internship)	Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	due to semesters		Total	including		Seminars	12	13	14	15	16	17				
				Exam	Test		Course project	Lectures								Laboratory classes			
																	1	2	3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. THE OBLIGATORY ACADEMIC DISCIPLINES																
1	Global Economy	120	4	x			60	30		30	60				4	
2	Social responsibility	120	4	x			45	15		30	75			3		
3	Innovative development company	120	4	x			40	20		20	80					4
4	Intellectual Property	30	1		x		15	15			15			1		
5	Tax Policy	120	4	x			45	15		30	75			3		
6	Taxation of undertakings	120	4	x			45	15		30	75			3		
7	tax administration	120	4	x		x	45	15		30	75		x		3	
8	Tax control	120	4	x		x	40	20		20	80		x			4
9	Applied econometrics	90	3		x		45	15	30		45				3	
Total		960	32	7	2	2	380	160	30	190	580	1		10	10	8
2. ELECTIVE ACADEMIC DISCIPLINES																
2.1. Disciplines chosen by University																
1	Methodology and organization of financial and economic research	90	3	x			45	15		30	45				3	
2	Agricultural policy	90	3		x		20	10	10		70					2
3	Business Foreign Language	150	5		x		30		30		120			2		
Total		330	11	1	2		95	25	40	30	235			2	3	2
2.2. Disciplines chosen by students																
Specialization «Theoretical and methodological basis of taxation and tax regulation»																
1	Customs business	90	3		x		45	15		30	45			3		
2	Organization and management of tax in the supervisory bodies	90	3	x			45	15		30	45			3		
3	Personal Income Tax	90	3		x		45	15		30	45				3	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
4	Tax Accounting	90	3		x		40	20		20	50					4
5	Tax Planning	90	3		x		40	20		20	50					4
6	Environmental Sciences Finances	90	3		x		30	15		15	60				2	
Total		540	18	1	5		245	100		145	295			6	5	8
Total		1830	61	9	9	2	720	285	70	365	1110	1		18	18	18
3. OTHER FORMS OF TRAINING																
	Preparing and defense of Master paper	450	15													
	Practical training (internship)	420	14													
	Number of Course Projects	2														
	Number of passes	9														
	Number of Exams	9														
	Total for the specialty	2700	90	9	9	2	720	285	70	365	1110	1		18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	960	32	35,6
2. Elective academic disciplines	870	29	32,2
2.1. Disciplines chosen by University	330	11	12,2
2.2. Disciplines chosen by students	540	18	20
3. Other form of training	870	29	32,2
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	–	–	–	9	44
2	10	2	8	2	2	–	24
Total for the specialty	40	7	8	2	2	9	68

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	3	420	14	8

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Tax administration	30	1	x	
2	Tax control	30	1	x	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	60	2	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

ECONOMIC FACULTY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0305 «Economics and entrepreneurship»
Specialty	8.03050901 «Accounting and Audit»
Master's program	Educational and Professional
Specialization	«Methods and organization of accounting, control and analysis in the management of the banks», «Methods and organization of accounting, control and analysis in the management of enterprises of agroindustrial production», «Economic control of businesses of agroindustrial production», «Methods and organization of accounting, control and analysis in the management of public sector institutions», «Strategic accounting and social business analytics»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master in Accounting and Audit

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes				Individual work		Practical training		Practical training (internship)		Distribution of hours per week within an acad. year and semester		
		Hours	Credit	due to semesters			Total	including		Seminars	Lectures	Laboratory classes	Practical training	Practical training (internship)	I year	II year	1	2	3
				Exam	Test	Course project													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	15	15	10
1. THE OBLIGATORY ACADEMIC DISCIPLINES																			
1	Global Economy	120	4	x			45	15		30	75			3					
2	Social responsibility	120	4	x			45	15		30	75			3					
3	Innovative development company	120	4	x			40	20		20	80								4
4	Intellectual Property	30	1		x		15	15			15			1					
5	Accounting in enterprise management	120	4	x		x	45	15		30	75				3				
6	Financial Analysis	120	4	x			45	15		30	75			3					
7	Accounting organization	120	4	x			60	30		30	60		x		4				
8	Organization and Methods audit	120	4	x			40	20		20	80		x		4				
9	Strategic analysis in enterprise management	90	3	x			45	15		30	45				3				
10	Applied econometrics	90	3	x			45	15	30		45				3				
Total		1050	35	9	1	1	425	175	30	220	625	1		10	13		8		
2. ELECTIVE ACADEMIC DISCIPLINES																			
2.1. Disciplines chosen by University																			
1	Agricultural policy	90	3		x		30	15		15	60								2
2	Business Foreign Language	150	5		x		30		30		120				2				
Total		240	8	2	2		60	15	30	15	180			2			2		
2.2. Disciplines chosen by students																			
Specialization «Methods and organization of accounting, control and analysis in the management of the banks»																			
1	Control in banks	90	3		x		45	15		30	45				3				
2	Analysis of Banking	90	3		x		45	15		30	45				3				
3	Management Accounting in banks	90	3		x		45	15		30	45						3		
4	Accounting Forensic examination	90	3	x			40	20		20	50								4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
5	Accounting for banks according to international standards	90	3		x		40	20		20	50					4
6	Bank Statements	90	3		x		30	15		15	60				2	
Total		540	18	1	5		245	100		145	295			6	5	8
Specialization «Methods and organization of accounting, control and analysis in the management of enterprises of agroindustrial production»																
1	Control in agricultural units	90	3		x		45	15		30	45			3		
2	Accounting for the company small and medium businesses in agriculture	90	3		x		45	15		30	45			3		
3	Accounting in industrial and business agriservice	90	3		x		45	15		30	45				3	
4	Accounting Forensic examination	90	3	x			40	20		20	50					4
5	Accounting and financial reporting under international standards	90	3		x		40	20		20	50					4
6	Accounting for foreign economic activity	90	3		x		45	15		30	45				2	
Total		540	18	1	5		245	100		145	295			6	5	8
Specialization «Economic control of businesses agroindustrial production»																
1	Theory of financial and economic control	90	3		x		45	15		30	45			3		
2	Information-analytical services	90	3		x		45	15		30	45			3		
3	Control in agricultural units	90	3		x		45	15		30	45				3	
4	Accounting Forensic examination	90	3	x			40	20		20	50					4
5	Computer technologies in accounting and auditing	90	3		x		40	20		20	50					4
6	Tax Management	90	3		x		30	15		15	60				2	
Total		540	18	1	5		245	100		145	295			6	5	8
Specialization «Methods and organization of accounting, control and analysis in the management of public sector institution»																
1	Control of agricultural units	90	3		x		45	15		30	45			3		
2	Accounting for the company small and medium businesses in agriculture	90	3		x		45	15		30	45			3		
3	Accounting in industrial and business agriservice	90	3		x		45	15		30	45				3	
4	Accounting Forensic examination	90	3	x			40	20		20	50					4
5	Computer technologies in accounting and auditing	90	3		x		40	20		20	50					4
6	Accountability in public sector institutions	90	3		x		30	15		15	60				2	
Total		540	18	1	5		245	100		145	295			6	5	8
Specialization «Strategic accounting and social business analytics»																
1	Balancing	90	3		x		45	15		30	45			3		
2	Innovation and investment analysis	90	3		x		45	15		30	45			3		
3	Information-analytical management	90	3		x		45	15		30	45				3	
4	Macroeconomic Analysis	90	3	x			40	20		20	50					4
5	Accounting and financial reporting under international standards	90	3		x		40	20		20	50					4
6	Business social analysis	90	3		x		30	15		15	60				2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total		540	18	1	5		245	100		145	295			6	5	8
Total		1830	61	12	8	1	730	290	60	380	1100	1		18	18	18
3. OTHER FORMS OF TRAINING																
Preparing and defense of Master paper		450	15													
Practical training (internship)		420	14													
Number of Course Projects		1														
Number of passes		8														
Number of Exams		12														
Total for the specialty		2700	90	12	8	1	730	290	60	380	1100	1		18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1050	35	38,9
2. Elective academic disciplines	780	26	28,9
2.1. Disciplines chosen by University	240	8	8,9
2.2. Disciplines chosen by students	540	18	20
3. Other form of training	870	29	32,2
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	–	–	–	9	44
2	10	2	8	2	2	–	24
Total for the specialty	40	7	8	2	2	9	68

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	3	420	14	8

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Accounting in enterprise management	30	1	x	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	60	2	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

ECONOMIC FACULTY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0305 «Economics and entrepreneurship»
Specialty	8.03050901 «Accounting and Audit»
Master's program	Educational and Professional
Specialization	«Accounting, control and analysis in the management of agricultural enterprises»
Form of training	full-time
Term of study (Credits)	2 years (120)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master in Accounting and Audit

I. SCHEDULE OF EDUCATION PROCESS
for Training Specialists for second (master) level of higher education in 2015
in specialty 8.03050901 «Accounting and Audit»

Year of training		2015 year												2016 year																							
		September			October			November			December			January			February			March			April			May			June			July			August		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5
I																																					
II																																					

Year of training		2016 year												2017 year																							
		September			October			November			December			January			February			March			April			May			June			July			August		
		29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3
I																																					
II																																					

Legend:

	-	Theoretical training		-	Practical training (internship)
:	-	Examination period		-	Preparation of master thesis
-	-	Holidays		-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)		Auditorium classes, hours						Individual work			Practical training		Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	due to semesters		Total	y tomy учeбн		Seminars	Practical training ^а	Practical training ^б	15	15	15	16	17			
				Exam	Test		Course project	Lectures									Laboratory classes		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17			
1. THE OBLIGATORY ACADEMIC DISCIPLINES																			
1	Global Economy	120	4	x			45	15		30	75			3					
2	Social responsibility	120	4	x			45	15		30	75			3					
3	Innovative development company	120	4	x			40	20		20	80					4			
4	Intellectual Property	30	1		x		15	15			15			1					
5	Accounting in enterprise management	120	4	x		x	45	15		30	75				3				
6	Financial Analysis	120	4	x			45	15		30	75			3					
7	Accounting organization	120	4	x			60	30		30	60		x		4				
8	Organization and Methods audit	120	4	x			40	20		20	80		x			4			
9	Strategic analysis in enterprise management	90	3	x			45	15		30	45			3					
10	Applied econometrics	90	3	x			45	15	30		45				3				
Total		1050	35	9	1	1	425	175	30	220	625	1		10	13	8			
2. ELECTIVE ACADEMIC DISCIPLINES																			
2.1. Disciplines chosen by University																			
1	Agricultural policy	90	3		x		30	15		15	60					2			
2	Business Foreign Language	150	5		x		30		30		120			2					
Total		240	8	2	2		60	15	30	15	180			2		2			
2.2. Disciplines chosen by students																			
Specialization «Accounting, control and analysis in the management of agricultural enterprises»																			
1	Control of agricultural units	90	3		x		45	15		30	45			3					
2	Information-analytical services	90	3		x		45	15		30	45			3					
3	Methodology and organization of research	90	3		x		45	15		30	45				3				
4	Accounting Forensic examination	90	3	x			40	20		20	50					4			
5	Computer technologies in accounting and auditing	90	3		x		40	20		20	50					4			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6	Accounting for foreign economic activity	90	3		x		30	15		15	60				2	
Total		540	18	1	5		245	100		145	295			6	5	8
Total		1830	61	12	8	1	730	290	60	380	1100	1		18	18	18
3. OTHER FORMS OF TRAINING																
	Preparing and defense of Master paper	450	15													
	Practical training (internship)	1320	44													
	Number of Course Projects	1														
	Number of passes	8														
	Number of Exams	12														
	Total for the specialty	3600	90	12	8	1	730	290	60	380	1100	1		18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1050	35	29,2
2. Elective academic disciplines	780	26	21,7
2.1. Disciplines chosen by University	240	8	6,7
2.2. Disciplines chosen by students	540	18	15,0
3. Other form of training	1770	59	49,1
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	–	–	–	9	44
2	15	3	20	4	1	3	46
Total for the specialty	45	8	20	4	1	12	90

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	3	420	14	8
2	Practical training (predegree)	4	900	30	12

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Accounting in enterprise management	30	1	x	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

ECONOMIC FACULTY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	1801 «Specific categories»
Specialty	8.18010009 «Stock exchange activities»
Master's program	Educational and Professional
Specialization	«Managing risk in the stock market», «Analysis of financial and commodity markets», «Professional activity in the securities market»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	Master
Qualification	Manager in Stock exchange activities

I. SCHEDULE OF EDUCATION PROCESS

[illegible]

Year of training	2016 year																			
	September			October			November			December			30	28 XII 3 1						
	1	7	14	21	4	5	12	19	1	X	2	9			16	23	6	7	14	21
6	13	20	27	X	11	18	25	XI	8	15	22	29	XI	13	20	27				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
II											:	:	:	II	II	//	//			

Legend:

-	Theoretical training	X	-	Practical training (internship)
-	Examination period	II	-	Preparation of master thesis
-	Holidays	//	-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)				Auditorium classes, hours				Individual work		Practical training		Distribution of hours per week within an acad. year and semesters			
		Hours	Credit	due to semesters			Course project	Total	including		Seminars	Individual work	Practical training	Practical training (internship)	1 year	II year	1	2	3
				Exam	Test				Lectures	Laboratory classes									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17			
1. THE OBLIGATORY ACADEMIC DISCIPLINES																			
1	Intellectual Property	120	4		1		30	15		15	90			2					
2	Exchange commodity market	150	5	1			60	30		30	90			4					
3	Exchange stock market	150	5	1		1	60	30		30	90			4					
4	Brokering	120	4	1			20	10	10		100							2	
5	Analysis and forecasting the stock market	120	4	1		1	45	15	30		75						3		
6	Financial derivatives	120	4	1			45	15	30		75						3		
7	Exchange electronic trading	120	4	1			45	15	30		75						3		
8	Adjusting the stock market	90	3	1			30	15			60			2					
9	Pricing in the stock market	120	4	1			45	15	30		75						3		
10	Foreign exchange market and stock transactions	90	3		1		30	15		15	60						2		
11	Exchange risk management	90	3	1			30	10	20		60							3	
12	International stock markets	90	3	1			30	15		15	60						2		
13	Commodity exchange goods	90	3		1		20	10	10		70							2	
14	Clearing and settlement activities	90	3		1		20	10	10		70							2	
Total		1560	52	10	4	2	510	220	170	120	1050				14	14	14	14	9
2. ELECTIVE ACADEMIC DISCIPLINES																			
2.1. Disciplines chosen by University																			
1	Methodology and organization of research	120	4		1		30	15		15	90						2		
2	Business Foreign Language	90	3		1		30	15		15	60						2		
3	Agricultural policy	90	3		1		30	15		15	60							2	
Total		300	10		3		90	45		45	210				4	2			
2.2. Disciplines chosen by students																			
Specialization «Managing risk in the stock market»																			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Economic and financial risks	90	3		1		20	10		10	70					2
2	Hedges of futures and options	120	4	1			40	20	20		80					4
3	Trading Strategies	90	3	1			30	10	20		60					3
4	Exchange marketing	90	3		1		30	15		15	60				2	
Total		390	13	2	2		120	55	40	25	270				2	9
Specialization «Analysis of financial and commodity markets»																
1	Trade Exchange statistics	90	3		1		30	15		15	60				2	
2	Fundamental analysis	120	4	1			30	10	20		90					3
3	Technical Analysis	90	3	1			30	10	20		60					3
4	Modeling Situations on the market	90	3		1		30	10	20		60					3
Total		390	13	2	2		120	55	40	25	270				2	9
Specialization «Professional activity in the securities market»																
1	Trading in securities	120	4	1	1		50	25	25		70				2	2
2	Depository activity	90	3		1		20	10		10	70					2
3	Evaluation activity	90	3		1		20	10		10	70					2
4	Asset management	90	3	1			30	10	20		60					3
Total		390	13	2	2		120	55	40	25	270				2	9
Total		2250	75	12	9	2	720	320	210	190	1530			18	18	18
3. OTHER FORMS OF TRAINING																
Preparing and defense of Master paper		150	5													
Practical training (internship)		300	10													
Number of Course Projects		2														
Number of passes		9														
Number of Exams		12														
Total for the specialty		2700	90	12	9	2	720	320	210	190	1530			18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1560	52	57,8
2. Elective academic disciplines	690	23	25,5
2.1. Disciplines chosen by University	300	10	11,1
2.2. Disciplines chosen by students	390	13	14,4
3. Other form of training	450	15	16,7
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	–	–	–	9	44
2	10	2	8	2	2	–	24
Total for the specialty	40	7	8	2	2	9	68

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	3	300	10	8

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Exchange stock market	30	1	x	
2	Analysis and forecasting the stock market	30	1	x	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	60	2	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

ECONOMIC FACULTY

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	1801 «Specific categories»
Specialty	8.18010024 «Applied Economics»
Master's program	Educational and Professional
Specialization	«Globalization and European integration», «Competitiveness of agrarian formations»
Form of training	full-time
Term of study (Credits)	1,5 year (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master in Applied Economics

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes				Lectures	Laboratory classes		Seminars		
		Hours	Credits	Exam	Test	Course project	Total	including				Practical training	Practical training (internship)	I year		II year
								Lectures	Laboratory classes	Seminars	1			2	3	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. MANDATORY TRAINING COURSE																
1	Applied Economics	150	5	1		1	60	30		30	90			1		
2	Economics of production	150	5		1		30	15		15	120				2	
3	National economy	150	5	1			45	15		30	120			1		
4	Global Economy	150	5	1			30	15		15	120				2	
5	Biosocial economy	150	5		1		30	15		15	120				2	
6	Statistical modeling and forecasting	120	4		1		45	15		30	90			1		
7	Applied econometrics	90	3		1		30	15		15	60				2	
8	International Economics	120	4	1			40	20		20	100					3
9	Financial management	150	5		1		30	15		15	120				2	
10	Strategic management	90	3		1		40	20		20	70					3
Total		1320	44	4	6	1	380	175	0	205	1010	0	0	3	10	6
2. SELECTIVE COURSES																
2.1. Disciplines at the option of university																
1	Agricultural policy	120	4	1			45	15		30	90			1		
2	Methodology and organization of scientific research of the basics of intellectual property	90	3		1		45	15		30	60			1		
3	Business Foreign Language	90	3		1		60	30		30	60			1	2	
Total		300	10	1	2		150	60		90	210			3	2	
2.2. Subjects chosen by the student																
2.2.1. Specialization «Globalization and European integration»																
1	Globalisation and European integration	90	3	1		1	45	15		30	45				2	
2	The international division of labor	90	3	1			45	15		30	70				2	
3	Risk Management in the economy	90	3		1		40	20		20	70					3
4	Strategic Environmental Assessment	90	3		1		30	10		20	45					3
5	Analysis of investment projects	90	3		1		30	10		20	70					3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total		450	15	2	3	1	190	70		120	300				2	3
2.2.2. Specialization «Competitiveness of agrarian formations»																
1	The competitiveness of agricultural units	90	3	1		1	45	15		30	45				2	
2	Management consulting	90	3	1			45	15		30	45				2	
3	Marketing Management	90	3		1		20	20		20	70					3
4	Agricultural Economics Service	90	3		1		20	10		20	70					3
5	Economic and financial risks	90	3		1		20	10		20	70					3
Total		450	15	2	3		190	70		120	300				2	3
Total		2070	69				550	260		290	1520			15	15	10
3. OTHER STUDIES																
Preparing and defense of Master paper		270	9									180	90			
Practical training (internship)		90	3													
Number of Course Projects		270	9													
Number of passes						1										
Number of Exams					11											
Total for the specialty				7												
Preparing and defense of Master paper		2700	90				580	275		305	1610	180	90	15	15	10

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1470	44	49
2. Elective academic disciplines	840	25	28
2.1. Disciplines chosen by University	300	10	9
2.2. Disciplines chosen by students	150	15	17
3. Other form of training	690	21	23
Total for the specialty	2700	90	100

IV. ЗВЕДЕНІ ДАНІ ПРО БЮДЖЕТ ЧАСУ, ТИЖНІ

Course	Theoretical training	Examination period	Practical training	Preparation of bachelor thesis	State certification	Holidays	Total
1	30	5	–	–	–	9	44
2	10	2	8	2	2	–	24
Total for the specialty	40	7	8	2	2	9	68

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	3	300	10	8

VI. COURSE PAPERS AND PROJECTS

№	Назва дисципліни	Години	Кредити	Курсова робота	Курсовий проект
1	Applied Economics	30	1	X	
2	Globalization and European integration	30	1	X	
3	Competitiveness of agrarian formations	30	1	X	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	90	3	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF AGRICULTURAL MANAGEMENT

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0305 «Economics and entrepreneurship»
Specialty	8.03050701 «Marketing»
Master's program	Educational and Professional
Specialization	«Logistics», «International trade», «Commercial and intermediary activity», «Advertising Management»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master degree in marketing

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours				Individual work	Practical training		Practical training (internship)		Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	due to semesters			Total	у тому числі				15	15	15	15	15		
				Exam	Test	Course project		Lectures	Laboratory classes	Seminars								
																	1	2
1. THE OBLIGATORY ACADEMIC DISCIPLINES																		
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
1	Global economy	90	3	1			30	15		15	60			2				
2	Social responsibility	90	3		1		30	15		15	60			2				
3	Company innovation development	90	3	2			30	15		15	60			2				
4	Financial management	90	3		2		30	15		15	60			2				
5	Human resources management	90	3		1		30	15		15	60			2				
6	Strategic Marketing	90	3	1		1	45	15		30	45			3				
7	Logistics management	90	3	2			30	15		15	60			2				
8	Advertising management	90	3	2			45	15		30	45			3				
9	Marketing Management	90	3	2		2	45	15		30	45			3				
10	Forecasting methods in marketing research	90	3	1			45	15		30	45			3				
11	Commercial activity of intermediary enterprises	90	3		2		30	15		15	60			2				
12	Marketing planning	90	3		2		30	15		15	60			2				
13	Management of enterprise competitiveness	90	3		2		30	15		15	60			2				
Total		1170	39	7	6	2	450	195	0	255	720	0	0	12	18	0		
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines chosen by University																		
1	Agricultural policy	90	3		1		30	15		15	60			2				
2	Methodology and organization of scientific research with the pr. of intellectual property	90	3		1,3		60	30		30	30			2		2		
3	Business foreign language	150	5	3	1		60			60	90			2		2		
Total		330	11	1	3	0	150	45	0	105	180	0	0	6	0	4		
2.2. Disciplines chosen by students																		
Specialization «Logistics»																		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Project Management	90	3		3		20	10		10	70					2
2	Mathematical models in logistics	90	3		3		20	10		10	70					2
3	Logistics in FEA	120	4		3		20	10		10	100					2
4	Transport Logistics	120	4		3		20	10		10	100					2
5	International Management	120	4	3			30	20		10	90					3
6	Product Innovation Policy	120	4	3			30	10		20	90					3
Total		660	22	2	4	0	140	70	0	70	520	0	0	0	0	14
Specialization «International trade»																
1	Marketing research of foreign markets	90	3		3		20	10		10	70					2
2	International trade and world markets conjuncture	120	4		3		20	10		10	100					2
3	Logistics in FEA	90	3		3		20	10		10	70					2
4	International Business Transactions	120	4		3		20	10		10	100					2
5	International Management	120	4	3			30	20		10	90					3
6	Product Innovation Policy	120	4	3			30	10		20	90					3
Total		660	22	2	4	0	140	70	0	70	520	0	0	0	0	14
Specialization «Commercial and intermediary activity»																
1	Electronic commerce	90	3		3		20	10		10	70					2
2	Merchandising	90	3		3		20	10		10	70					2
3	Direct sale technology	120	4		3		20	10		10	100					2
4	Retailing technology	120	4		3		20	10		10	100					2
5	International Management	120	4	3			30	20		10	90					3
6	Product Innovation Policy	120	4	3			30	10		20	90					3
Total		660	22	2	4	0	140	70	0	70	520	0	0	0	0	14
Specialization «Advertising Management»																
1	Advertising projects management	120	4		3		20	10		10	100					2
2	Brand Management	120	4		3		20	10		10	100					2
3	Creativity in advertising	90	3		3		20	10		10	70					2
4	Psychology of Advertising	90	3		3		20	10		10	70					2
5	International Management	120	4	3			30	20		10	90					3
6	Product Innovation Policy	120	4	3			30	10		20	90					3
Total		660	22	2	4	0	140	70	0	70	520	0	0	0	0	14
Total		990	33	3	7	2	290	115	0	175	700	0	0	6	0	18
3. OTHER FORMS OF TRAINING																
Preparing and defense of Master paper																
Practical training (internship)		300	10													
Number of Course Projects		240	8									240				
Number of passes		1				2										
Number of Exams		8			13											
Total for the specialty		2700	90	10	13	2	740	310	0	430	1420	0	240	18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1170	39	43,3
2. Elective academic disciplines	990	33	36,7
2.1. Disciplines chosen by University	330	11	12,2
2.2. Disciplines chosen by students	660	22	24,5
3. Other form of training	540	18	20
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	4	6	2	-	10	52
2	10	1	-	4	3	-	18
Total for the specialty	40	5	6	6	3	10	70

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	1	240	8	6

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Strategic Marketing	30	1	1	
2	Marketing Management	30	1	1	

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Master's thesis preparation and defense	300	10	9

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
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FACULTY OF AGRICULTURAL MANAGEMENT

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0305 «Economics and entrepreneurship»
Specialty	8.03050701 «Marketing»
Master's program	Educational and Research
Specialization	«Scientific and methodological principles of marketing activities and international trade»
Form of training	full-time
Term of study (Credits)	2 years (120)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master degree in marketing

I. SCHEDULE OF EDUCATION PROCESS for Training Specialists for second (master) level of higher education in 2015 in specialty 8.03050701 «Marketing»

[illegible]

Legend:

a	-	Theoretical training	X	-	Practical training (internship)
:	-	Examination period	I	-	Practical training (educational)
-	-	Holidays	II	-	Preparation of master thesis
A	-	intermediate attestation	//	-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours					Individual work				Practical training		Distribution of hours per week within an acad. year and semesters	
		due to semesters			Course project		Lectures		Laboratory classes		Seminars								Practical training (internship)
		Hours	Credit	Exam	Test	Total	0	1	2	3	4								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
1. THE OBLIGATORY ACADEMIC DISCIPLINES																			
1	Global economy	90	3	1			30	15		15	60			2					
2	Social responsibility	90	3		1		30	15		15	60			2					
3	Company innovation development	90	3	2			30	15		15	60				2				
4	Financial management	90	3		2		30	15		15	60				2				
5	Human resources management	90	3		1		30	15		15	60			2					
6	Strategic Marketing	90	3	1		1	45	15		30	45			3					
7	Logistics management	90	3	2			30	15		15	60				2				
8	Advertising management	90	3	2			45	15		30	45				3				
9	Marketing Management	90	3	2		2	45	15		30	45				3				
10	Forecasting methods in marketing research	90	3	1			45	15		30	45			3					
11	Commercial activity of intermediary enterprises	90	3		2		30	15		15	60				2				
12	Marketing planning	90	3		2		30	15		15	60				2				
13	Management of enterprise competitiveness	90	3		2		30	15		15	60				2				
14	Stock market	90	3		4		30	10		20	60						2		
Total		1260	42	7	7	2	480	205	0	275	780	0	0	12	18	0	2		
2. ELECTIVE ACADEMIC DISCIPLINES																			
2.1. Disciplines chosen by University																			
1	Agricultural policy	90	3		1		30	15		15	60			2					
2	Methodology and organization of scientific research with the pr. of intellectual property	90	3		1,3		60	30		30	30			2			2		
3	Business foreign language	150	5	3	1		60			60	90			2			2		
Total		330	11	1	3	0	150	45	0	105	180	0	0	6	0	4	0		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2.2. Disciplines chosen by students																	
Specialization «Scientific and methodological principles of marketing activities and international trade»																	
1	Electronic commerce	90	3		3		20	10		10	70					2	
2	Merchandising	90	3		3		20	10		10	70					2	
3	Direct sale technology	120	4		3		20	10		10	100					2	
4	Retailing technology	120	4		3		20	10		10	100					2	
5	International Management	120	4	3			30	20		10	90					3	
6	Product Innovation Policy	120	4	3		3	30	10		20	90					3	
7	Mathematical models in management and marketing	120	4		4		30	20		20	80						4
8	Innovative marketing	120	4	4			30	20		20	80						4
9	Marketing research of foreign markets	120	4	4			30	20		20	80						4
10	Methodology and organization of scientific research	120	4		4		30	10		20	90						3
Total		1140	38	4	6	0	300	140	0	150	520	0	0	0	0	14	15
Total		1470	49	5	9	0	450	185	0	255	700	0	0	6	0	18	15
3. OTHER FORMS OF TRAINING																	
Preparing and defense of Master paper																	
Pedagogical practice		420	14														
Practical training (internship)		150	5										150				
Number of Course Projects		300	10										300				
Number of passes		1				2											
Number of Exams		8			16												
Total for the specialty		3600	120	12	12	3	930	540	0	530	1480	0	450	18	18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1260	42	35
2. Elective academic disciplines	1470	49	40,84
2.1. Disciplines chosen by University	330	11	9,17
2.2. Disciplines chosen by students	1140	38	31,67
3. Other form of training	870	29	24,16
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	4	6	2	-	10	52
2	20	2	5	8	3	4	42
Total for the specialty	50	6	11	10	3	14	94

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Pedagogical practice	2	150	5	5
2	Practical training (internship)	1	300	10	6

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Strategic Marketing	30	1	1	
2	Marketing Management	30	1	1	
3	Product Innovation Policy	30	1		1

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Master's thesis preparation and defense	420	14	13

CURRICULUM of training Specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	0306 «Management and Administration»
Specialty	8.03060101 «Management of organization and administration»
Master's program	Educational and Professional
Specialization	«Management on the market of goods and services», «Quality management», «Management of enterprise strategic development», «Management in the sphere of economic competition», «Management of cooperative groups» full-time
Form of training	1,5 years (90)
Term of study (Credits)	the first level of higher education (bachelor)
On the basis of	«Master»
Educational degree	Master degree in management of organization and
Qualification	administration, manager (administrator) of an organization

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours					Individual work	Practical training		Distribution of hours per week within an acad. year and semesters	
		Hours	Credit	due to semesters		Total	Lectures		Laboratory classes		Seminars					
				Exam	Test		Course project									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. THE OBLIGATORY ACADEMIC DISCIPLINES																
1	Contract law	90	3	1			30	15		15	60			2		
2	Public administration	90	3	1			30	15		15	60			2		
3	Business administration: management of organization	120	4	1			45	15		30	75			3		
4	Business administration: corporate management	120	4	2			30	15		15	90				2	
5	Business administration: change management	90	3		2		30	15		15	60				2	
6	Business administration: project management	120	4	2		2	30	15		15	90				2	
7	Business administration: quality management	90	3		2		30	15		15	60				2	
8	Financial management	90	3	2			30	15		15	60				2	
9	Information systems and technologies in organization management	90	3		2		30	15	15		60				2	
10	Investment management	90	3	2			30	15		15	60				2	
11	Psychology of management and conflict management	90	3	1		1	45	15		30	45				3	
12	Management of assets	90	3		1		30	15		15	60				2	
Total		1170	39	7	6	2	390	180	15	195	780	0	0	12	14	0
2. ELECTIVE ACADEMIC DISCIPLINES																
2.1. Disciplines chosen by University																
1	Agricultural policy	90	3	2			30	15		15	60				2	
2	Methodology and organization of scientific research with the pr. of intellectual property	90	3		1		60	30		30	30				4	
	Business foreign language	150	5	3	1		60			60	90				2	
Total		330	11	1	3	0	150	45	0	105	180	0	0	6	2	2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2.2. Disciplines chosen by students																
Specialization «Management on the market of goods and services»																
1	Market infrastructure management	120	4		3		30	10		20	90					3
2	Management of marketing communications and competitiveness	120	4		3		30	10		20	90					3
3	Management of enterprise potential	120	4	3		3	40	20		20	80					4
4	Management of enterprise activity on the market of goods and services	120	4	3			40	20		20	80					4
5	Business protocol and negotiating	90	3		3		20	10		10	70					2
6	Business game (Business management)	90	3		2		30	15		15	60				2	
Total		660	22	2	4	1	190	85	0	105	470	0	0	0	2	16
Specialization «Quality Management»																
1	Complex system of quality management of products and services	120	4	3		3	40	20		20	80					4
2	Information management of labour and product quality	120	4		3		30	10		20	90					3
3	Quality potential management	120	4	3			40	20		20	80					4
4	Corporate quality management	120	4		3		30	10		20	90					3
5	Business protocol and negotiating	90	3		3		20	10		10	70					2
6	Business game (Business management)	90	3		2		30	15		15	60				2	
Total		660	22	2	4	1	190	85	0	105	470	0	0	0	2	16
Specialization «Management in the sphere of economic competition»																
1	Management of enterprise competitiveness	120	4	3		3	40	20		20	80					4
2	Management of enterprise potential	120	4	3			40	20		20	80					4
3	Risk and economic security management	120	4		3		30	10		20	90					3
4	Business ethics and corporate social responsibility	120	4		3		30	10		20	90					3
5	Business protocol and negotiating	90	3		3		20	10		10	70					2
6	Business game (Business management)	90	3		2		30	15		15	60				2	
Total		660	22	2	4	1	190	85	0	105	470	0	0	0	2	16
Specialization «Management of enterprise strategic development»																
1	Management of enterprise organizational development	120	4	3			40	20		20	80					4
2	Crisis management	120	4	3		3	40	20		20	80					4
3	Diagnostics in management system	120	4		3		30	10		20	90					3
4	Management of enterprise innovation activity	120	4		3		30	10		20	90					3
5	Business protocol and negotiating	90	3		3		20	10		10	70					2
6	Business game (Business management)	90	3		2		30	15		15	60				2	
Total		660	22	2	4	1	190	85	0	105	470	0	0	0	2	16
Specialization «Management of cooperative groups»																

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Management of cooperative activity Environment for cooperative business development	120	4	3		3	40	20		20	80					4
2		120	4	3			40	20		20	80					4
3	Management of cooperative members and customers interaction	120	4		3		30	10		20	90					3
4	Organizational support of cooperative activity	120	4		3		30	10		20	90					3
5	Business protocol and negotiating	90	3		3		20	10		10	70					2
6	Business game (Business management)	90	3		2		30	15		15	60				2	
Total		660	22	2	4	1	190	85	0	105	470	0	0	0	2	16
Total		990	33	4	6	1	330	130	0	200	660	0	0	6	4	18
3. OTHER FORMS OF TRAINING																
	Preparing and defense of Master paper	300	10													
	Practical training (internship)	240	8										240			
	Number of Course Projects	1				2										
	Number of passes	8			12											
	Number of Exams	12		11												
	Total for the specialty	2700	90	11	12	3	720	310	15	395	1440	0	240	18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1170	39	43,3
2. Elective academic disciplines	990	33	36,7
2.1. Disciplines chosen by University	330	11	12,2
2.2. Disciplines chosen by students	660	22	24,5
3. Other form of training	540	18	20
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	4	6	2	-	10	52
2	10	1	-	4	3	-	18
Total for the specialty	40	5	6	6	3	10	70

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	1	240	8	6

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Business administration: project management	30	1	1	
2	Psychology of management and conflict management	30	1		1
3	Management of enterprise potential	30	1	1	
	Complex system of quality management of products and services				
	Management of enterprise competitiveness				
	Crisis management				
	Management of cooperative activity				

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Master's thesis preparation and defense	300	10	9

CURRICULUM of training Specialists in 2015 academic year

Level of higher education
Area of knowledge
Specialty
Master's program
Specialization
Form of training
Term of study (Credits)
On the basis of
Educational degree
Qualification

The second (Master)
0306 «Management and Administration»
8.03060101 «Management of organization and
administration»
Educational and Research
«Scientific approaches to efficient management in the market
of goods and services»
full-time
2 years (120)
the first level of higher education (bachelor)
«Master»
Master degree in management of organization and
administration, manager (administrator) of an organization

I. SCHEDULE OF EDUCATION PROCESS for Training Specialists for second (master) level of higher education in 2015 in specialty 8.03060101 «Management of organization and administration»

[illegible]

Legend:

	-	Theoretical training	X	-	Practical training (internship)
:	-	Examination period	I	-	Practical training (educational)
-	-	Holidays	II	-	Preparation of master thesis
A	-	intermediate attestation	//	-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours				Individual work		Practical training		Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	due to semesters		Total	y tomy quc:ni		12	13	14	15	16	17	18		
				Exam	Test		Course project	Lectures								Laboratory classes	Seminars
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. THE OBLIGATORY ACADEMIC DISCIPLINES																	
1	Contract law	90	3	1			30	15		15	60			2			
2	Public administration	90	3	1			30	15		15	60			2			
3	Business administration: management of organization	120	4	1			45	15		30	75			3			
4	Business administration: corporate management	120	4	2			30	15		15	90				2		
5	Business administration: change management	90	3		2		30	15		15	60				2		
6	Business administration: project management	120	4	2		2	30	15		15	90				2		
7	Business administration: quality management	90	3		2		30	15		15	60				2		
8	Financial management	90	3	2			30	15		15	60				2		
9	Information systems and technologies in organization management	90	3		2		30	15	15		60				2		
10	Investment management	90	3	2			30	15		15	60				2		
11	Psychology of management and conflict management	90	3	1		1	45	15		30	45			3			
12	Management of assets	90	3		1		30	15		15	60			2			
13	Methodology and organization of scientific research	90	3		4		40	20		20	50						4
Total		1260	42	7	5	2	390	180	15	195	780	0	0	12	14	0	4
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Agricultural policy	90	3	2			30	15		15	60				2		
2	Methodology and organization of scientific research with the pr. of intellectual property	90	3		1		60	30		30	30			4			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
3	Business foreign language	150	5	3	1		60			60	90			2		2	
Total		330	11	1	3	0	150	45	0	105	180	0	0	6	2	2	0
2.2. Disciplines chosen by students																	
Specialization «Scientific approaches to ensuring effective management on the market of goods and services»																	
1	Market infrastructure management	120	4		3		30	10		20	90					3	
2	Management of marketing communications and competitiveness	120	4		3		30	10		20	90					3	
3	Management of enterprise potential	120	4	3		3	40	20		20	80					4	
4	Management of enterprise activity on the market of goods and services	120	4	3			40	20		20	80					4	
5	Business protocol and negotiating	90	3		3		20	10		10	70					2	
6	Business game (Business management)	90	3		2		30	15		15	60			2			
7	Management of financial reorganization and bankruptcy	120	4	4			40	20		20						4	
8	Mathematical models in management and marketing	120	4		4		30	10		20						3	
9	Business planning of innovative projects	120	4	4			40	20		20						4	
10	International standardization and certification of technologies, raw materials and finished products	120	4		4		30	20		10						3	
Total		1140	38	4	6	1	330	155	0	175	470	0	0	0	2	16	14
Total		1470	49	6	9	1	480	200	0	290	650	0	0	6	4	18	14
3. OTHER FORMS OF TRAINING																	
Preparing and defense of Master paper																	
Practical training (internship)																	
Pedagogical practice																	
Number of Course Projects																	
Number of passes																	
Number of Exams																	
Total for the specialty																	

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1260	42	35
2. Elective academic disciplines	1470	49	40,84
2.1. Disciplines chosen by University	330	11	9,17
2.2. Disciplines chosen by students	1140	38	31,67
3. Other form of training	870	29	24,16
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	4	6	2	-	10	52
2	20	2	5	8	3	4	42
Total for the specialty	50	6	11	10	3	14	94

V. PRACTICAL TRAINING

Nº	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Pedagogical practice	2	150	5	5
2	Practical training (internship)	1	300	10	6

VI. COURSE PAPERS AND PROJECTS

Nº	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Business administration: project management	30	1	1	
2	Psychology of management and conflict management	30	1		1
3	Management of enterprise potential	30	1	1	

VII. STATE CERTIFICATION

Nº	Component of certification	Hours	Credits	Number of weeks
1	Master's thesis preparation and defense	420	14	13

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF AGRICULTURAL MANAGEMENT

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0306 «Management and Administration»
Specialty	8.030600401 «Management of foreign economic activity»
Master's program	Educational and Professional
Specialization	«International business management», «International commercial activity»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master degree in management of foreign economic activity, manager (administrator) of foreign economic activity

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours				Individual work			Practical training		Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	due to semesters			Total	y tomy yucni		Seminars	Practical training	Practical training (internship)	1 year	II year	1	2	3	Number of weeks in semester
				Exam	Test	Course project		Lectures	Laboratory classes									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	15	15
1. THE OBLIGATORY ACADEMIC DISCIPLINES																		
1	International private law	90	3		2		30	15		15	60						2	
2	Management of FEA	210	7	2	1	2	75	30		45	135				2	3		
3	International marketing	150	5	1			45	15		30	105				3			
4	Investment management	120	4	1			45	15		30	75				3			
5	Information systems and technologies in FEA management	120	4		2		30	15		15	90					2		
6	International credit-settlement and currency transactions	120	4	2			45	15		30	75					3		
7	Organization and techniques of FEO	120	4	1		1	30	15		15	90				2			
8	International economic activity	120	4		2		30	15		15	90					2		
9	Assets management	90	3		1		30	15		15	60				2			
Total		1140	38	5	5	2	360	150	0	210	780	0	0	12	12	0		
2. ELECTIVE ACADEMIC DISCIPLINES																		
2.1. Disciplines chosen by University																		
1	Agricultural policy	90	3		2		30	15		15	60					2		
2	Methodology and organization of scientific research with the pr. of intellectual property	90	3		1		60	30		30	30				4			
3	Business foreign language	150	5	2	1		60			60	90				2	2		
Total		330	11	1	3	0	150	45	0	105	180	0	0	6	4			
2.2. Disciplines chosen by students																		
Specialization «International business management»																		
1	International business	120	4		3		40	20		20	80						4	
2	Strategies in international business	120	4	3			40	20		20	80						4	

2		1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	International customs regulations		120	4		3		40	20		20	80					4
4	Business game (Business management)		120	4	3			40	20		20	80					4
5	Business protocol and negotiating		120	4		2		30	15		15	90				2	
6	World agriculture and food resources		90	3		3		20	10		10	70					2
Total			690	23	2	4	0	210	105	0	105	480	0	0	0	2	18
Specialization «International commercial activity»																	
1	International commercial activity		120	4	3			40	20		20	80					4
2	Business game (Business management)		120	4	3			40	20		20	80					4
3	Logistics in FEA		120	4		3		40	20		20	80					4
4	Risk management in international commercial activity		120	4		3		40	20		20	80					4
5	Business protocol and negotiating		120	4		2		30	15		15	90				2	
6	World agriculture and food resources		90	3		3		20	10		10	70					2
Total			690	23	2	4	0	210	105	0	105	480	0	0	0	2	18
Total			1020	34	3	7	0	360	150	0	210	660	0	0	6	6	18
3. OTHER FORMS OF TRAINING																	
Preparing and defense of Master paper			300	10													
Practical training (internship)			240	8										240			
Number of Course Projects			1				2										
Number of passes			8			12											
Number of Exams			12														
Total for the specialty			2700	90	8	12	2	720	300	0	420	1450	0	240	18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1140	38	42,2
2. Elective academic disciplines	1020	34	37,8
2.1. Disciplines chosen by University	330	11	12,2
2.2. Disciplines chosen by students	690	23	25,6
3. Other form of training	540	18	20
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	4	6	2	-	10	52
2	10	1	-	4	3	-	18
Total for the specialty	40	5	6	6	3	10	70

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	1	240	8	6

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Management of FEA	30	1	1	
2	Organization and techniques of FEO	30	1		1

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Master's thesis preparation and defense	300	10	9

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF AGRICULTURAL MANAGEMENT

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0306 «Management and Administration»
Specialty	8.03060401 «Management of foreign economic activity»
Master's program	Educational and Research
Specialization	«Research of the world conjuncture of agricultural market»
Form of training	full-time
Term of study (Credits)	2 years (120)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Master degree in management of foreign economic activity, manager (administrator) of foreign economic activity

**I. SCHEDULE OF EDUCATION PROCESS
for Training Specialists for second (master) level of higher education in 2015
in specialty 8.03060401 «Management of foreign economic activity»**

Year of training	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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	IX	1	21	IX	5	12	19	26	X	10	17	24	31	7	14	21	28	I	9	16	23	30	6	13	20	27	4	11	18	25	32	39	46	53	60	67	74	81	88	95																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Legend:

	-	Theoretical training		X	-	Practical training (internship)
:	-	Examination period		I	-	Practical training (educational)
-	-	Holidays		II	-	Preparation of master thesis
A	-	intermediate attestation		//	-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours					Individual work		Practical training		Practical training (internship)	Distribution of hours per week within an acad. year and semesters				
		Hours	Credit	due to semesters		Course project	Total	у тому числі		Seminars	15	15	10	11	12	13	14	15	16	17	18
				Exam	Test			Lectures	Laboratory classes												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18				
1. THE OBLIGATORY ACADEMIC DISCIPLINES																					
1	International private law	90	3		2		30	15		15	60				2						
2	Management of FEA	210	7	2	1	2	75	30		45	135			2	3						
3	International marketing	150	5	1			45	15		30	105			3							
4	Investment management	120	4	1			45	15		30	75				3						
5	Information systems and technologies in FEA management	120	4		2		30	15		15	90				2						
6	International credit-settlement and currency transactions	120	4	2			45	15		30	75				3						
7	Organization and techniques of FEO	120	4	1		1	30	15		15	90			2							
8	International economic activity	120	4		2		30	15		15	90				2						
9	Assets management	90	3		1		30	15		15	60			2							
10	Methodology and organization of scientific research	90	3		4		45	15		30	45							3			
Total		1230	41	5	6	2	405	165	0	240	825	0	0	12	12	0	3				
2. ELECTIVE ACADEMIC DISCIPLINES																					
2.1. Disciplines chosen by University																					
1	Agricultural policy	90	3		2		30	15		15	60				2						
2	Methodology and organization of scientific research with the pr. of intellectual property	90	3		1		60	30		30	30			4							
3	Business foreign language	150	5	2	1		60			60	90			2	2						
Total		330	11	1	3	0	150	45	0	105	180	0	0	6	4	0	0				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2.2. Disciplines chosen by students																	
Specialization «Research on the world conjuncture of agricultural market»																	
1	International commercial activity	120	4	3		3	40	20		20	80					4	
2	Business game (Business management)	120	4	3			40	20		20	80					4	
3	Logistics in FEA	120	4		3		40	20		20	80					4	
4	Risk management in international commercial activity	120	4		3		40	20		20	80					4	
5	Business protocol and negotiating	120	4		2		30	15		15	90				2		
6	World agriculture and food resources	90	3		3		20	10		10	70					2	
7	Mathematical models in management and marketing	120	4		4		30	10		20	90						3
8	Organization and regulation of foreign economic activity	150	5	4			40	20		20	110						4
9	Models in planning and forecasting FEA	120	4	4			40	20		20	80						4
10	International business	90	3		4		20	10		10	70						2
11	Stock market	90	3		4		20	10		10	70						2
Total		1260	42	4	7	0	360	175	0	185	900	0	0	0	2	18	15
Total		1590	53	5	10	0	500	220	0	280	1080	0	0	6	6	18	15
3. OTHER FORMS OF TRAINING																	
Preparing and defense of Master paper																	
Practical training (internship)																	
Pedagogical practice																	
Number of Course Projects																	
Number of passes																	
Number of Exams																	
Total for the specialty																	
		420	14														
		300	10										300				
		150	5										150				
		1				2											
		8			12												
		12		8													
		3600	120	10	16	3	860	370	0	490	1860	0	450	18	18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1260	42	35
2. Elective academic disciplines	1470	49	40,84
2.1. Disciplines chosen by University	330	11	9,17
2.2. Disciplines chosen by students	1140	38	31,67
3. Other form of training	870	29	24,16
Total for the specialty	3600	120	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	4	6	2	-	10	52
2	20	2	5	8	3	4	42
Total for the specialty	50	6	11	10	3	14	94

V. PRACTICAL TRAINING

Nº	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Pedagogical practice	2	150	5	5
2	Practical training (internship)	1	300	10	6

VI. COURSE PAPERS AND PROJECTS

Nº	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Management of FEA	30	1	1	
2	Organization and techniques of FEO	30	1		1
3	International commercial activity	30	1	1	

VII. STATE CERTIFICATION

Nº	Component of certification	Hours	Credits	Number of weeks
1	Master's thesis preparation and defense	420	14	13

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
FACULTY OF AGRICULTURAL MANAGEMENT**

CURRICULUM of training Specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	1801 «Specific categories»
Specialty	8.18010018 «Administrative management»
Master's program	Educational and Professional
Specialization	«Management of agrarian enterprises development»
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	manager (administrator) in administrative management

**I. SCHEDULE OF EDUCATION PROCESS
for Training Specialists for second (master) level of higher education in 2015
in specialty 8.18010018 «Administrative management»**

Year of training	2015 year												2016 year																														
	September			October			November			December			January			February			March			April			May			June			July			August									
	1	7	14	21	IX	5	12	19	26	2	9	16	23	1	7	14	21	XII	28	4	11	18	25	1	8	15	22	29	6	13	20	27	4	11	18	25	1	8	15	22			

Legend:

☐	-	Theoretical training	☐	-	Practical training (internship)
:	-	Examination period	☐	-	Preparation of master thesis
-	-	Holidays	☐	-	State certification (state examination and diploma defense)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours					Individual work	Practical training		Practical training (internship)	Distribution of hours per week within an acad. year and semesters					
		Hours	Credit	due to semesters			Total	Lectures			Laboratory classes		Seminars	13		14	1 year semester				
				Exam	Test	Course project		0	24	15	2						3				
1	2	3	4	5	6	7	8	9	10	11	12	15	16	17	15	15	15				
1. THE OBLIGATORY ACADEMIC DISCIPLINES																					
1	Business-management	150	5	1			45	15		30	105			3							
2	Economics of production	150	5	1		1	45	15		30	105			3							
3	Analysis and control of an enterprise	150	5	1			45	15		30	105			3							
4	Economic information science	90	3		1		15			15	75			1							
5	Methodology of social empirical research	120	4		1		30	15		15	90			2							
6	Planning and organization of an enterprise	150	5	2		2	45	15		30	105					3					
7	Strategies of international agricultural marketing	150	5	2			45	15		30	105					3					
8	Business game	150	5	3			48	24		24	102						4				
9	Project management and evaluation	150	5		2		30	15		15	120					2					
Total		1260	42	6	3	2	348	129	0	219	912			12	8	4					
2. ELECTIVE ACADEMIC DISCIPLINES																					
2.1. Disciplines chosen by University																					
1	Agricultural policy	150	5	2			45	15		30	105					3					
2	Methodology and organization of scientific research with the pr. of intellectual property	90	3		3		48	24		24	42						4				
3	Business foreign language	150	5	2	1		60			60	90					2	2				
Total		390	13	2	2	0	153	39	0	114	237					2	5	4			
2.2. Disciplines chosen by students																					
Specialization «Management of agrarian enterprises development»																					
1	Chief administrative officer	90	3		1		30	15		15	60					2					
2	Organization of business activities	90	3		1		30	15		15	60					2					
3	Management consulting	150	5		2		45	15		30	105						3				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
4	Legal principles of administrative activity	90	3		2		30	15		15	60				2	
5	Human resources management	90	3	3			48	24		24	42					4
6	Quantitative methods of decision making	90	3		3		36	12		24	54					3
7	Automated accounting system	90	3		3		36	12		24	54					3
Total		690	23	1	6	0	255	108	0	147	435			4	5	10
Specialization «Administrative management and marketing agrobusiness system»																
1	Methods of administrative activity	90	3		1		30	15		15	60			2		
2	Management of enterprise activities	90	3		1		30	15		15	60			2		
3	International agribusiness	150	5		2		45	15		30	105				3	
4	Management of FEA	90	3		2		30	15		15	60				2	
5	Biosocial economy	90	3		3		36	12		24	54					3
6	Strategic management	90	3	3			48	24		24	42					4
7	International economic activity of Ukraine	90	3		3		36	12		24	54					3
Total		690	23	1	6	0	255	108	0	147	435			4	5	10
Total		1080	36	3	8	0	408	147	0	261	672			6	10	14
3. OTHER FORMS OF TRAINING																
Preparing and defense of Master paper																
Practical training (internship)		180	6													
Number of Course Projects		1				2							180			
Number of passes		8			11											
Number of Exams		12		9												
Total for the specialty		2700	90	9	11	0	756	276	0	480	1584		180	18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1260	42	46,7
2. Elective academic disciplines	1080	36	40
2.1. Disciplines chosen by University	390	13	14,4
2.2. Disciplines chosen by students	690	23	25,6
3. Other form of training	360	12	13,3
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	4	10	–	–	8	52
2	12	1	–	2	3	–	18
Total for the specialty	42	5	10	2	3	8	70

V. PRACTICAL TRAINING

№	Type of practical training	Semester	Hours	Credits	Number of weeks
2	Practical training (internship)	1,2	180	6	10

VI. COURSE PAPERS AND PROJECTS

№	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Economics of production	30	1		1
2	Planning and organization of an enterprise	30	1		1

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Number of weeks
1	Master's thesis preparation and defense	180	6	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF INFORMATIONAL TECHNOLOGY

**CURRICULUM
training specialists in 2015 entry**

Level of higher education (Bachelor's)	Second (Master's)
Area of knowledge	0305 «Economics and Entrepreneurship»
Specialty	8.03050201 «Economic Cybernetics»
Master's Programme	Educational and professional
Specialization	«Economic and Mathematical Modeling»
The form training	Full-time
Apprenticeship (volume ECTS)	1,5 years (90)
Based on	the first (bachelor level of higher education)
Higher education degree	«Master»
Qualification	Master of Economic Cybernetics

I. SCHEDULE OF TRAINING
training specialists second (master's) level of higher education in 2015 accession
specialty 8.03050201 «Economic Cybernetics»

Year of training	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Legend:

	-	Theoretical training
:	-	Examination period
-	-	Holidays
A	-	intermediate attestation

X	-	Scientific and Production practice
II	-	Preparation of master's work
//	-	state attestation (state examination and protection of master's work)

II. PLAN OF EDUCATIONAL PROCESS

№	Discipline	General volume		Forms of control of knowledge on semester				Lecture classes				Practical training		Distribution of weekly hours by years of study and semesters			
		Hours	Credits	Exam	Test	Course work (project)	Total	Lectures	Laboratory	Practical	Individual work	Production practice	Research practice	Number of weeks per semester			
1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	
1. REGULATORY ACADEMIC DISCIPLINES																	
1	The Global Economy	120	4	2			45	30		15	75				3		
2	Social Responsibility	120	4	2			30	15		15	90				2		
3	Innovative development	120	4	1			45	30	15		75			3			
4	Safety at work in the sphere	90	3	1			15	15			75			2			
5	Mathematical methods and models of market economy	120	4	1		1	45	15	30		75			3			
6	Corporate Information Systems	120	4	2		2	45	15	30		75				3		
7	Information Management	120	4	1			45	15	30		75			3			
Total		810	27	10	0	3	270	135	105	30	540	0	0	11	8	0	
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Business Foreign Language	90	3		1		15			15	75			2			
2	Agricultural Policy	90	3		1		30	15		15	60			2			
3	Methodology and organization of research on the basics of intellectual property	90	3	2			30	15	15		60				2		
4	Standardization and certification of information technology	90	3		2		30	15	15		60				2		
Total		360	12	2	4	0	105	45	30	30	255	0	0	4	4		
2.2. Disciplines chosen by students																	
Specializing «Economic and Mathematical Modeling»																	
1	Modeling in the management of socio-economic systems	120	4	3			30	10	20	0	90					6	
2	Stochastic models in management	90	3	3			30	10	20	0	60					6	
3	Modeling and management of innovation and investment processes	90	3	3			30	10	20	0	60					6	
4	Development of Web Applications	90	3		1		45	15	30		45			3			

1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18
5	Electronic commerce	90	3		1		30	15	15		60				2	
6	Data mining	90	3		1		30	15	15		60				2	
7	Global Information Resources	90	3		2		30	15	15		60				2	
8	Geoinformation systems and technologies in environmental management	90	3													
9	Risks and insurance in the agricultural business	90	3													
10	Models of environmental management	90	3													
11	Agricultural consulting	90	3													
Total		660	22	9	5	0	225	90	135	0	435	0	0	3	6	18
3. OTHER STUDIES																
Practical training		150	5									180				
Pregraduation practice		270	9										324			
Preparation of Master's work		390	13													
State attestation		60	2													
Number of of course work (projects)		0				2										
Number of tests		0			7											
Number of exams		0		11												
Total for OCD		2700	90	21	9	3	600	270	270	60	1230	150	270	18	18	18

III. STRUCTURE OF CURRICULUM

Discipline	Hours	Credits	%
1. Regulatory academic disciplines	810	27	30
2. Elective academic disciplines	1020	34	38
2.1. Disciplines chosen by University	360	12	14
2.2. Disciplines chosen by students	660	22	24
3. Other studies	870	29	32
TOTAL for OCD	2700	90	100

IV. SUMMARY OF BUDGET, WEEK

Year	Theoretical training	Examination period	Practical training	Preparation of master's work	State attestation	Holidays	Total
1	30	5	12	–	–	9	56
2	5	1	–	10	2	–	18
Total for OCD	35	6	12	10	2	9	74

V. PRACTICAL TRAINING

№	Type of practice	Semestr	Hours	Credits	Weeks
1	Practical training	1	150	5	4
2	Pregraduation practice and preparation of Master's work	2	270	9	8

VI. COURSE WORK AND PROJECTS

№	Discipline	Hours	Credits	Course work	Course project
1	Mathematical methods and models of market economy	30	1		CP
2	Corporate Information Systems	30	1		CP

VII. STATE ATTESTATION

№	Component attestation	Hours	Credits	Weeks
1	Protection of master's work	60	2	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF INFORMATIONAL TECHNOLOGY

**CURRICULUM
training specialists in 2015 entry**

Level of higher education (Bachelor's)	Second (Master's)
Area of knowledge	0305 «Economics and Entrepreneurship»
Specialty	8.03050201 «Economic Cybernetics»
Master's Programme	Educational and scientific
Specialization	«Forecasting of social and economic processes»
The form training	Full-time
Apprenticeship (volume ECTS)	2 years (120)
Based on	the first (bachelor level of higher education)
Higher education degree	«Master»
Qualification	Master of Economic Cybernetics

I. SCHEDULE OF TRAINING
training specialists second (master's) level of higher education in 2015 accession
specialty 8.03050201 «Economic Cybernetics»

Year of training	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Legend:

	-	Theoretical training
:	-	Examination period
-	-	Holidays
A	-	intermediate attestation

X	-	Scientific and Production practice
II	-	Preparation of master's work
//	-	state attestation (state examination and protection of master's work)

II. PLAN OF EDUCATIONAL PROCESS

№	Discipline	General volume		Forms of control of knowledge on semester			Lecture classes					Practical training		Distribution of weekly hours by years of study and semesters			
		Credits		Exam	Test	Course work (project)	Total	Lectures	Laboratory	Practical	Individual work	Production practice	Research practice	1 year		2 year	
		Hours	1sem											2 sem.	1 sem		
1. REGULATORY ACADEMIC DISCIPLINES																	
1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	
1	The Global Economy	120	4	2			45	30		15	75				3		
2	Social Responsibility	120	4	2			30	15		15	90				2		
3	Innovative development	120	4	1			45	30	15		75			3			
4	Safety at work in the sphere	90	3	1			15	15			75			2			
5	Mathematical methods and models of market economy	120	4	1		1	45	15	30		75			3			
6	Corporate Information Systems	120	4	2		2	45	15	30		75				3		
7	Information Management	120	4	1			45	15	30		75			3			
Total		810	27	10	0	3	270	135	105	30	540	0	0	11	8	0	0
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Business Foreign Language	90	3		1		15			15	75			2			
2	Agricultural Policy	90	3		1		30	15		15	60			2			
3	Methodology and organization of research on the basics of intellectual property	90	3	2			30	15	15		60				2		
4	Standardization and certification of information technology	90	3		2		30	15	15		60				2		
Total		360	12	2	4	0	105	45	30	30	255	0	0	4	4		
2.2. Disciplines chosen by students																	
Specializing «Forecasting of social and economic processes»																	
1	Theory of forecasting and modeling	150	5	4			48	24	24	0	102						
2	Adaptive models in economics	150	5	4			48	24	24	0	102						
3	Risk Management	150	5		4		48	24	24	0	102						
4	Development of Web Applications	150	5		1		45	15	30		105			3			

1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18
5	Electronic commerce	150	5	3			30	15	15		120					3
6	Data mining	150	5		2		45	15	30		105				3	
7	Global Information Resources	120	4		2		45	15	30		75				3	
8	Geoinformation systems and technologies in environmental management	150	5		3		30	15	15		120					4
9	Forecasting trends in the global food market	150	5	3			30	15	15		120					4
10	Stochastic models in economics	150	5	3			30	15	15		120					4
11	Agricultural consulting	90	3		3		30	15	15		60					3
Total		1560	52	17	15	0	429	192	237	0	1131	0	0	3	6	18
3. OTHER STUDIES																
Practical training		150	5									180				
Pregraduation practice		270	9										324			
Preparation of Master's work		390	13													
State attestation		60	2													
Number of of course work (projects)		0				2										
Number of tests		0			7											
Number of exams		0		11												
Total for OCD		3600	120	29	19	3	804	372	372	60	1926	150	270	18	18	18

III. STRUCTURE OF CURRICULUM

Discipline	Hours	Credits	%
1. Regulatory academic disciplines	810	27	23
2. Elective academic disciplines	1920	64	53
2.1. Disciplines chosen by University	360	12	10
2.2. Disciplines chosen by students	1560	52	43
3. Other studies	870	29	24
TOTAL for OCD	3600	120	100

IV. SUMMARY OF BUDGET, WEEK

Year	Theoretical training	Examination period	Practical training	Preparation of master's work	State attestation	Holidays	Total
1	30	5	12	–	–	9	56
2	23	4	–	13	2	2	44
Total for OCD	53	9	12	13	2	11	100

V. PRACTICAL TRAINING

№	Type of practice	Semestr	Hours	Credits	Weeks
1	Practical training	1	150	5	4
2	Pregraduation practice and preparation of Master's work	2	270	9	8

VI. COURSE WORK AND PROJECTS

№	Discipline	Hours	Credits	Course work	Course project
1	Mathematical methods and models of market economy	30	1		CP
2	Corporate Information Systems	30	1		CP

VII. STATE ATTESTATION

№	Component attestation	Hours	Credits	Weeks
1	Protection of master's work	60	2	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF INFORMATIONAL TECHNOLOGY

**CURRICULUM
training specialists in 2015 entry**

Level of higher education (Bachelor's)	Second (Master's)
Area of knowledge	0501 «Informatics and Computation Technics»
Specialty	8.05010101 «Information managing systems and technologies»
Master's Programme	Educational and professional
Specialization	«Telecommunication support of information management systems», «Information Managing Systems and Technologies in agro-industrial and environmental field»
The form of training	Full-time
Apprenticeship (volume ECTS)	1,5 years (90)
Based on	the first (bachelor level of higher education)
Higher education degree	«Master»
Qualification	Analyst of computer systems, researcher (computing systems)

training specialists second (master's) level of higher education in 2015 accession specialty 8.05010101 «Information managing systems and technologies»

337

II. PLAN OF EDUCATIONAL PROCESS

№	Discipline	General volume		Forms of control of knowledge on semester				Lecture classes					Practical training		Distribution of weekly hours by years of study and semesters		
				Course work (project)				Individual work									
		Hours	Credits	Exam	Test	Total	Lectures	Laboratory	Practical	Individual work	Production practice	Research practice	1sem	2 sem.	1 sem		
																Number of weeks per semester	
1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	
1. REGULATORY ACADEMIC DISCIPLINES																	
1	Project management	150	5	1			45	15	30		105			3			
2	Reliability of Computer Systems Functioning	150	5	3			40	20	20		110					4	
3	Projecting of Informational-management and intelligence systems	150	5		2	30	45	15	30		105			3			
4	Modelling and forecast in environmental sphere	150	5	1			45	15	30		105			3			
5	World information Recourses	150	5	2			45	15	30		105				3		
6	Object modelling and designing of complex systems	150	5	2			45	15	30		105				3		
7	Datacentres Organization	150	5	1		30	45	15	30		105			3			
8	Mathematical models in the systems of artificial intelligent	150	5	2			45	15	30		105				3		
Total		1200	40				355	125	230	0	845	0	0				
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Business Foreign Language	90	3		1		15			15	75			3			
2	Agricultural Policy	90	3		1		30	15		15	60			3			
3	Methodology and organization of research on the basics of intellectual property	90	3		1		30	15	15		60			3			
4	Standardization and certification of information technology	90	3		3		30	15	15		60					3	
Total		360	12	0	6	0	105	45	30	30	255	0	0				
2.2. Disciplines chosen by students																	
Specializing «Telecommunication support of information management systems»																	
1	Global informational infrastructure	150	5		2		36	18	18		114				3		
2	Telecommunication technology and networks	150	5	2			36	18	18		114				3		

1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18
3	Mobile computer-integrated systems	120	4	3		30	30	10	20		90					3
4	Robot-technic Systems of Management	120	4		3		30	10	20		90					4
5	Geographical Informational Systems and Technology in Environmental Management	120	4		3		30	10	20		90					4
6	Intellectual Data Analysis	120	4		3		30	10	20		90					
7	Security of Information and communication systems	120	4		3		30	10	20		90					
8	WEB-applets Development	120	4		3		30	10	20		90					
Specializing «Information Managing Systems and Technologies in agro-industrial and environmental field»																
1	Technology of Data Mining	150	5		2		36	18	18		114				3	
2	Information systems management	150	5	2			36	18	18		114				3	
3	Frameworks of object-oriented modelling	120	4	3		30	30	10	20		90					3
4	Robot-technic Systems of Management	120	4		3		30	10	20		90					4
5	Geographical Informational Systems and Technology in Environmental Management	120	4		3		30	10	20		90					4
6	Intellectual Data Analysis	120	4		3		30	10	20		90					
7	Security of Information and communication systems	120	4		3		30	10	20		90					
8	WEB-applets Development	120	4		3		30	10	20		90					
Total		660	22			30	102	46	56	0	318		0	18	18	18
3. OTHER STUDIES																
Practical training		120	4									120				
Pregraduation practice		180	6										180			
Preparation of Master's work		120	4													
State attestation		60	2													
Number of of course work (projects)														1	1	1
Number of tests														3	3	3
Number of exams														3	3	2
Total for OCD		2700	90				562	216	316	30	1418	120	180	18	18	18

III. STRUCTURE OF CURRICULUM

Discipline	Hours	Credits	%
1. Regulatory academic disciplines	1200	40	44
2. Elective academic disciplines	1020	34	38
2.1. Disciplines chosen by University	360	12	14
2.2. Disciplines chosen by students	660	22	24
3. Other studies	480	16	18
TOTAL for OCD	2700	90	100

IV. SUMMARY OF BUDGET, WEEK

Year	Theoretical training	Examination period	Practical training	Preparation of master's work	State attestation	Holidays	Total
1	30	5	12	–	–	9	56
2	10	2	–	4	2	–	18
Total for OCD	40	7	12	4	2	9	74

V. PRACTICAL TRAINING

№	Type of practice	Semestr	Hours	Credits	Weeks
1	Practical training	1	120	4	4
2	Research practice	1	180	6	6

VI. COURSE WORK AND PROJECTS

№	Discipline	Hours	Credits	Course work	Course project
1	Datacentres Organization	30	1		CP
2	Projecting of Informational-management and intelligence systems	30	1		CP

VII. STATE ATTESTATION

№	Component attestation	Hours	Credits	Weeks
1	Protection of master's work	60	2	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF INFORMATIONAL TECHNOLOGY

**CURRICULUM
training specialists in 2015 entry**

Level of higher education (Bachelor's)	Second (Master's)
Area of knowledge	0501 «Informatics and Computation Technics»
Specialty	8.05010101 «Information managing systems and technologies»
Master's Programme	Educational and scientific
Specialization	«Distributed Information Systems»
The form of training	Full-time
Apprenticeship (volume ECTS)	2 years (120)
Based on	the first (bachelor level of higher education)
Higher education degree	«Master»
Qualification	Analyst of computer systems, researcher (computing systems)

training specialists second (master's) level of higher education in 2015 accession specialty 8.05010101 «Information managing systems and technologies»

Legend:

X	II	//
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Scientific and Production practice
Preparation of master's work
state attestation (state examination

II. PLAN OF EDUCATIONAL PROCESS

№	Discipline	General volume		Forms of control of knowledge on semester				Lecture classes					Practical training		Distribution of weekly hours by years of study and semesters		
		Hours	Credits	Exam	Test	Course work (project)	Total	Lectures	Laboratory	Practical	Individual work	Production practice	Research practice	1 sem.	2 sem.	1 sem	
														Number of weeks per semester			
1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	
1. REGULATORY ACADEMIC DISCIPLINES																	
1	Project management	150	5	1			45	15	30		105			3			
2	Reliability of Computer Systems Functioning	150	5	3			60	30	30		90					4	
3	Projecting of Informational-management and intelligence systems	150	5		2	30	45	15	30		105				3		
4	Modelling and forecast in environmental sphere	150	5	1			45	15	30		105			3			
5	World information Recourses	150	5		2		45	15	30		105				3		
6	Object modelling and designing of complex systems	150	5	2			45	15	30		105				3		
7	Datacentres Organization	150	5	1		30	45	15	30		105			3			
8	Mathematical models in the systems of artificial intelligent	150	5	2			45	15	30		105				3		
Total		1200	40				375	135	240	0	825	0	0				
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Business Foreign Language	90	3		1		15			15	75			3			
2	Agricultural Policy	90	3		1		30	15		15	60			3			
3	Methodology and organization of research on the basics of intellectual property	90	3		1		30	15	15		60			3			
4	Standardization and certification of information technology	90	3		3		45	15	30		45					3	
Total		360	12	0	6	0	120	45	45	30	240	0	0				
2.2. Disciplines chosen by students																	
Specializing «Distributed Information Systems»																	
1	The principles of distributed network programming	150	5	2			45	15	30		105				3		
2	Methods and information technologies of risks evaluation	150	5		4		48	24	24		102						

1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18
3	Distributed geospatial remote monitoring	150	5	4		30	48	24	24		102					
4	Robot-technic Systems of Management	150	5		3		60	30	30		90					4
5	Geographical Informational Systems and Technology in Environmental Management	150	5		3		60	30	30		90					4
6	Intellectual Data Analysis	150	5		2		45	15	30		105				3	
7	Security of Information and communication systems	150	5		4		48	24	24		102					
8	WEB-applets Development	150	5		3		45	15	30		105					3
Total		1200	40			30	261	123	138	0	489	0	0	18	18	18
3. OTHER STUDIES																
Practical training		120	4									120				
Pregraduation practice		180	6										180			
Preparation of Master's work		480	16													
State attestation		60	2													
Number of of course work (projects)														1	1	1
Number of tests														3	3	3
Number of exams														3	3	2
Total for OCD		3600	120				756	303	423	30	1554	0	0	18	18	18

III. STRUCTURE OF CURRICULUM

Discipline	Hours	Credits	%
1. Regulatory academic disciplines	1200	40	33
2. Elective academic disciplines	1560	52	43
2.1. Disciplines chosen by University	360	12	10
2.2. Disciplines chosen by students	1200	40	33
3. Other studies	840	28	24
Total for OCD	3600	120	100

IV. SUMMARY OF BUDGET, WEEK

Year	Theoretical training	Examination period	Practical training	Preparation of master's work	State attestation	Holidays	Total
1	30	5	12	–	–	9	56
2	23	4	–	13	2	2	44
Total for OCD	53	9	12	13	2	11	100

V. PRACTICAL TRAINING

№	Type of practice	Semestr	Hours	Credits	Weeks
1	Practical training	1	120	4	5
2	Research practice	1	180	6	7

VI. COURSE WORK AND PROJECTS

№	Discipline	Hours	Credits	Course work	Course project
1	Datacentres Organization	30	1		CP
2	Projecting of Informational-management and intelligence systems	30	1		CP

VII. STATE ATTESTATION

№	Component attestation	Hours	Credits	Weeks
1	Protection of master's work	60	2	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF INFORMATIONAL TECHNOLOGY

**CURRICULUM
training specialists in 2015 entry**

Level of higher education	Second (Master's)
Area of knowledge	0501 «Informatics and Computation Technics»
Specialty	8.05010105 «Computer Ecological and Economic Monitoring»
Master's Programme	Educational and professional
Specialization	«Computer Monitoring of Environmental Economics», «Ecological monitoring of the environment»
The form of training	Full-time
Apprenticeship (volume ECTS)	1,5 years (90)
Based on	the first (bachelor level of higher education)
Higher education degree	«Master»
Qualification	Analyst of computer systems, researcher (computing systems)

I. SCHEDULE OF TRAINING
training specialists second (master's) level of higher education in 2015 accession
specialty 8.05010105 «Computer Ecological and Economic Monitoring»

Year of training	2015 year												2016 year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Legend:

	-	Theoretical training	X	-	Scientific and Production practice
:	-	Examination period	II	-	Preparation of master's work
-	-	Holidays	//	-	state attestation (state examination and protection of master's work)
A	-	intermediate attestation			

II. PLAN OF EDUCATIONAL PROCESS

№	Discipline	General volume		Forms of control of knowledge on semester			Lecture classes					Practical training		Distribution of weekly hours by years of study and semesters				
		Hours	Credits	Exam	Test	Course work (project)	Total	Lectures	Laboratory	Practical	Individual work	Production practice	Research practice	1 year			2 year	
														1 sem	2 sem.	1 sem		
Number of weeks per semester																		

1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	
1. REGULATORY ACADEMIC DISCIPLINES																	
1	Modeling ecological and economic systems	120	4	1			45	15	30		75			3			
2	Methods and systems for decision support in the management of ecological and economic processes	120	4	3			45	15	30		75					3	
3	Aerospace monitoring of geosystems	120	4	1		30	45	15	30		75			3			
4	Intelligent computer monitoring system	120	4	2			45	15	30		75				3		
5	Hardware and software for collecting and processing environmental information	120	4		1		45	15	30		75			3			
6	Object-oriented analysis and design of complex systems	120	4	2		30	45	15	30		75				3		
7	Organization and management of data warehouse	120	4	1			45	15	30		75			3			
8	Environmental control and security	120	4		2		45	15	30		75				3		
9	Simulation modeling of environmental processes	120	4	2			45	15	30		75				3		
Total		1080	36				90	36	54	0	150	0	0				
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Business Foreign Language	90	3		1		15			15	75			3			
2	Agricultural Policy	90	3		1		30	15		15	60			3			
3	Methodology and organization of research on the basics of intellectual property	90	3		2		30	15	15		60			3			
4	Standardization and certification of information technology	90	3		3		30	15	15		60					3	
Total		360	12	0	7	0	105	45	30	30	255	0	0				
2.2. Disciplines chosen by students																	
Specializing «Computer Monitoring of Environmental Economics»																	

1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18
1	Environmental and economic optimization of production	150	5	3			30	10	20		120					4
2	Methods of economic and statistical researches	150	5	3			30	10	20		120					4
3	IT monitoring of environmental and socio-economic processes	120	4		2		45	15	30		75				3	
4	Managing of IT infrastructure monitoring systems	120	4		3	30	30	10	20		90					2
5	Global information resources	120	4		3		30	10	20		90					2
6	Environmental monitoring and technical safety	150	5	3			30	10	20		120					
7	Content management and integration of information in the agro-eco-systems	120	4		2		45	15	30		75					
8	Mobile Computer Integrated Systems	120	4		3		30	10	20		90					
9	Global information infrastructure	150	5	3			30	10	20		120					
10	Development of web applications	120	4		2		45	15	30		75					
Specializing «Ecological monitoring of the environment»																
1	Geographic information systems and technologies in ecology and environmental	120	4		2		45	15	30		75				3	
2	Environmental monitoring and technical safety	150	5	3		1	30	10	20		120					4
3	Environmental management and auditing	150	5	3			30	10	20		120					4
4	Content management and integration of information in the agro-eco-systems	120	4		3		30	10	20		90					2
5	Managing of IT infrastructure monitoring systems	120	4		3	30	30	10	20		90					2
6	Global information resources	120	4		3		30	10	20		90					
7	Environmental standards and certification	150	5	3			30	10	20		120					
8	IT monitoring of environmental and socio-economic processes	120	4		2	1	45	15	30		75					
9	Mobile Computer Integrated Systems	120	4		3		30	10	20		90					
10	Global information infrastructure	150	5	3			30	10	20		120					
11	Development of web applications	120	4		2		45	15	30		75					
Total		660	22				165	55	110	0	495	0	0	18	18	18
3. OTHER STUDIES																
Practical training		120	4									120				
Pregraduation practice		180	6										180			
Preparation of Master's work		240	8													
State attestation		60	2													
Number of of course work (projects)				x	x	2								1	1	1
Number of tests				x	9	x								3	3	3
Number of exams				9	x	x								3	3	3
Total for OCD		2700	90				360	136	194	30	900			18	18	18

III. STRUCTURE OF CURRICULUM

Discipline	Hours	Credits	%
1. Regulatory academic disciplines	1080	36	40
2. Elective academic disciplines	1020	34	38
2.1. Disciplines chosen by University	360	12	14
2.2. Disciplines chosen by students	660	22	24
3. Other studies	600	20	22
TOTAL for OCD	2700	90	100

IV. SUMMARY OF BUDGET, WEEK

Year	Theoretical training	Examination period	Practical training	Preparation of master's work	State attestation	Holidays	Total
1	30	5	12	–	–	9	56
2	10	2	–	4	2	–	18
Total for OCD	40	7	12	4	2	9	74

V. PRACTICAL TRAINING

№	Type of practice	Semestr	Hours	Credits	Weeks
1	Practical training	1	120	4	5
2	Research practice	1	180	6	7

VI. COURSE WORK AND PROJECTS

№	Discipline	Hours	Credits	Course work	Course project
1	Aerospace monitoring of geosystems	30	1		CP
2	Object-oriented analysis and design of complex systems	30	1		CP

VII. STATE ATTESTATION

№	Component attestation	Hours	Credits	Weeks
1	Protection of master's work	60	2	2

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF HUMANITIES AND PEDAGOGY

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0101 «Pedagogical Education»
Specialty	8.01010601 «Social Pedagogy»
Master's program	Educational and Professional
Specialization	«Social and Pedagogical Activity in Rural Areas», «Social and Pedagogical Monitoring of Rural Areas and Social Network Diagnostics»
Form of training	full-time
Term of study (Credits) on the basis of	1,5 year (90)
Educational degree	the first level of higher education (bachelor)
Qualification	«Master» Social educator

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work	Practical training		Distribution of hours per week within an acad. year and semesters		
		Semesters			Including		1 year semester	2 year semester								
		Hours	Credit	Exam	Test	Course paper			Total	Lectures	Laboratory classes	Seminars	1	2	3	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. COMPULSORY ACADEMIC DISCIPLINES																
1	Organization of Social Services Activity	90	3	1		1	30	15		15	60			2		
2	Social Youth Policy of Ukraine and Sociology of Rural Youth	90	3		1		30	15		15	60			2		
3	Urgent Issues of Social Pedagogy	90	3	1			30	15		15	60			2		
4	Social Work in Ukraine	90	3		1		30	15		15	60			2		
5	Legislative Framework for Socio-Pedagogical Activity and Fundamentals of Intellectual Property	90	3		1		30	15		15	60			2		
6	Family Social Support	90	3	2			30	15		15	60			2		
7	Psychological and Pedagogical Therapy	90	3	2			30	15		15	60			2		
8	Methods of Teaching Social and Pedagogical Disciplines	150	5	2		2	60	30		30	90			4		
9	Demography	90	3	3		3	18	8		10	72					2
10	Pedagogy and Psychology of Higher School	90	3	1			30	15		15	60			2		
11	Management of Social and Pedagogical Systems and Management of Social and Pedagogical Work	210	7		2,3		78	39		39	132			4	1	
12	Information Technologies in Social and Pedagogical Activity	90	3		2		30	15		15	60			2		
Total		1260	42	7	5	3	426	212	0	214	834	0	0	12	14	3
2. ELECTIVE ACADEMIC DISCIPLINES																
2.1. Disciplines chosen by University																
1	Methods of Social and Pedagogical Workshop	90	3		3		36	18		18	54					4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Methodology and Organization of Scientific Research	90	3		1		45	23		22	45			2		
3	Business Foreign Language	150	5	1			60			60	90			4		
Total		330	11	1	3	0	141	41	0	100	189	0	0	6	0	4
2.2. Disciplines chosen by students																
Specialization «Social and Pedagogical Activity in Rural Areas»																
1	Organization of Work with Different Social Groups	90	3	3			27	18		9	63					3
2	Social Work with Children at Risk	90	3	2			30	15		15	60				2	
3	Culture of Speech and Business Communication	90	3		2		30	15		15	60				2	
4	Information Technologies in Education	90	3		3		36	18	18		54					4
5	Advertising and Information Technologies in the Social Sphere	90	3		3		18	8	10		72					2
6	Professiology	90	3		3		18	8		10	72					2
Total		540	18	2	4	0	159	82	28	49	381	0	0	4	4	11
Specialization «Social and Pedagogical Monitoring of Rural Areas and Social Network Diagnostics»																
1	Organization of Work with Different Social Groups	90	3	3			27	18		9	63					3
2	Social Work with Children at Risk	90	3	2			30	15		15	60				2	
3	Expertise of Psychological and Sociological Tools	90	3		2		30	15		15	60				2	
4	Information Technologies for Social and Pedagogical Research	90	3		3		36	18	18		54					4
5	Social Network Diagnostics	90	3		3		18	8	10		72					2
6	Human Resources and Labour Market	90	3		3		18	8		10	72					2
Total		540	18	2	4	0	159	82	28	49	381			0	4	11
Total		870	29	3	7	0	300	123	28	149	570	0	0	6	4	15
3. OTHER FORMS OF TRAINING																
State examination																
	Master's thesis preparation and defense	30	1													
	Practical training	330	11													
	Course work	210	7			3						30	180			
	Tests													1	1	1
	Exams				12									4	3	5
	Total	2700	90	10	12	3	726	335	28	180	1404	30	180	18	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1260	42	47,7
2. Elective academic disciplines	870	29	32,2
2.1. Disciplines chosen by University	330	11	12,2
2.2. Disciplines chosen by students	540	18	20
3. Other form of training	570	19	21,1
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	6	-	-	11	52
2	9	2	-	3	1	-	15
Total for the specialty	39	7	6	3	1	11	67

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Educational (pedagogical) practice	2	30	1	1
2	Production socio-pedagogical practice in the social. services	2	180	6	5

VI. COURSE PAPER AND PROJECTS

Nº	Discipline	Hours	Credits	Course paper	Course projects
1	Organization of Social Services Activity	30	1	+	
2	Demography	30	1	+	
3	Methods of Teaching Social and Pedagogical Disciplines	30	1	+	

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis preparation and defense	330	11	3
2	State exam	30	1	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

FACULTY OF HUMANITIES AND PEDAGOGY

**CURRICULUM
of training specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	0203 «Human Sciences»
Specialty	8.02030304 «Translation»
Master's program	Educational and Professional
Specialization	«Translation Activity in Agroindustrial and Environment Protection Branches»
Form of training	full-time
Term of study (Credits)	1,5 year (90)
on the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	philologist-researcher, Translator (German/English), teacher of higher educational institution

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work		Practical training		Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	Semesters			Total	Including		Seminars	12	13	14	15	16	17	18
				Exam	Test	Course paper		Lectures	Laboratory classes								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. COMPULSORY ACADEMIC DISCIPLINES																	
1	Pedagogy and Psychology of Higher School	90	3		1, 2		30	15		15	60			1	1		
2	Methods of Teaching Translation at Higher School	90	3		2		30	15		15	60				2		
3	Communication Strategies of the First Foreign Language	240	8	1,2,3			84			84	156			2	2	3	
4	Theory of Translation	120	4		1,2		60	30		30	60			2	2		
5	Ukrainian Language for Translation	90	3		1,2		30			30	60			1	1		
6	Translation Techniques (the first foreign language)	270	9	1,2,3			92			92	178			2	2	4	
7	Communication Strategies of the Second Foreign Language	210	7	1,2,3			76			76	134			2	2	2	
Total		1110	37	9	7	0	402	60	0	342	708			10	12	9	
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Methodology and Organization of Scientific Research with Fundamentals of Intellectual Property	120	4		1		45	22		23	75				3		
2	Rhetoric and Cross-Cultural Communication	120	4	1	2		45	23		22	75			1	2		
3	Comparative Typology of the First Foreign and Ukrainian Languages	90	3		2		30	15		15	60				2		
Total		330	11	1	3	0	120	60	0	60	210			4	4	0	
2.2. Disciplines chosen by students																	
1	Methods of Creation of E-Learning Courses	90	3		3		32	8	24	0	58						4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Information Technologies in Translation	90	3		1		30	8	22	0	60			2		
3	Translation Techniques (the second foreign language)	180	6	1,2			60			60	120			2	2	
4	Translation Editing of Texts on Agricultural Issues	90	3		3		16			16	74					2
5	Interpreting and Translation of Specialized Texts (horticulture and forestry; ecology and agronomy; veterinary medicine and animal science; agrarian law; quality, standardization and certification of production; agricultural machinery, agricultural mechanization and electrification)	90	3		3		24			24	66					3
Total		540	18	2	4	0	162	16	46	100	378			4	2	9
Total		870	29	3	7	0	282	76	46	160	588			8	6	9
3. OTHER FORMS OF TRAINING																
State examination		60	2													
Master's thesis preparation and defense		300	10													
Practical training		360	12									60	300			
Course work						0										
Tests					14									5	6	3
Exams				12										5	4	3
Total for specialty		2700	90				684	136	46	502	1296			18	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1110	37	41,1
2. Elective academic disciplines	870	29	32,2
2.1. Disciplines chosen by University	330	11	12,2
2.2. Disciplines chosen by students	540	18	20
3. Other form of training	720	24	26,7
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	8	-	-	9	52
2	8	2	-	3	2	-	15
Total for the specialty	38	7	8	3	2	9	67

V. PRACTICAL TRAINING

N	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Introductory (professional) internship	2	60	2	1
2	Practical training (assistance)	2	180	6	3
3	Practical training (translation and technology)	2	60	2	2
4	Practical (graduate) training	2	60	2	2

VI. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	State examination in Theory and Practice of Translation (the first foreign language)	30	1	1
2	State examination in Theory and Practice of Translation (the second foreign language)	30	1	1
3	Master's thesis preparation and defense	300	10	3

CURRICULUM of training specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	1801 «Specific Categories»
Specialty	8.18010020 «Management of Educational Institution»
Master's program	Educational and Professional
Specialization	«Management Activity at Higher Educational Institutions of I-II Levels of Accreditation», «Management Activity at Higher Educational Institutions of III-IV Levels of Accreditation», «Management Activity at Technical Schools», «Management Activity at Comprehensive Educational Institutions»
Form of training	full-time
Term of study (Credits)	1,5 year (90)
on the basis of	the first level of higher education (bachelor)
Educational degree	«Master»
Qualification	Manager of enterprise, institution and organization (for education and practical training)

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)		Audience employments (hours)					Individual work		Practical training		Practical training practice		Distribution of hours per week within an acad. year and semesters				
		Hours		Credit		Semesters		Total		Lectures		Laboratory classes		Seminars		Including		1 year semester		2 year semester	
1. COMPULSORY ACADEMIC DISCIPLINES																					
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17					
1	Financial and Economic Activity Management	90	3		2		30	15		15	60				2						
2	Audit and Management Activity Assessment	90	3		1		30	15		15	60			2							
3	Psychology of Management	90	3	2			30	15		15	60				2						
4	Legal Framework for Educational Institution	90	3	1			30	15		15	60			2							
5	Manager of Educational Institution	90	3		2		15	7		8	75				1						
6	Theory of Performance Organization and Management	90	3		2		45	23		22	45				3						
7	Management process in education	120	4	2	1	1	60	30		30	60			2	2						
8	Management of Education and Training	90	3	3		3	30	15		15	60					6					
9	Human Resources Management	90	3	2		2	30	15		15	60				2						
10	Information Technologies in Education and Automated Systems for Educational Institution Management	150	5	2	1, 3		70	35		35	80			1	1	8					
11	Modern Systems of Education	90	3	1			30	15		15	60			2		0					
Total		1080	36	7	7	3	400	200	0	200	680	0	0	9	13	14					
2. ELECTIVE ACADEMIC DISCIPLINES																					
2.1. Disciplines chosen by University																					
1	Business Foreign Language	150	5	1			60	0		60	90			4							
2	Methodology and Organization of Scientific Research with Fundamentals of Intellectual Property	90	3		1		30	15		15	60			2							
3	Education Technologies	90	3	2			30	15	15	0	60				2						
Total		330	11	2	1	0	120	30	15	75	210	0	0	6	2	0					
2.2. Disciplines chosen by students																					
Specialization «Management Activity at Comprehensive Educational Institutions»																					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Document Management and Business Communication in Management of Educational Institution	90	3		2		45	15	0	30	45				3	
2	Organization of Comprehensive Educational Institution Activity	90	3		1		15	7		8	75			1		
3	Management Techniques	90	3		3		20	10		10	70					4
4	Modern Software and Online Technologies in Education	90	3		1		30	15		15	60			2		
Total		360	12	0	4	0	110	47	0	63	250	0	0	3	3	4
Specialization «Management Activity at Technical Schools»																
1	Document Management and Business Communication in Management of Educational Institution	90	3		2		45	15	0	30	45				3	
2	Theory and Methods of Professional Training	90	3		1		15	7		8	75			1		
3	Management Techniques	90	3		3		20	10		10	70					4
4	Conflictology	90	3		1		30	15		15	60			2		
Total		360	12	0	4	0	110	47	0	63	250	0	0	0	3	4
Specialization «Management Activity at Higher Educational Institutions of I-III Levels of Accreditation»																
1	Document Management and Business Communication in Management of Educational Institution	90	3		2		45	15	0	30	45				3	
2	Theory and Methods of Professional Training	90	3		1		15	7		8	75			1		
3	Management Techniques	90	3		3		20	10		10	70					4
4	Conflictology	90	3		1		30	15		15	60			2		
Total		360	12	0	4	0	110	47	0	63	250	0	0	0	3	4
Specialization «Management Activity at Higher Educational Institutions of III-IV Levels of Accreditation»																
1	Document Management and Business Communication in Management of Educational Institution	90	3		2		45	15	0	30	45				3	
2	Theory and Methods of Professional Training	90	3		1		15	7		8	75			1		
3	Management Techniques	90	3		3		20	10		10	70					4
4	Conflictology	90	3		1		30	15		15	60			2		
Total		360	12	0	4	0	110	47	0	63	250	0	0	0	3	4
3. OTHER FORMS OF TRAINING																
State examination		330	11													
Practical training		600	20									90	510			
Course work						3								1	1	1
Tests					12									6	4	2
Exams				9										3	5	1
Total		2700	90				630	277	15	338	1140	90	510	18	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1080	36	40
2. Elective academic disciplines	690	23	25,5
2.1. Disciplines chosen by University	330	11	12,2
2.2. Disciplines chosen by students	360	12	13,3
3. Other form of training	930	31	34,5
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	6	25	2	-	14	52
2	4	1	6	3	1	-	15
Total for the specialty	34	7	31	5	1	14	67

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Educational practice	1	90	3	10
2	Manufacturing practice	2	120	4	15
3	Management practice	3	390	13	6

VI. COURSE PAPER AND PROJECTS

Nº	Discipline	Hours	Credits	Course paper	Course projects
1	Management process in education	30	1	+	
2	Management of Education and Training	30	1	+	
3	Human Resources Management	30	1	+	

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis preparation and defense	330	11	6

CURRICULUM of training specialists in 2015 academic year

Level of higher education
Area of knowledge
Specialty
Master's program
Specialization

The second (Master)
1801 «Specific Categories»
8.18010021 «Pedagogy of higher school»
Educational and Professional
«Methods of Teaching the Cycle of Agrobiological Disciplines»,
«Methods of Teaching the Cycle of Animal Science and Veterinary
Medicine Disciplines», «Methods of Teaching the Cycle of Technical
and Technological Disciplines», «Methods of Teaching the Cycle of
Economic and Information Disciplines», «Methods of Teaching the
Cycle of Social Sciences and Humanities»
full-time

Form of training
Term of study (Credits)
on the basis of
Educational degree
Qualification

1,5 year (90)
the first level of higher education (bachelor)
«Master»
Teacher of higher educational institution

I. SCHEDULE OF TRAINING **Specialists for second (master) level of higher education in 2015** **in specialty 8.18010021 «Pedagogy of higher school»**

Year of training	2015 year												2016 year																							
	September			October			November			December			January			February			March			April			May			June			July			August		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
	IX	X	XI	XII	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	I	II	III					
	1	7	14	21	28	5	12	19	X	2	9	16	23	XI	7	14	21	XII	4	11	18	I	1	8	15	II	7	14	21	III	4	11	18			
5	12	19	26	X	10	17	24	31	7	14	21	28	5	12	19	26	I	9	16	23	30	6	13	20	27	II	5	12	19	26	IV	9	16	23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		

Year of training	2016 year																							
	September			October			November			December														
	1	5	12	19	IX	3	10	17	24	31	7	14	21	XI	5	12	19	26						

Nomenclature:

-	Theoretical training	X	-	Scientific-practical training
:	Examination period	II	-	Preparation of master thesis
-	Holidays	//	-	State certification (state examination and diploma defence)
0	Pedagogical (assistance) training			

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Disciplines	Total amount		Forms of knowledge control (for sem.)			Audience employments (hours)				Individual work	Practical training		Distribution of hours per week within an acad. year and semesters			
		Hours	Credit	Semesters			Total	Lectures	Including		13	14	15	16	17		
				Exam	Test	Course paper			Laboratory classes	Seminars							
1	2	3	4	5	6	7	8	9	10	11	12						
1. COMPULSORY ACADEMIC DISCIPLINES																	
1	Introduction to Specialty	90	3		1		30	15		15	60			1			
2	Pedagogy	180	6	1		1	60	30		30	120			4			
3	Developmental and Pedagogical Psychology	120	4	1			45	15		30	75			3			
4	Principles of Scientific Research in Pedagogy	90	3	1			30	15		15	60			2			
5	History of Pedagogy and Development of Higher Education in Foreign Countries	90	3		1,2		45	22		23	45			2	1		
6	Principles of Pedagogical Skills and Ethics for Academic Staff of Higher School	120	4	2, 3			46	23		23	74				2	2	
7	Theory and Methods of Professional Training	180	6	2		2	60	30		30	120				4		
8	Organization of Educational Work at Higher Education Institutions	120	4	2			45	15		30	75				3		
9	Methods of Creation of E-Learning Online Courses	120	4		2		45	15		30	75				3		
10	Information Technologies in Education	120	4	2			45	15	30		75				3		
Total		1230	41	8	4	2	451	195	30	226	779	0	0	12	16	2	
2. ELECTIVE ACADEMIC DISCIPLINES																	
2.1. Disciplines chosen by University																	
1	Business Foreign Language	150	5	1			60			60	90				4		
2	Methodology and Organization of Scientific Research with Fundamentals of Intellectual Property	90	3		1		30	15		15	60				2		
3	Pedagogical Technologies	90	3		2		30	15		15	60				2		
Total		330	11	1	2	0	120	30	0	90	210	0	0	6	2	0	
2.2. Disciplines chosen by students																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Higher Education of Ukraine and the Bologna Process	90	3		3		16	8		8	74					2
2	Professional Training	90	3		3		16	8		8	74					2
3	Social Psychology and Psychology of Creativity	90	3	3			32	16		16	58					4
Total		270	9	1	2	0	64	32	0	32	206	0	0	0	0	8
Specialization «Methods of Teaching the Cycle of Agrobiological Disciplines»																
4	Methods of Teaching the Cycle of Agrobiological Disciplines	180	6	3		3	64	32		32	116					8
Specialization «Methods of Teaching the Cycle of Animal Science and Veterinary Medicine Disciplines»																
4	Methods of Teaching the Cycle of Animal Science and Veterinary Medicine Disciplines	180	6	3		3	64	32		32	116					8
Specialization «Methods of Teaching the Cycle of Technical and Technological Disciplines»																
4	Methods of Teaching the Cycle of Technical and Technological Disciplines	180	6	3		3	64	32		32	116					8
Specialization «Methods of Teaching the Cycle of Economic and Information Disciplines»																
4	Methods of Teaching the Cycle of Economic and Information Disciplines	180	6	3		3	64	32		32	116					8
Specialization «Methods of Teaching the Cycle of Social Sciences and Humanities»																
4	Methods of Teaching the Cycle of Social Sciences and Humanities	180	6	3		3	64	32		32	116					8
Total		450	15	1	0	1	128	64	0	64	322	0	0	0	0	16
Total		780	26	3	4	1	248	94	0	154	532	0	0	6	2	16
3. OTHER FORMS OF TRAINING																
State examination		360	12													
Practical training		330	11								60	300				
Course work						3							1	1	1	1
Tests					8								3	3	3	2
Exams				11									4	4	4	3
Total		2700	90	11	7	3	699	289	30	380	1311	60	300	18	18	18

III. STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1230	41	45,5
2. Elective academic disciplines	170	26	29
2.1. Disciplines chosen by University	330	11	12
2.2. Disciplines chosen by students	450	15	17
3. Other form of training	690	23	25,5
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	6	-	-	11	52
2	8	2	-	4	1	-	15
Total for the specialty	38	7	6	4	1	11	67

V. PRACTICAL TRAINING

Nº	Type of practice	Semester	Hours	Credits	Amount of weeks
1	Introductory (professional) internship	2	60	2	1
2	Practical training	2	120	4	3
3	Scientific-practical training	2	180	6	2

VI. COURSE PAPER AND PROJECTS

Nº	Discipline	Hours	Credits	Course paper	Course projects
1	Pedagogy	30	1	+	
2	Theory and Methods of Professional Training	30	1	+	
3	Methods of Teaching the Cycle of Agrobiological Disciplines	30	1	+	

VII. STATE CERTIFICATION

N	Attestations	Hours	Credits	Amount of weeks
1	Master's thesis preparation and defense	330	11	5

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE**

EDUCATION AND RESEARCH INSTITUTE OF CONTINUING EDUCATION

**CURRICULUM
of training Specialists in 2015 academic year**

Level of higher education	The second (Master)
Area of knowledge	1801 «Specific categories»
Specialty	8.18010004 «Extension service»
Master's program	Professional
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	Master
Qualification	Adviser in Extension

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)			Auditorium classes, hours				Individual work	Practical training		Distribution of hours per week within an acad. year and semesters		
		Hours	Credit	due to semesters		Total	including		13	14						
				Exam	Test		Course project	Lectures			Laboratory classes	Seminars				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. THE OBLIGATORY ACADEMIC DISCIPLINES																
1	Intellectual Property	90	3		1		30	16		14	60			2		
2	Agrarian, land and environmental law	90	3		1		30	16		14	60			2		
3	Methodology and organization of scientific research	90	3		3		20	10		10	70				2	
4	Agricultural extension	120	4	1			60	30		30	60			4		
5	Planning information and consultation programs in extension	120	4		3		20	10		10	100				2	
6	Organization of information and consultation activities	120	4	2		2	30	16		14	90			2		
7	Consulting management in agriculture	120	4	1		1	30	16		14	90			2		
8	Fundamentals of information technology in extension	120	4	2			60	30	30		60				4	
9	Legal support in extension	120	4		1		30	16		14	90			2		
10	Organisation of trainings in extension	120	4		3		20	10		10	100					2
11	Public relations for consulting	120	4	1			30	16		14	90			2		
12	Statistical modeling and forecasting extension	120	4		2		30	16		14	90				2	
Total		1350	45	5	7	2	390	202	30	158	960			14	8	6
2. ELECTIVE ACADEMIC DISCIPLINES																
2.1. Disciplines chosen by University																
1	Agricultural policy	120	4	2			30	16		14	90				2	
2	Business foreign language	120	4	1			30		30		90			2		
3	Extension in agribusiness	90	3		2		60	30		30	30				4	
4	International Extension	90	3		2		30	16		14	60				2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total		420	14	2	2	0	150	62	30	58	270			2	8	0
2.2. Disciplines chosen by students																
1	Extension to agricultural service cooperatives	90	3	3			40	20		20	50					4
2	Innovative activity	90	3		3		20	10		10	70					2
3	Ethic extension activity	90	3		1		30	16		14	60			2		
4	Extension for social development in rural areas	120	4	3			20	10		10	100					2
5	Extension in agricultural service	90	3		2		30	16		14	60				2	
6	Home Economics	90	3	3			20	10		10	70					2
7	Documentation in extension	90	3		3		20	10		10	70					2
Total		660	22	3	4		180	92	0	88	480			2	2	12
3. OTHER FORMS OF TRAINING																
Preparing and defense of Master paper																
		90	3													
Practical training (internship)																
		180	6													
Number of Course Projects																
						2										
Number of passes																
					13											
Number of Exams																
				10												
Total for the specialty																
		2700	90	10	13	2	720	356	60	304	1710			18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1350	45	50
2. Elective academic disciplines	1080	36	40
2.1. Disciplines chosen by University	420	14	16
2.2. Disciplines chosen by students	660	22	24
3. Other forms of training	270	9	10
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	5	3	–	9	52
2	10	3	–	2	1	–	16
Total for the specialty	40	8	5	5	1	9	68

V. PRACTICAL TRAINING

Nº	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	2	180	6	5

VI. COURSE PAPERS AND PROJECTS

Nº	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Organization of information and consultation activities	120	4	+	
2	Consulting management in agriculture	120	4	+	

VII. STATE CERTIFICATION

Nº	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	90	3	1

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
EDUCATION AND RESEARCH INSTITUTE OF CONTINUING EDUCATION**

CURRICULUM of training Specialists in 2015 academic year

Level of higher education	The second (Master)
Area of knowledge	1801 «Specific categories»
Specialty	8.18010012 «Management of innovative activity»
Master's program	Professional
Form of training	full-time
Term of study (Credits)	1,5 years (90)
On the basis of	the first level of higher education (bachelor)
Educational degree	Master
Qualification	Master of Management of innovative activity

II. CURRICULUM OF THE EDUCATIONAL PROCESS

N	Titles of Disciplines	Total amount		Forms of knowledge control (for sem.)				Auditorium classes, hours				Individual work		Practical training		Practical training (internship)		Distribution of hours per week within an acad. year and semesters		
		Credit		due to semesters		Exam	Test	Course project	Total	including			Practical training	Practical training (internship)	1 year	II year	semester	1	2	3
		Hours								Lectures	Laboratory classes	Seminars			15	15	15			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17				
1. THE OBLIGATORY ACADEMIC DISCIPLINES																				
1	The methodology of scientific research	90	3		1		30	15		15	60			2						
2	Economics of innovative enterprise	120	4	1		1	60	30		30	60			4						
3	The System analysis and acceptance innovative decisions	90	3	3			40	10		10	50								2	
4	Innovation Management	150	5	1			60	30		30	90			4						
5	Creative management	90	3		2		30	15		15	60				2					
6	Financial management	90	3	1			30	15		15	60				2					
7	Intellectual Property	90	3		1		30	15		15	60				2					
8	Technology transfer	120	4		2		30	15		15	90				2					
9	Marketing innovation	90	3	3			40	20		20	50								4	
10	Strategic management of innovative development	120	4	3			40	20		20	80								4	
11	Information systems in innovation activity	90	3		2		30	15		15	60				2					
12	Management of innovation projects	120	4	2		2	30	30		30	90					4				
Total		1260	42	7	5	2	450	225		225	810				14	10		12		
2. ELECTIVE ACADEMIC DISCIPLINES																				
2.1. Disciplines chosen by University																				
1	Business foreign language	90	3		1		30			30	60									
2	International Management	90	3		3		20	10		10	60									
3	Agricultural policy	90	3	2			30	15		15	60				2					
4	Investment management	120	4	2			30	15		15	90								2	
Total		390	13	2	2		110	40		70	280				2	4		2		
2.2. Disciplines chosen by students																				
1	Risks management in innovative activity	120	4		2		30	15		15	90								2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Logistic support for innovative activity	120	4		2		30	15		15	90				2	
3	Psychology of the innovative activity	90	3		1		30	15		15	60			2		
4	Quality management	120	4		3		20	10		10	100					2
5	Management of the organizational and production systems	120	4		3		20	10		10	100					2
6	Consulting in innovative activity	120	4		3		20	10		10	100					2
Total		690	23		6		150	75		75	540			2	4	6
Total		2340	78		8	2	710	340		370	1630					
3. OTHER FORMS OF TRAINING																
	Preparing and defense of Master paper	180	6													
	Practical training (internship)	180	6													
	Number of Course Projects	-														
	Number of passes	9														
	Number of Exams	13														
	Total for the specialty	2700	90	9	13		710	340		370	1630			18	18	18

III. THE STRUCTURE OF THE CURRICULUM

Disciplines	Hours	Credits	%
1. Compulsory academic disciplines	1260	42	47
2. Elective academic disciplines	1080	36	40
2.1. Disciplines chosen by University	390	13	14
2.2. Disciplines chosen by students	690	23	26
3. Other forms of training	360	12	13
Total for the specialty	2700	90	100

IV. CONSOLIDATED DATA OF BUDGET TIME (BY WEEKS)

Course	Theoretical training	Examination period	Practical training	Preparation of master thesis	State Certification	Holidays	Total
1	30	5	5	3		9	52
2	10	3	–	2	1	–	16
Total for the specialty	40	8	5	5	1	9	68

V. PRACTICAL TRAINING

Nº	Type of practical training	Semester	Hours	Credits	Number of weeks
1	Practical training (internship)	2	180	6	5

VI. COURSE PAPERS AND PROJECTS

Nº	Titles of Disciplines	Hours	Credits	Course papers	Course projects
1	Economics of innovative enterprise	120	4	+	
2	Management of innovation projects	120	4	+	

VII. STATE CERTIFICATION

Nº	Component of certification	Hours	Credits	Number of weeks
1	Defense of Master Paper	180	6	1

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