Form № H- 3.01

CABINET OF MINISTERS OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE

EDUCATINON PLANE
training specialists of 2013 year of entry

Educational qualification level	"Master"
Area of knowledge	0401 "Natural Sciences"
Specialty	8.04010601 "Ecology and Environmental Protection"
Specialization	Productional
Master programs	"Environmental control in the agrosphere: monitoring, certification and expertise", "Ecology and protection of water recourses of agrosphere", "Methods for ecological control of environmental objects"
Specialization	Reserch
Master programs	"Quality of Environment and System Analysis: Quality of Soil and system analysis of terrestrial ecosystems", "Quality of Environment and System Analysis: Water Quality and systems analysis of aquatic ecosystems", "Environmental Management and Policy", "Environmental governance and Policy"
The form of education	full-time
The term of education	1,5 years
Qualification	Ecologist; teacher of of higher education institution

Implementers the training of Masters

ERI	of Crop production, Ecology and Biotechnology
Department	of Ecology and Sustainable Development
Chair	Ecology of agrosphere and Ecological Control, Analitical, Bioinorganic Chemisty and Water Quality

I. THE TRAINING PROCESS SCHEDULE

a) of training specialists “Master” of 2013 year of entry
8.04010601 specialty “Ecology and Environmental Protection”

Year of study	2013 year																		2014 рік																																	
	September				30	October			28	November				December				30	January			27	Fabruary			24	March				31	April			28	May				June				30	July			28	August			
	2 7	9 14	16 21	23 28	IX 5 X	7 12	14 19	21 26	X 2 XI	4 9	11 16	18 23	25 30	2 7	9 14	16 21	23 28	XII 4 I	6 11	13 18	20 25	I 1 II	3 8	10 15	17 22	II 1 III	3 8	10 15	17 22	24 29	III 5 IV	7 12	14 19	21 26	IV 3 V	5 10	12 17	19 24	26 31	2 7	9 14	16 21	23 28	VI 5 VII	7 12	14 19	21 26	VII 2 VIII	4 9	11 16	18 23	25 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	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
I																																																	X/II	X/II	X/II	X/II
																		–	–	:	:	: II/П	II/П																				:	:	X	X	–	–	–	–	–	–

Year of study	2014 year																	
	September				30	October			28	November				December				30
	2 7	9 14	16 21	23 28	IX 5 X	7 12	14 19	21 26	X 2 XI	4 9	11 16	18 23	25 30	2 7	9 14	16 21	23 28	XII 4 I
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
II											:	:	II	II	II	II	//	

б) of training specialists “Master” of 2012 year of entry
8.04010601 specialty “Ecology and Environmental Protection”

Year of study	2013 year																		2014 year																																	
	September				30	October			28	November				December				30	January			27	Fabruary			24	March				31	April			28	May				June				30	July			28	August			
	2 7	9 14	16 21	23 28	IX 5 X	7 12	14 19	21 26	X 2 XI	4 9	11 16	18 23	25 30	2 7	9 14	16 21	23 28	XII 4 I	6 11	13 18	20 25	I 1 II	3 8	10 15	17 22	II 1 III	3 8	10 15	17 22	24 29	III 5 IV	7 12	14 19	21 26	IV 3 V	5 10	12 17	19 24	26 31	2 7	9 14	16 21	23 28	VI 5 VII	7 12	14 19	21 26	VII 2 VIII	4 9	11 16	18 23	25 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	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
II											:	:	II	II	II	II	//																																			

Legend:

Symbol		Meaning
(blank)	-	theoretical education
:	-	examination period
-	-	holidays
X	-	Scientific and productional
II	-	preparation of qualification master's work
//	-	state attestation (state exam and defense of master's thesis)
П	-	pedagogical (assistant) practice

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		
				(on semesters)				including						1 p.н.		2 p.н.
														Semester		
														1	2	3
														Number of weeks in a semester		
		hours	credits	exam	test	Course work (project)	Total	Lecture	Laboratory studies	Practical exercises (seminars)		Educational Practice	Manufacturing Practice	17	19	10
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I. NORMATIVE DISCIPLINES																
1.1. Cycle of humanitarian and socio-economic training*																
1	Civil Defence	54	1,5		1		19			19	35				1	
2	Labour Protection at industry	54	1,5	1			19	10		9	35				1	
3	Pedagogics and psychology of higher school	72	2	1		1	34	17		17	38			2		
4	Methodology of teaching at higher school	54	1,5		1		17	17			37			1		
5	Methodology and organization of scientific researches	72	2	1			34	17	17		38			2		
Total		**306**	**8,5**	**3**	**2**	**1**	**123**	**61**	**17**	**45**	**183**	**0**	**0**	**5**	**2**	**0**
1.2. Cycle of Science Training*																
1	Information Technologies	108	3		1	1	38	19	19		70				2	
2	Environmental Management and Audit	72	2		1		34	17		17	38			2		
3	Strategy of sustainable development	108	3	1			38	19		19	70				2	
4	International Standardisation and Certification	72	2		1		17	17			55			1		
5	Environmental Systems Analysis	216	6	1			57	19		38	159				3	
6	Basics of Geo-Information Science and Geo-Information Monitoring	108	3	1			38	19		19	70				2	
7	Environmental Standardisation and Certification	108	3	1			38	19		19	70				2	
Total		**792**	**22**	**4**	**3**	**1**	**260**	**129**	**19**	**112**	**532**	**0**	**0**	**3**	**11**	**0**
Total		**1098**	**30,5**	**7**	**5**	**2**	**383**	**190**	**36**	**157**	**715**	**0**	**0**	**8**	**13**	**0**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
II. SAMPLE TRAINING DISCIPLINES																
2.1. Choice of NULESU																
2.1.1. Cycle of professional and practice preparation*																
1	Environmental Policy	108	3	1			51	34		17	57			3		
2	Agrarian Policy	72	2		1		17	17			55			1		
3	Intellectual Property and World's Information Resources	72	2		1		38	19		19	34				2	
4	Radioecology	144	4		1		38	19		19	106				2	
5	The problems of ecological safety and optimization of modern concepts of nature	144	4		1		38	19		19	106				3	
6	Philosophy of Science and innovation	54	1,5	1			34	17		17	20			2		
7	Business Foreign Language (English)	54	1,5	1			34			34	20			2		
8	Agricultural, land and environmental law	54	1,5		1		17	17			37			1		
9	Strategy of sustainable development of nature and society	72	2	1			17	17			55			1		
Total		**774**	**21,5**	**1**	**4**	**0**	**182**	**108**	**0**	**74**	**358**	**0**	**0**	**4**	**7**	**0**
2.2. Choice of students																
2.2.1. Cycle of professional and practice preparation*																
Master program "Environmental and water quality protection"																
1	Water quality monitoring in agrosphere	108	3	1			40	20	20		68					4
2	Wastewater treatment	216	6	1			40	10	30		176					4
3	The methodology of modern chemical analysis and environmental chemistry	216	6	1			40	20	20		176					2
4	Environmental safety of water ecosystems	108	3		1		60	30	30		48					6
Total		**648**	**18**	**3**	**1**	**0**	**180**	**80**	**100**	**0**	**468**	**0**	**0**	**0**	**0**	**16**
Master program "Environmental control in agrosphere: monitoring, certification, expertise"																
1	Agroecology	216	6	1			40	20	20		176					4
2	Ecological expertise in agriculture (ahrobiotehnolohiy)	144	4	1		1	50	20		30	94					6
3	Environmental monitoring and control (monitoring, certification, management, inspection)	216	6	1			60	20	40		156					5
4	Agrarian Biotechnologies	72	2		1		30	10	20		42					3
Total		**648**	**18**	**3**	**1**	**1**	**180**	**70**	**80**	**30**	**468**	**0**	**0**	**10**	**14**	**18**
Master program "Environmental Systems Analysis: Soil Quality and Environmental Systems Analysis"																
1	Soil Quality Monitoring and Land Evaluation	216	6		1		40	20		20	176					4
2	Environmental Expertise in Agriculture	108	3	1		1	50	20		30	58					5
3	Environmental Monitoring and Land Certification	216	6	1			50	20	30		166					5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
4	Land Management	108	3	1			40	20		20	68					4
Total		**648**	**18**	**3**	**1**	**1**	**180**	**80**	**30**	**70**	**468**	**0**	**0**	**0**	**0**	**18**
Master program "Environmental Systems Analysis: Water Quality and Environmental Systems Analysis"																
1	Aquatic Ecosystems	108	3		1		40	20		20	68					4
2	Hydroecology	108	3	1			40	20		20	68					4
3	Environmental safety of aquatic ecosystems and water quality monitoring	216	6	1			40	20		20	176					4
4	Water Management	216	6	1			60	30		30	156					6
Total		**648**	**18**	**3**	**1**	**0**	**180**	**90**	**0**	**90**	**468**	**0**	**0**	**0**	**0**	**18**
Master program "Environmental Management and Policy"																
1	International Environmental Policy	180	5	1			40	20	20		140					4
2	Environmental Inspection	144	4		1		60	20	40		84					6
3	State Environmental Management	180	5	1			40	20	20		140					4
4	Environmental Impact Assessment: Regional Management	144	4	1			40	20	20		104					4
Total		**648**	**18**	**3**	**1**	**0**	**180**	**80**	**100**	**0**	**468**	**0**	**0**	**0**	**0**	**18**
Master program "Methods of ecological control environmental objects"																
1	Methodology and technical support for modern environmental researches	216	6	1			50	20	30		166					5
2	System analysis of environmental quality objects and crop production.	180	5		1		40	20	20		140					4
3	Laboratory work (methods of control and assessing the quality of soil and water resources)	252	7	1			90	30	60		162					9
Total		**648**	**18**	**2**	**1**	**0**	**180**	**70**	**110**	**0**	**468**	**0**	**0**	**0**	**0**	**18**
Total		**2520**	**70**	**11**	**10**	**2**	**745**				**1541**			**12**	**20**	**18**
Preparation and defense of master's thesis		**432**	**12**													
Practice preparation		**288**	**8**									216	72			
Number of coursework						2										
Number of tests					11											
Number of examinations				13												
Total		**3240**	**90**	**11**	**10**	**2**	**745**	**0**	**0**	**0**	**1541**	**216**	**72**	**12**	**20**	**18**

* Names of disciplines cycles in accordance with the requirements of higher education industry standards, ratified after 2007 year, EQH and EPP.

III. СТРУКТУРА НАВЧАЛЬНОГО ПЛАНУ

Educational disciplines	Hours	Credits	%
1. Normative educational disciplines	1260	35	39
1.1. Cycle of humanitarian and socio-economic and professionally oriented disciplines*	468	13	15
1.2. Cycle of disciplines of natural and scientific, professional and practical training*	792	22	24
2. Selective educational courses	1260	35	39
2.1. Educational courses by University choise	612	17	19
2.1.1. Cycle of disciplines of natural and scientific, professional and practical training*	612	17	19
2.2. Educational courses by student choise	648	18	20
2.2.1. Cycle of disciplines of natural and scientific, professional and practical training*	648	18	20
3. Other workload	720	20	22
Total	**3240**	**90**	**100**

* Names of disciplines cycles in accordance with the requirements of higher education industry standards, ratified after 2007 year, EQH and EPP.

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	36	4	8	8		**8**	**56**
2	10	2		4	1		**17**
Total for EQL	**46**	**6**	**8**	**12**	**1**		**73**

V. PRACTICAL PREPARATION

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Scientific and productional	1,2	216	**6**	**6**
2	Pedagogical (assistant) practice	2	72	**2**	**2**

VI. COURSEWORKS AND PROJECTS

№	Discipline	Hours	Credits	Courseworks	Projects
1	Methodology of teaching in higher education			**x**	
2	Information technology			**x**	
3	Ecological Expertise for agriculture in production			**x**	

VII. STATE ATTESTATION

№	Content of state attestation	Hours	Credits	Number of weeks
1	Defense of master's thesis	36	1	1