

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

**EDUCATION PLANE
training specialists since 2013 year**

Educational and qualification level	“Master”
Branch of knowledge	0901 “Agriculture and forestry”
Specialty	8.09010102 “Agrochemistry and soil science”
Specialization	Production oriented disciplines
Master program	“Soil Science, monitoring of soil quality and soil conservation”, ”Agrochemical service modern technologies in crop productivity”
Specialization	Research oriented disciplines
Master program	“Conservation and Increasing of quality of land through the use of local resources and minimizing of soil tillage”, “Perfection the diagnosis of nitrogen nutrition of crops and their fertilizer”
Form of training	full-time
Term of study	1,5 years
Qualification of graduates	researcher in agrochemistry and soil science

Implement a master's program

SRI	institute of plant sciences, ecology and biotechnologies
Faculty	agrobiology
Departments	Agricultural Chemistry and Agricultural Production Quality named after O.I. Dushechkin, Soil Science and Soil Protection named after Professor V.I. Shykula

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	The number of credits	Exam	Test	Coursework (project)	Total	including				Industrial practice	Research practice	And year of study		2 year study
								Lectures	Lab works	Practical lessons				1s.	2s.	3s.
														Number of weeks per semester		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. REGULATORY ACADEMIC DISCIPLINES																
1.1. Cycle of humanitarian, social and economic training*																
1	Labor protection in industry	72	2	e			34	17	17		38			2		
2	Business foreign language	72	2	e			34		34		38			2		
4	Civil protection	36	1		t		10	10			26					1
3	Philosophy of science and innovative development	108	3	e			34	17		17	74			2		
4	Geographic information systems of agricultural landscape and basics of geostatistics	72	2		t		34	17	17		38				2	
Total number		360	10	3	2		146	61	68	17	214			6	2	1
1.2. The cycle of professional and practical training*																
1	Management of soil regimes	108	3		t		34	17	17		74				2	
2	Soil conservation and restoration of fertility	216	6	e	t	CW	85	34	51		131			3	2	
3	Soil quality, standardization and product certification	180	5	e			68	34	34		112			4		
4	Management of nutritive conditions of crops in drop irrigation in greenhouses	144	4		t	CW	34	17	17		110			2		
5	Agrochemical service	144	4	e	t	CW	64	27	37		80				2	3
6	Management by crop production quality	108	3		t		34	17	17		74				2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
7	Environmental chemistry	72	2		t		30	10	20		42					3
8	Technologies of rational land use	108	3	e			34	17	17		74				2	
9	The strategies of agroecosystem management	144	4	e			51	34	17		93			3		
Total number		1224	34	5	6	3	434	207	227	0	790			12	10	6
Total according to regulatory part		1584	44	8	8		580	268	295	17	1004			18	12	7
2. ELECTIVE ACADEMIC DISCIPLINES																
Production oriented disciplines																
2.1. Disciplines chosen by University																
2.1.1. Cycle of professional and practical training*																
1	Programming of soil fertility and crop production	216	6	e			30	10	20		186					3
2	Methodology of scientific researches	180	5		t		34	17	17		146				2	
3	The models of the technological management in agrochemical service	216	6	e			34	17	17		182				2	
4	Land reclamation	216	6	e			34	17	17		182				2	
Total amount according the University chose		828	23	3	1	1	132	61	71	0	696			0	6	3
2.2. Disciplines chosen by students																
2.1.2. Cycle of professional and practical training*																
Master program "Soil Science, monitoring of soil quality and soil conservation"																
1.	Research methods of soil cover	72	2	e			30	10	20		42					3
2	Quality of soils (bonity of soils)	72	2		t		20	10	10		52					2
3	Soil quality monitoring	72	2		t		30	10	20		42					3
Total selected by the students		216	6	1	2		80	30	50	0	136			0	0	8
Master program "Agrochemical service modern technologies in crop productivity"																
1	Economic and organizational support of agrochemical service	72	2	e			30	10	20		42					3
2	Diagnosis of plants nutrition and fertilization strategies	72	2		t		30	10	20		42					3
3	Management of agrochemical resources	72	2		t		20	10	10		52					2
Total selected by the students		216	6	1	2		80	30	50		136			0	0	8

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Research oriented disciplines																
2.2. Disciplines chosen by students																
2.1.2. Cycle of professional and practical training*																
Master program "Conservation and Increasing of quality of land through the use of local resources and minimizing of soil tillage"																
1	Diagnostics of soils	72	2		t		30	10	20		42					3
2	Soil organic matter	72	2	e			20	10	10		52					2
3	International classification of soils and taxonomy	72	2	e			30	10	20		42					3
Total selected by the students		216	6	2	2		80	30	50	0	136			0	0	8
Master program "Perfection the diagnosis of nitrogen nutrition of crops and their fertilizer"																
1.	Diagnosis plant nutrition	72	2		t		30	10	20		42					3
2	Management plants nutrition conditions	72	2		t		20	10	10		52					2
3	Management by crop production quality	72	2	e			30	10	20		42					3
Total selected by the students		216	6	1	2		80	30	50		136				0	8
Total number of elected part		1044	29	2	4		212	91	121	0	832				6	11
Practical training		396	11													
Writing and defense of master's thesis		216	6													
Number of coursework		3														
Number of tests					11											
Number of examinations				12												
TOTAL FOR SPECIALTY		3240	90	12	11	3	792	359	416	17	1836			18	18	18

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

III. STRUCTURE OF A TRAINING PLAN

The disciplines	Hours	Credits	%
1. Regulatory academic disciplines	1584	44.0	49.0
1.1. Cycle of humanitarian, social and economic training*	360	10.0	11.0
1.2. The cycle of professional and practical training*	1224	34.0	38.0
2. Elective academic disciplines	1044	29.0	32.0
2.1. Disciplines chosen by University	828	23.0	25.0
2.1.1. The cycle of professional and practical training*	828	23.0	25.0
2.2. Disciplines chosen by students	216	6.0	7.0
2.2.1. The cycle of professional and practical training*	216	6.0	7.0
3. Other load	612	17.0	19.0
Together for EQL	3240	90.0	100

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

IV. SUMMARY THE BUDGET ON TIME, WEEKS

Year of study	Theoretical study	Examination period	Practical training	Writing of master's thesis	State certification	Vacation	Total
1	34	4	10	-	-	8	56
2	10	2		3	1	-	16
Together for EQL	44	6	10	3	1	8	72

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production (scientific-research) practice	1. 2	396	11	10

VI. COURSE WORK

№	Subjects	Hours	Credits	Coursework	Course project
1	Soil conservation and restoration of fertility	18	0.5	CW	
2	Management of nutritive conditions of crops in drop irrigation in greenhouses	18	0.5	CW	
3	Agrochemical service	18	0.5	CW	

VII. STATE CERTIFICATION

№	Component certification	Hours	Credits	Number of weeks
1	Writing and defense of master's thesis	216	6	4