Form № H- 3.01

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

CURRICULA AND PROGRAM OF MASTER DEGREE

Educational qualification level	Master»
Field of knowledge	0801 “Geodesy and Land Management”
Specialty	8.08010103 “Land Management and Cadastre”
Specialization	Production
Master programs	“Land Management and Cadastre”, “Land Conservation”, “GIS in land management”, “Evaluation of Land and Property”, “Geodetic-Cartographic Technologies in Land Management”
Specialization	Research
Master programs	“Geoinformation monitoring of land resources”, “Mapping Modeling land use issues”
Mode of study	full time
Term of stud	1,5 year
Qualification of graduates	Master of Science in Land Management and Cadastre

Implement preparation of bachelors

Educational and Research Institute	of Land Resource and Judisprudence
Faculty	of Land Management
Departments in charge of graduate training:	Land Resources Administration Management, Land Cadastre

I. THE TRAINING PROCESS SCHEDULE

a) training of specialists educational qualification level “Master” accession 2013 year
specialty “Land Management and Cadastre”

course	2013 year																		2014 year																																	
	September				30	October			28	November				December				30	January			27	February			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	X	X	X
																		–	–	:	:																		:	:	X	X	X	X	X	X	–	–	–	–	–	–

б) training of specialists educational qualification level “Master” for 2013-2014 the academic year
specialty “Land Management and Cadastre”

course	2013 year																		2014 year																																	
	September				30	October			28	November				December				30	January			27	February			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	X	X	X
																		–	–	:	:																		:	:	X	X	X	X	X	X	–	–	–	–	–	–
II											:	:	II	II	II	//	//																																				

Notation:

	-	theoretical training	X	-	work placements
:	-	examination session	O	-	educational practice
-	-	vacations	II		preparation of baccalaureate work
			//	-	state certification

II. PLAN OF THE EDUCATIONAL PROCESS

№	The name of the course, practice	The total volume hours		Forms of knowledge control by semester credits			Classes at the audience exam				Independent work setoff	Practical training Coursework (draft)		Distribution of weekly hours per semester and courses		
														Semester		
		hours	credits	exam	setoff	Coursework (draft)	Total	including				educational practice	work placements	1	2	3
								lectures	laboratory works	practical works				Number of weeks in a semester		
														17	17	10
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	Scientific foreign language (Business Foreign Language)	54	1,5	1			34			34	20			2		
2	Pedagogy of Higher School	36	1,0		2		17			17	19				1	
3	Commercial and Labor Law	36	1,0		1		17			17	19			1		
4	Physical Education	36	1,0		1		0				36			0		
Total for the cycle		162	4,5	1	3		68			68	94			3	1	0
1.2. Cycle of natural science (fundamental) training*																
1	Scientific Methodology and Research Methods	36	1,0		2		17			17	19				1	
2	Licensing and patenting of research output	36	1,0		3		10		10		26					1
3	Information technologies in scientific research	72	2,0		3		20		20		52					2
4	Labor safety in the field of activity	36	1,0	1			17		17		19			1		
5	Civil defense	36	1,0		1		17		17		19			1		
Total for the cycle		216	6,0	0	5	0	81	0	64	17	135			2	1	3
1.3. Cycle of professional and practical training*																
1	Management of Land Resources	144	4,0	2			51	17	34		93				3	
2	GIS in cadastral systems	144	4,0	3			30		30		114					3
3	Legislative Support of Real Estate Cadastre	162	4,5	3			30	10	20		132					3
4	Land Monitoring and Conservation	144	4,0		2		54	18	36		90				3	
Total for the cycle		594	16,5	3	1	1	165	46	120		429	0	0	0	6	6
Elective part, total		972	27,0	4	9	1	324	46	188	90	648	0	0	5	8	9

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
2. ELECTIVE ACADEMIC DISCIPLINES																
2.1. Disciplines chosen by the University																
2.1.1. Cycle of natural science (fundamental) training*																
1	The legal process of land management	72	2,0	2			34	17		17	38				2	
2	Organization of land surveying works	108	3,0	3			30	10		20	78			3		
3	Design engineering	108	3,0	2		1	51	17	34		57				3	
4	The land market and real estate	72	2,0		2		34	17		17	38				2	
5	Economics of land use and land management	108	3,0	3			30	10	20		78					3
6	Philosophy of science and innovation development	54	1,5	1			34	17		17	20			2		
7	Strategy for sustainable development of nature and society	36	1,0		1		17	17			19			1		
8	State Examination of land management decisions	36	1,0		1		17	17			19			1		
9	Agricultural, land and environmental law	36	1,0		1		17	17			19			1		
10	International standards and certification technologies, raw materials and finished goods	36	1,0		1		17	17			19			1		
11	Higher Education and the Bologna Process	54	1,5		3		17	17			37			1		
Total for the cycle		720	20,0	5	6	1	298	173	54	71	422	0	0	9	7	3
2.2. Disciplines chosen by students																
2.2.1. Cycle of humanitarian, social and economic training*																
Master program “Evaluation and forecast of land quality”																
1	Formation of agrolandscapes	72	2,0	1			34	17	17		38			2		
2	Evaluation and forecast of land quality	90	2,5	1			34	17	17		56			2		
3	Environmental impact assessment of land use planning decisions	126	3,5	2			51	17	34		74				3	
4	The technological aspects of land use	72	2,0		3		20	10	10		52					2
5	Prediction of land use	72	2,0	3			20	10	10		52					2
6	Engineering and technological regulation of land protection	54	1,5		3		20	10	10		34					2
Total for the cycle		486	13,5	4	2	0	179	81	98	0	306	0	0	4	3	6
Master Program “Geoinformation monitoring of land resources”																
1	Methods of remote sensing	72	2,0	1			34	17	17		38			2		
2	Geospatial databases	90	2,5	1			34	17	17		56			2		
3	Analysis of spatial data	126	3,5	2			51	17	34		74				3	
4	Multivariate analysis techniques	72	2,0		3		20	10	10		52					2
5	GIS monitoring of natural resources	72	2,0	3			20	10	10		52					2
6	Naivhatsiyni Global Satellite Systems	54	1,5		3		20	10	10		34					2
Total for the cycle		486	13,5	4	2	0	179	81	98	0	306	0	0	4	3	6
Master program “Land Management and Cadastre”																
1	Automation in land management	72	2,0	1			34	17	17		38			2		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Planning Development of Territories	90	2,5	1			34	17	17		56			2		
3	Standardization and Regulation of Land Management	126	3,5	2			51	17	34		74				3	
4	Quality Management of Land Management Projects	72	2,0		3		20	10	10		52					2
5	Management of Municipal Lands	72	2,0	3			20	10	10		52					2
6	Computer technology in land management	54	1,5		3		20	10	10		34					2
Total for the cycle		486	13,5	4	2	0	179	81	98	0	306	0	0	4	3	6
Master program “Land Conservation”																
1	Formation of agrolandscapes	72	2,0	1			34	17	17		38			2		
2	Evaluation and forecast of land quality	90	2,5	1			34	17	17		56			2		
3	Environmental impact assessment of land use planning decisions	126	3,5	2			51	17	34		74				3	
4	Technological aspects of land use	72	2,0		3		20	10	10		52					2
5	Prediction of land use	72	2,0	3			20	10	10		52					2
6	Engineering and technological regulation of land protection	54	1,5		3		20	10	10		34					2
Total for the cycle		486	13,5	4	2	0	179	81	98	0	306	0	0	4	3	6
Master program “GIS in land management”																
1	Information Modeling and programming in land management	72	2,0	1			34	17	17		38			2		
2	Methods of remote sensing in land management	90	2,5	1			34	17	17		56			2		
3	GIS analysis and geostatistics applied to land management	126	3,5	2			51	17	34		74				3	
4	Geoprocessing tools	72	2,0		3		20	10	10		52					2
5	GIS of Natural Resources	72	2,0	3			20	10	10		52					2
6	Naivhatsiyni Global Satellite Systems	54	1,5		3		20	10	10		34					2
Total for the cycle		486	13,5	4	2	0	179	81	98	0	306	0	0	4	3	6
Master program “Evaluation of Land and Property”																
1	Information support of monetary evaluation of land	72	2,0	1			34	17	17		38			2		
2	Registration of ownership	90	2,5	1			34	17	17		56			2		
3	Landscape science basics of land management	126	3,5	2			51	17	34		74				3	
4	Real Estate Evaluation	72	2,0		3		20	10	10		52					2
5	Regulatory and expert assessment of land parcels	72	2,0	3			20	10	10		52					2
6	The land market and evaluation activities	54	1,5		3		20	10	10		34					2
Total for the cycle		486	13,5	4	2	0	179	81	98	0	306	0	0	4	3	6
Master program “Mapping Modeling land use issues”																
1	Computer technology mapping	72	2,0	1			34	17	17		38			2		
2	Mapping supply of land management	90	2,5	1			34	17	17		56			2		
3	Mapping as a method of research	126	3,5	2			51	17	34		74				3	
4	Thematic mapping: map land resources	72	2,0		3		20	10	10		52					2

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
5	Mapping of Natural Resources	72	2,0	3			20	10	10		52					2
6	Methodology GIS modeling transformation processes in land use	54	1,5		3		20	10	10		34					2
Total for the cycle		486	13,5	4	2	0	179	81	98	0	306	0	0	4	3	6
Master program “Geodetic-Cartographic Technologies in Land Management”																
1	Computer technologies of mapping	72	2,0	1			34	17	17		38			2		
2	Cartographic supply of land management	90	2,5	1			34	17	17		56			2		
3	Topographic, geodetic and cartographic supply of land management	126	3,5	2			51	17	34		74				3	
4	Thematic Mapping: maps of land cover and use	72	2,0		3		20	10	10		52					2
5	Modeling in Cartography	72	2,0	3			20	10	10		52					2
6	National geospatial data infrastructure	54	1,5		3		20	10	10		34					2
Total for the cycle		**486**	**13,5**	**4**	**2**	**0**	**179**	**81**	**98**	**0**	**306**	**0**	**0**	**4**	**3**	**6**
Elective part, total		**846**	**23,5**													
Practical training		**576**	**16,0**										**576**			
Writing and defense of master's hesis		**486**	**13,5**													
Number of coursework (projects)		**1**														
Number of setoff		**18**														
Number of exam		**13**														
TOTAL, ACCORDING TO THE FIELD OF STUDY		**3240**	**90,0**	**13**	**18**	**2**	**846**	**320**	**346**	**180**	**1332**	**0**	**576**	**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 THE CURRICULUM

The name of the course, practice	hour	credits	%
1. Regulatory academic disciplines	972	27	30,1
1.1. Cycle of humanitarian, social and economic training*	162	4,5	5,0
1.2. Cycle of natural science (fundamental) training*	216	6	6,7
1.3. Cycle of professional and practical training*	594	16,5	18,4
2. Elective academic disciplines	1206	33,5	37,2
2.1. Disciplines chosen by the University	720	20	22,2
2.1.1.Cycle of natural science (fundamental) training*	720	20	22,2
2.1.2. Cycle of professional and practical training*	486	13,5	15,0
2.2.1. Cycle of humanitarian, social and economic training*	486	13,5	15,0
3. Other load	1062	29,5	32,7
Total, according to the field of study	**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 study	Theoretical study	Exam session	Practical training	Preparing baccalaureate work	State certification	Holidays	Total
1	34	4	10			**8**	56
2	10	2	-	4	1		17
Total, according to the field of study	**44**	**6**	**10**	**4**	**1**	**8**	**73**

V. PRACTICAL TRAINING

№	Practical training	Semester	Hour	Credits	Number of weeks
1	Work placements	1	216	6,0	4
2	Master's practical training	2	360	10,0	6

VI. COURSE WORKS & PROJECTS

№	Number of coursework (projects)	Hour	Credits	Coursework	Projects
1	Design engineering	36	1,0		+

VII. STATE ATTESTATION

№	Component of attestation	Hour	Credits	Number of weeks
1	Defense of master's thesis	72	2,0	2