

Cabinet of Ministers of Ukraine
National University of Life and Environmental Sciences of Ukraine

CURRICULUM

of training specialists 2013 year of entry

Education qualification level	"Bachelor"
area of expertise	1001 "AGRICULTURAL TECHNOLOGY AND ENERGY PRODUCTION"
in the direction	6.100101 - POWER AND ELECTRICAL SYSTEMS IN AGRICULTURE
Form of education	High
Apprenticeship	3 years 10 months
Qualifying graduates	Technician-Electrician

Implement training of bachelors

INSTITUTE OF	ENERGETICS AND AUTOMATION
FACULTY OF	ENERGETICS AND AUTOMATION

Dean of the Faculty _____ **I.Rad'ko**

№	Course title	The total amount		Forms of knowledge control according to semesters			Classroom hours				self study	The practical training		Distribution of weekly hourse by the courses and semesters							
														1 nd course		2 nd course		3 nd course		4 nd course	
							semesters														
		acad hours	credits	exam	test	course project	whole	lectures	laboratory classes	practical classes		1	2	3	4	5	6	7	8		
												Quantity week in a semester									
												16	19	16	19	16	19	16	14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

1. Cycle of humanitarian and socio-economic training

1.1. NORMATIVE ACADEMIC DISCIPLINES

1	Ukrainian language (for professional	108	3,0	1			32			32	76			2							
2	History of Ukraine	108	3,0	1			48	16		32	60			3							
3	The history of Ukrainian culture	72	2,0	2			38	19		19	34				2						
4	Foreign Language	180	5,0	2	1		10			108	72			2	4						
5	Politics	72	2,0		3		32	16		16	40					2					
6	Philosophy	108	3,0	3			64	32		32	44					4					
7	Physical Education	360	10,0		1-4		14			140	22			2	2	2	2				
	The total number of cycles	648	18	5	6		32	83	0	239	32	0	0	9	8	8	2	0	0	0	0

1.2. SELECTIVE STUDYING DISCIPLINES

1	Sociology	72	2,0		3		32	16		16	40					2					
2	Jurisprudence	72	2,0		8		32	16		16	40									2	
3	Psychology	72	2,0		8		32	16		16	40										2
4	Culture studying	72	2,0		5		32	16		16	40						2				
	The total number of cycles	288	8		4		128	64	0	64	16	0	0	0	0	2	0	2	0	2	2
	Total	936	26	5	10		450	147	0	303	48	0	0	9	8	10	2	2	0	2	2

2. Cycle of natural science (basic) training

2.1. NORMATIVE ACADEMIC DISCIPLINES

1	High Maths	360	10,0	1;	-		271	102	35	134	89			6	5	5					
2	Applied Maths	90	2,5		4		57	19	19	19	33						3				
3	Chemistry	72	2,0	1			48	32	16		24			3							
4	Physics	216	6,0	2;	1		188	86	70	32	28			4	4	3					
5	Engineering and Computer Graphics	216	6,0	1	2		140	70	70		76			4	4						

6	Fundamentals of Ecology	54	1,5		8		28	14		14	26									2
	The total number of cycles	1008	28,0	7	4		732	323	210	199	27	0,0	0,0	17	13	8,0	3,0	0,0	0,0	2,0
	Total	1008	28,0	7	4		732	323	210	199	27	0,0	0,0	17	13	8,0	3,0	0,0	0,0	2,0

3. Cycle professional and practical training

3.1. NORMATIVE ACADEMIC DISCIPLINES

1	Technology of Processing and Storage of Agricultural products	108	3,0	2			76	38	38		32				4						
2	Theoretical Foundations of Electrical Engineering	432	12,0	4; 5	3	18	242	102	102	38	17 2					4	6	4			
3	Electrical materials	108	3,0		3		64	32	32		44					4					
4	Electric machines	324	9,0	5;			210	70	105	35	11							6	6		
5	Theoretical Foundations of Automation	180	5,0	6	5		140	70	35	35	40							4	4		
6	Electronics and microcircuitry	108	3,0	4			76	38	38		32						4				
7	Heat appliances	144	4,0	4			76	38	19	19	68						4				
8	Hydraulics	108	3,0		5		64	32	32		44							4			
9	Computers and Computer Technologies	216	6,0	6	1,2	18	146	54	92		52			2	3				3		
10	Engineering Mechanics	216	6,0	4	3		140	70		70	76					4	4				
11	Instrumentation of Metrology	108	3,0	5			80	48	32		28							5			
12	Vital Safety	72	2,0		2		38	19		19	34				2						
13	Labor Protection	108	3,0	8			42	14	14	14	66										3
14	Introduction to the profession	72	2,0		1		32	16	16		40			2							
15	Fundamentals of Electric drive	252	7,0	7	6		159	70	70	19	93								5	4	
16	Electrotechnology and lighting	288	8,0	8	5, 7	36	200	92	92	16	52							5		4	4
17	Fundamentals of electricity	216	6,0	6,		18	140	70	35	35	58								4	4	
18	Installation of power equipment and systems control	108	3,0		4		57	38	19		51						3				
19	Grounds of technical operation of power equipment and controls	108	3,0		7		64	32	32		44									4	
	Educational Practice for the production and processing of agricultural products	72	2,0									72									
	Educational elektroslyusarna practice	108	3,0									108									
	The industrial wiring practices	180	5,0										180								
	Production operational practice	180	5,0										180								
	The total number of cycles	3816	106	17	13	90	2046	943	803	300	1140	180	360	4,0	9,0	12,0	21,0	28,0	22,0	16,0	7,0

3.2. Cycle professional and practical training (University Choice Disciplines)

1	Agricultural machines and equipment	252	7,0		4		76	38	38		176						4				
2	Economics and Organization of energy service	216	6,0		7		64	32		32	152									4	
3	Fundamentals of energy facilities in	180	5,0		8		56	28	14	14	124										4
4	Fundamentals of Entrepreneurship,	252	7,0		6		76	38		38	176								4		
5	Diagnosis of power equipment	216	6,0		7		64	32	32		152									4	
6	Control and protection devices	288	8,0	6		18	76	38	38		194								4		
	The total number of cycles	1404	39	1	5	18	412	206	122	84	974	0	0	0	0	0	4	0	8	8	4

3.3. Cycle professional and practical training (Students Choice Disciplines)

1	Technical service electrical	216	6,0		8		56	28	28		160										4
2	Technical service electrical	216	6,0		8		56	28	28		160										4
3	Adjustable electric drive	216	6,0		8		42	28	14		174										3
4	Electronic devices in control systems	216	6,0	7			64	32	32		152									4	
5	Thermal power plant installations and systems	216	6,0		8	18	56	28	28		142										4
	The total number of cycles	1080	30	1	4	18	274	144	130		788	0	0	0	0	0	0	0	0	4	15
	Total	6300	175	19	22	126	2732	1293	1055	384	2902	180	360	4	9	12	25	28	30	28	26

3.4. SELECTIVE STUDYING DISCIPLINES

1	Mastering professional occupation	72	2,0		5		32	15		15	48							2		
2	Basics repair browser. household appliances and radio devices	72	2,0		6		38	19		19	48								2	
3	Preparation car drivers category "B"	72	2,0	6			57	38		19	48								3	
4	Cultural awareness training	216	6,0				210			210	6			2	2	2	2	2	2	
5	Military training	675	18,75				450			450	225							6	6	6
	The total number of cycles	648	18,0				162	88		0	486			2	2	2	2	6	6	6
	State certification		11,0								396									
	quantity of course project					6														
	quantity of test				36															
	quantity of exam			31																
	Total		240,0	31	36	126	3914	1763	1265	886	4060	180	360	30	30	30	30	30	30	30

III. STRUCTURE of the CURRICULUM

Subject matters	Hours	Credits	%
I. Statutory subjects	5472	152	63
1.1. Cycle of the humanities and socio-economic disciplines	648	18,0	8
1.2. Cycle of mathematical and natural-scientific training	1008	28,0	12
1.3. Cycle disciplines of professional and practical training	3816	106	44
2. Selective Courses	2772	77,0	32
2.1 Elective Courses University	1404	39,0	16
2.1.1 Cycle disciplines of professional and practical training	1404	39,0	16
2.2 Disciplines chosen by the student	1368	38,0	16
2.2.1. Cycle of the humanities and socio-economic disciplines	288	8,0	3
2.2.2. Cycle disciplines of professional and practical training	1080	30,0	13
	396	11,0	5
In all for GLR	8640	240	100

VI. COURSEWORK AND PROJECTS

№	Subjects	Hours	Credits	Course work	Course project
1	Heat power installations and systems	36	1		CP
2	Electrotechnology and lighting	36	1		CP
3	Basics of electricity supply	18	0,5	CW	
4	Control and protection devices	18	0,5	KP	
5	Theoretical Foundations of Electrical Engineering	18	0,5	KP	
6	Computers and computer technology	18	0,5	KP	

IV. SUMMARY TIME BUDGET(WEEKS)

Year study	Theoretical study	Examination period	Practical training	Preparing baccalaureate work	State certification	Holidays	In all
1	35	4	5			8	52
2	35	4	5			8	52
3	35	4	5			8	52
4	30	4		4	1	2	41
In all	135	16	15	4	1	26	197

V. PRACTICAL TRAINING

№	Kind of practise	Semester	Hours	Credits	Weeks
1	Training on the production and recycling agricultural products	2	72	2	2
2	Training electromechanical	2	108	3	3
3	Training electroassembly	4	180	5	5
4	Production operating	6	180	5	5

VII. STATE CERTIFICATION

№	Component of certification	Hours	Credits	Weeks
1	State exam	36	1	1
2	Protection baccalaureate work	360	10	5

