

2017

1/III Academic discipline of Environmental Protection

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

		CURRICULUM (Enrolment 2017)	
Level	Bachelor	Form of study	full-time
Speciality	Automation and Compute	u Interreted Technologies Faculty of Chemical Technology	(full-time, part-time)

ichael Zgurovsky			=	
ichael Zgurovsky	Specialization	Computer-Integrated Technologies of Sustainable Chemical Production Complexes	Qualification	Bachelor in Automation and Computer-Integrated Technologies

Study duration 3 years 10 months
Base level Secondary school

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	I. Schedule of educational process																																																				
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ng Examinati	Practice Assessment Research Holiday Total Type of practice YEAR Weeks	1			Subjects		T		graduate		
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Code	Subjects	Exams	Final tests	Course projects	Coursework	ECTS Credits	Total	Lectures	Practical	Laboratory	Self-study
1	2 L CENERAL TRAININ	3	4	5	6	7	8	9	10	11	12
	I. GENERAL TRAININ I.1. Natural-scientific trai										
1/I	Higher mathematics: 1. Liner Algebra and Analytic Geometry, Differential Equations 2. Integral Calculus, Differential Equations 3. Multiple Integrals, Vector Series, Theory of Probability	1,2,3				18	540	108	162		270
2/I	Physics 1. Mechanics, Molecular Physics and Thermodynamics 2. Electromagnetism. Optics. Atomic Physics	1,2				10	300	72	36	36	156
3/I	Computer Graphics		2			4	120	18	18	36	48
4/I	Special Sections of Mathematics 1. Applied Statistic 2. Mathematical equations of physical chemistry	5	4			8	240	54	54	18	114
5/I	Programming 1. Procedural programming 2. Object-Oriented Programming	2,3				10	300	54	18	90	138
	total number of part I.1	8	2	0	0	50	1500	306	288	180	726
1/II	I.2. Basic training (major co	ourses	3			4	120	36	18	18	48
2/II	Computer Electronics 1. Bases of Electronic Circuitry 2. Basic Microprocessor Technology	5	4			8	240	54	18	63	105
3/11	Automatic Control Theory 1. Linear Systems 2. Unconventional Systems	6,7				10	300	72	18	54	156
4/II	Software Development Technologies 1. Modern Programming Technologies 2. Information Systems and Complexes	4,5			5	12	360	54	36	90	180
5/II	Computer simulation of processes and systems 1. Identification and Modeling of Technological Objects 2. Modeling Objects and Systems in Industry	7	6			8	240	54		72	114
6/11	Metrology		3			3	90	18	36	_	36
7/11	Labor and Life Safety	ļ	7			4	120	36	28	8	48
8/11	Economics and Production Organization	6	7	0	1	4 53	120 1590	36 360	36 190	305	48 735
	total number of part I.2 I.3. Basic training (optional			U		53	1590	300	190	303	135
1/III	Academic discipline of Environmental Protection		5			2	60	18	18		24

1/111	Academic discipline of Environmental Protection		5			2	60	18	18		24
2/111	Pre-diploma Practice		8			7,5	225				225
3/111	Bachelor Thesis					6	180				180
	total number of part I.3	0	2	0	0	15,5	465	18	18	0	429
	I.4. Humanities training (option	al cou									
1/IV	Academic discipline of History (block 1)		1			2	60	18	18		24
2/IV	Academic discipline of Ukraunian Language (block 2)		2			2	60	18	18		24
3/IV	Academic discipline of Philosophy (block 3)		4			2	60	18	18		24
4/IV	Academic discipline of Psychology (block 4)		2			2	60	18	18		24
5/IV	Academic discipline of Low (block 5)		3			2	60	18	18		24
6/IV	Social and Humanitarian Academic discipline (block 6)		5			2	60	18	18		24
7/IV	Social and Humanitarian Academic discipline (block 6)		5			2	60	18	18		24
8/IV	Foreign Language		2, 4			6	180		144		36
9/IV	Foreign Language for Specific Purposes		6, 7			4	120		90		30
	total number of part I.4	0	11	0	0	24	720	126	360	0	234
	TOTAL IN GENERAL TRAINING	14	21	0	1	143	4275	810	856	485	2124
	II. VOCATIONAL TRAIN										
	II.1. Vocational and practical training	(majo		rses)							
1/vm	Introduction to information technology		1			3,5	105	27	18	18	42
2/vm	Engineering Graphics		1			3	90	18	36		36
3/vm	Programming of specialized tasks		3		3	4	120	18		36	66
4/vm	General Chemical Technology	3				6	180	36	18	36	90
5/vm	Technological Measurement and Measuring Devices	4				5	150	36		36	78
6/vm	Technological control objects 1. Theoretical Bases of Control Objects' Functioning 2. Processes and Equipment of Objects of Automation	6	5	6		9	270	54	36	36	144
7/vm	Computer Networks		4			3	90	18		36	36
8/vm	Technical Means of Automation 1. Means of Automation of Typical Chemical Production Processes 2. Automatic Control Strategies Development		5, 6			8	240	54	18	72	96
9/vm	Fundamentals of Sustainable Development		6			2,5	75	27	18		30
10/vm	Automation of Technological Processes 1. Automation of Typical Production Processes 2. Automation System Projecting	7	8			9,5	285	63	18	63	141
11Vvm	Sustainable Manufacturing and Technology	8				5	150	36	18	18	78
	total number of part II.1	5	8	1	1	58,5	1755	387	180	351	837
	II.2. Vocational and practical training (option	nal co	urses)							
1/vo	Academic discipline of Chemistry		1, 2			6	180	36	36	36	72
2/vo	Academic discipline of Computer Engineering Fundamentals	1				6	180	36	27	36	81
3/vo	Academic discipline of Applied Mathematics	4			4	6,5	195	36	18	36	105
4/vo	Academic discipline of Engineering Aspect of Sustainable Development		6			4,5	135	45	18	18	54
5/vo	Academic discipline of Modeling Heat and Mass Transfer Processes	7	6		7	9,5	285	54	18	45	168
6/vo	Academic discipline of Specialized Software		8			2,5	75	18		18	39
7/vo	Academic discipline of Control Systems Exploitation	8				4	120	18		36	66
	total number of part II.2	4	4	0	2	39	1170	243	117	225	585
				_	3	97.5	2925	630	297	576	1422
	TOTAL IN VOCATIONAL TRAINING	9	12	1	3	97,5	2925	030	231	3/0	1722

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