

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

CURRICULUM (Enrolment 2017)

APPRO	ソヘトロ					(E11101	ment zuir)									
y Rector	of Igor Sikorsky	Kyiv Polytechnic I	nstitute	Level	Bachelor				Form (of study	Full-time					
											(full-time, part-time)					
	Michael Zgurovsky			Speciality	1	22 Computer Scien	ce		Facult	y (Institute)	Institute of Applied					
				. ,		·					System A	nalysis				
	2017				tion Data	a Mining in Project M	lanagement		Qualifica	tion	Associate Pr Information 1	rofessional in Fechnologies				
				Graduation	n Department		Methods for S	ystem	Study	duration	3 years 10 months					
									Base I	evel	Full Seco Education					
					I. Sch	nedule of educat	ional proces	s								
YEAR	September	October	November	December	January	January	March	April	May	June	July	August				
¥	1 2 3 4	5 6 7 8 9	10 11 12 13 14	15 16 17	18 19 20 21 2	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. Ocheane of educational process																																																		
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	1	2	3	4	5	6	7	8	9	10	11	12	13	3 14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34 :	35	36 3	7 3	8 39	40	41	42	43	44	45	46	47	48	49	50	51	52
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5	ymbo	ols:		Le	earnin	g peri	od		Ε	Exa	min	ation			Р	Pra	ctice			R	Res	earc	h		Α	Asse	essme	ent	T	Н	Holid	ay																			

	II. Summary table of time budget (Weeks)											
YEAR	Learning period	Examinatio n	Practice	Assessme nt	Research	Holiday	Total					
ı	36	4				12	52					
II	36	4				12	52					
III	36	5				11	52					
IV	27	3	5	2	4	2	43					

III. Practice												
Type of practice	YEAR	Weeks										
Pre-diploma Practice	IV	3										

V. Plan of Educational process

IV. Graduates assessment												
Subjects	Form of graduates assessment (exam, graduation project)	YEAR										
	Diploma Project	IV										

	Distribution for teri (semesters)				rms		Number of hours							
			(seme	sters)	1				ures/pra					
				ts		is is		2001	lessons	, iioui				
Code	Subjects	Exams	Final tests	Course projects	Coursework	ECTS Credits	Total	Lectures	Practical	Laboratory	Self-study			
1	2	3	4	5	6	7	8	9	10	11	12			
	I. GENI	ERAL	TRAII	NING										
	I.1. Natura	II-scie	ntific	trainir	ng									
1/I	Mathematical Analysis: 1. Differential Calculus of Functions of One Real Variable 2. Differential Calculus of Functions of Several Real Variables. Integration of Functions of One Variable 3. Differential Equations. Multiple Integrals	1,2,3				17	510	144	144		222			
2/I	Discrete Mathematics: 1. Set Theory. Combinatorics. Graphs Algebraic Structures 2. Boolean Algebras. Matthematical Logics. Algorithms Theory	1	2			8	240	72	72		96			
3/I	Probability Theory. Random Processes and Mathematical Statistics	3				5	150	36	36		78			
4/I	Numerical Methods: 1. Solution of Equations and Systems. Function Approximation 2. Calculation of Eigen Pairs of Matrix. Solution of Differential Equations	3	4d			7.5	225	72		54	99			
5/I	Development and Analysis of Computing Algorithms		4			4.5	135	36		36	63			
6/I	Analytic Geometry and Linear Algebra: 1. Analytic Geometry 2. Linear Algebra	2	1d			8.5	255	72	72		111			
7/I	Operations Research: 1. Linear Programming 2. Nonlinear Programming	5,6				7	210	72	54		84			
8/I	Physics: 1. Mechanics. Elecntomagnetics 2. Ascillation. Waves. Elements of Quantum Machanics	2	3			7	210	72	36		102			
	total number of part I.1	10	5			64.5	1935	576	414	90	855			
	I.2. Basic tra	ining	(majo	r cou	rses)									
1/II	Economics of Organization and Production Planning		7			4	120	36	36		48			
2/II	Subjects on Life Safety		6			2	60	18	18		24			
3/11	Decision-Making Theory	7			7	5	150	54	18		78			
4/11	Object-Oriented Programming	4			4	6	180	54		36	90			
5/II	Algorithmization and Programming	1				5	150	54		36	60			
6/II	Operating Systems	5	3d		-	7	120	54		18	48			
7/II 8/II	Data Base Systems	5	6d		5	6	210 180	72 54		36 36	102 90			
9/II	Software Design Technologies		7d			3.5	105	36		18	51			
9/II 10/II	Information Systems Protection Technologies Systems Modeling and Simulation	7	, u			5	150	36		18	96			
11/II	Information Systems Development	8				4	120	54	18		48			
12/II	System Analysis	6				4.5	135	54	18		63			
13/II	Data Mining		6d			4.5	135	54		18	63			
14/II	Computer Networks	6				5	150	54		18	78			
'	total number of part I.2	8	6		3	65.5	1965	684	108	234	939			
	I.3. Basic trair	ning (nal co	urses			,						
1/III	Pre-diploma Practice		8d			7.5	225				225			
2/11	Diploma Project					6	180				180			
	total number of part I.3					13.5	405				405			

		Dist		n for te	rms			Numb	er of h	nours	
				, , , , , , , , , , , , , , , , , , ,		ι		Lecti	ures/prac	ctical	
Code	Subjects	Exams	Final tests	Course projects	Coursework	ECTS Credits	Total	Lectures	Practical successions and successions and successions are successions and successions are successions and successions are succ	Laboratory	Self-study
1	2	3	4	5	6	7	8	9	10	11	12
	I.4. Humanities t	rainin	g (opt	tional	cours	es)					
1/IV	History Subjects		2			2	60	18	18		24
2/IV	Ukrainian Language Subjects		1			2	60	18	18		24
3/IV	Philosophy Subjects		4			2	60	18	18		24
4/IV	Psychology Subjects		4			2	60	18	18		24
5/IV	Subjects on Law		6			2	60	18	18		24
6/IV	Subjects on Humanities and Social Sciences #1		5			2	60	18	18		24
7/IV	Subjects on Humanities and Social Sciences #2		7			2	60	18	18		24
8/IV	Foreign Language		2,4d			6	180		144		36
9/IV	Foreign Language for Professional Purposes		6,7d			4	120		30		30
	total number of part I.4		11			24	720	126	360		234
	TOTAL IN GENERAL TRAINING	18	22		3	167.5	5025	1386	882	324	2433
	II. VOCA	TION/	L TR	AINING	3						
	II.1. Vocational and pra	actica	l train	ina (n	naior	COLLEGA	e)				
1/c	Web-Oriented Software Development	5	l train	ling (ii	lujoi v	4.5	135	54		18	63
2/c	Algorithms and Data Structures	- 0	1			4	120	36		18	66
3/c	Distributed Systems and Parallel Computing Technologies		5d			5	150	36		36	78
4/c	Electronics and Electrical Engineering		3			3	90	36		18	36
5/c	Computer Circuit Engineering and Computer Architecture	4				4	120	54		18	48
6/c	IT-Projects Management		8d			3	90	36	18		36
7/c	Making Decisions under Conflicts	8				4	120	36	18		66
8/c	Harmonic Analysis and Operational Calculus	4				4	120	36	36		48
9/c	Mathematical Statistics		4			3	90	36	18	36	
	total numberof part II.1	4	5			34.5	1035	360	90	108	477
	II.2. Vocational and prac	ctical	trainii	ng (op	tional	cours	es)				
1/св	Geoinformatics Systems		3			3	90	36	18		36
2/св	Introduction to Data Mining		1			2.5	75	18		18	39
3/св	Programming		2d		2	7	210	54		54	102
4/св	Applied Statistics		5			3	90	36	18		36
5/св	Text Mining Analysis		6			3.5	105	36		18	51
6/св	Data Mining Models and Methods		7			3	90	36		18	36
7/св	Nonparametric Programming Landuages		5			3	90	36		18	36
8/св	Data Mining in Geoinformatics		7			3	90	36		18	36
9/св	Theory of Information and Coding		3			3	90	36	18		36
10/св	SAS Software and Hardware for Data Storage Processing and Analysis	7				3	90	36		18	36
11/св	Artificial Intelligence Methods and Systems	8	<u> </u>	<u> </u>	<u> </u>	4	120	36		18	66
	total number of part II.2	2	9		1	38	1140	396	54	180	510
	TOTAL IN VOCATIONAL TRAINING	6	14		1	72.5	2175	756	144	288	987
	TOTAL	24	36		4	240.0	7200	2142	1026	612	3420

Approved by Faculty Academic Council, Meetin	g protocol №	_ from April 25, 2017
Head of the Department Dean of the Faculty (Director of the Institute) _	O.L.Tymoschuk	V.D.Romanenko