## MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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

## **CURRICULUM**

(Enrolment 2020)

by Academic Council	Level	Bachelor		Form of study	full-time
Igor Sikorsky Kyiv Polytechnic Institute					(full-time, part-time)
(Meeting protocol №from2020)	Speciality	151 Automation and comp	outer - integrated technologies	Faculty (Institute)	FACULTY OF INSTRUMENTATION ENGINEERING Bachelor in Automation and Computer Integrated
Head of Academic Council	Educational	and Professional program		Qualification	Technology
Mykhaylo ILCHENKO	Compute	er-Integrated Technologies and	Navigation and Control Systems	Study duration	3 years 10 months
	Graduation		ent of Instruments and Systems of	Base level	
		(	Orientation and Navigation		Full Secondary Education

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AR		S	ept	temb	er			О	ctob	er			N	over	nber			Dec	emb	ber			Janu	ary			Fel	brua	ry		- 1	/larch				Ap	ril			1	May			Jı	ine	_			July	-			Au	ıgust	1
Ϋ́E	1	- 2	2	3	4		5	6	7	8	9	10	11	12	13	3 14	15	16	1	7 1	8 1	9	20	21	22	23	24	25	5 26	27	7 28	29	30	3	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
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	II. St	ummary t	able of	time b	udget	(Weeks	s)
YEAR	Learning period	Examination	Practice	Assessment	Research	Holiday	Total
-1	36	4				12	52
II	36	4				12	52
III	36	5				11	52
IV	27	3	5	2	4	2	43

III. P	ractice	
Type of practice	YEAR	Weeks
Pre-diploma Practice	8	5

IV. Gra	duates assessment	
Subjects	Form of graduates assessment (exam, graduation project)	YEAR
Diploma Thesis	Defence of Diploma Thesis	8

	V. Plan of E	ducat	ional n	rocess							
	T Tunion			n for te							
		2.0		esters)		,,		Numb	er of h	ours	
			Ì	*		ECTS Credits			res/prac	tical	
g	- 4		sts	tas	test	e.			lessons	_	₹
Code	educational components	Exams	Final tests	ndividual		S	Total	es	77	-aboratory	Self-study
		Exa	na	Ē	Module	5	P	Lectures	Practical	rat	÷.
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1	2	3	4	5	6	7	8	9	10	11	12
	1. Compulsory e				onent	S					
201	1.1. Gene	ral tra	ining	cycle					- 10		
301 302	History of science and technology		2		1 2	2	60	18 18	18 18		24
303	Principles of professional oral speech (rhetoric) Higher mathematics	1.2.3		1.2.3	1,2,3	18	540	108	162		270
304	Physics Physics	1,2,3		1,2,0	1,2,5	10	300	72	36	36	156
305	Computer Graphics	1,2	2			4	120	18	54	30	48
306	Programming	1,2				10	300	72	108		120
307	Physical education or basics of a healthy lifestyle	-,-	2,4		1.3	5	150		144		6
308	Foreign Language		2,4		1,3	6	180		144		36
309	Economics and Production Engineering		7		7	4	120	36	36		48
3010	Life safety and civil defence		7		7	4	120	36	28	8	48
	Total number of part 1.1	7	9	3	11	65	1950	378	748	44	780
	1.2. Vocati	onal t	rainin	g cycl	е		•				
ПО1	Materials Science		1	1		5	150	36	36		78
ПО2	Engineering Graphics		1	1		4,5	135	18	54		63
ПОЗ	Information Technology		2		2	5	150	36	54		60
ПО4	Electrical Engineering		3	3	3	4	120	36	18	18	48
ПО5	Metrology		3			4	120	36	18		66
ПО6	Theoretical and applied mechanics	3	4,5	5	3,4	11,5	345	90	72		183
ПО7	Special parts of Mathematics	4	4	4	4	8	240	54	54	18	114
ПО8	Computer simulation of processes and systems	4		4	4	8	240	54		54	132
ПО9	Electronics and basics of microprocessor technology	5	4	4		8	240	36	18	54	132
ПО10	Design of devices of automation systems		6			3,5	105	36	36		33
ПО11 ПО12	Design of devices of automation systems Coursework	5		6		1,5 5	45 150	0 36	0 18	0 18	45 78
ПО12	Basic theory of sensitive elements of orientation  Automatic Control Theory	5.6		5		10	300	108	54	18	120
ПО14	Microprocesor Technics	6		6	6	6	180	18	34	54	108
ПО15	Technical means of automation	6		6	0	5	150	36		36	78
ПО16	Gyroscopic and Navigational Instruments	7			7	9	270	54	18	36	162
ПО17	Gyroscopic and Navigational Instruments Coursework			7		1	30	0	0	0	30
ПО18	Design of automation systems		8	8	8	4	120	36	18	18	48
ПО19	Pre-diploma Practice		8			6	180				
ПО20	Bachelor Thesis Designing					6	180				
	Total number of part 1.2	10	12	13	9	115	3450	720	468	324	1578
	TOTAL IN NORMATIVE educational components	17	21	16	20	180	5400	1098	1216	368	2358
	2. Optional ed	ucatio	nal co	mpor	ents						
	2.1. General training cycle (Option	nal s	ubieto	s fron	า Univ	ersity	catalo	aue)			
3B 1	Educational component 1 of the GU-Catalog		3		3	2	60	18	18		24
3B 2	Educational component 2 of the GU-Catalog		3		3	2	60	18	18		24
3B 3	Educational component 3 of the GU-Catalog		4		4	2	60	18	18		24
3B 4	Educational component 4of the GU-Catalog		6		6	2	60	18	18		24
3B 5	Foreign Language (for Specific Purposes)	8	6		5,7	6	120		126		54
	Total number of part 2.1	1	5		6	14	360	72	198	0	150
	2.2. Vocational training cycle (Or	otiona	l subi	etcs fr	om F	aculty	catalo	que)			
	Educational component 1 of the F-Catalog		3		3	3,5	105	36	9	18	42
ПВ 1			3	3		3	90	36		18	36
ПВ 1 ПВ 2	Educational component 2 of the F-Catalog			5		6	180	54	36	36	54
	Educational component 2 of the F-Catalog  Educational component 3 of the F-Catalog		5								
ПВ 2			5	_	5	5	150	18		54	78
ПВ 2 ПВ 3	Educational component 3 of the F-Catalog		_	6	5	5 5,5	150 165	18 36	36	54 18	78 75
ПВ 2 ПВ 3 ПВ 4	Educational component 3 of the F-Catalog  Educational component 4 of the F-Catalog		5		5	-			36		
ПВ 2 ПВ 3 ПВ 4 ПВ 5	Educational component 3 of the F-Catalog  Educational component 4 of the F-Catalog  Educational component 5 of the F-Catalog		5	6	5	5,5	165	36	36	18	75
ПВ 2 ПВ 3 ПВ 4 ПВ 5 ПВ 6	Educational component 3 of the F-Catalog Educational component 4 of the F-Catalog Educational component 5 of the F-Catalog Educational component 6 of the F-Catalog		5 6 7	6	5	5,5 5,5	165 165	36 18	36	18	75 111
ПВ 2 ПВ 3 ПВ 4 ПВ 5 ПВ 6 ПВ 7	Educational component 3 of the F-Catalog Educational component 4 of the F-Catalog Educational component 5 of the F-Catalog Educational component 6 of the F-Catalog Educational component 7 of the F-Catalog		5 6 7	6 7 7	5	5,5 5,5 5	165 165 150	36 18 18	36	18 36 54	75 111 78
ПВ 2 ПВ 3 ПВ 4 ПВ 5 ПВ 6 ПВ 7 ПВ 8	Educational component 3 of the F-Catalog Educational component 4 of the F-Catalog Educational component 5 of the F-Catalog Educational component 6 of the F-Catalog Educational component 7 of the F-Catalog Educational component 8 of the F-Catalog Educational component 9 of the F-Catalog Total number of part 2.2	0	5 6 7 7 8 8 8	6 7 7 8 8	8 3	5,5 5,5 5 6 6,5 46	165 165 150 180 195 1380	36 18 18 18 18 252	81	18 36 54 36 36 36	75 111 78 126 141 741
ПВ 2 ПВ 3 ПВ 4 ПВ 5 ПВ 6 ПВ 7	Educational component 3 of the F-Catalog Educational component 4 of the F-Catalog Educational component 5 of the F-Catalog Educational component 6 of the F-Catalog Educational component 7 of the F-Catalog Educational component 8 of the F-Catalog Educational component 8 of the F-Catalog Educational component 8 of the F-Catalog	0 1 18	5 6 7 7 8 8	6 7 7 8 8	8	5,5 5,5 5 6 6,5	165 165 150 180 195	36 18 18 18		18 36 54 36 36	75 111 78 126 141

Head of the Department	 /Nadiia BOURAOU/
Dean of the Faculty	 /Gregory TYMCHIK_/