

## MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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

## **CURRICULUM**

(Envolment 2020)

ALLKOVED			Linionnent 2020)					
by Academic Council	Level	Bachelor		Form of study	full-time			
laor Sikorskv Kviv Polvtechnic Institute (Meeting protocol № from 2020)	Speciality 161	Chemical Technology	and Engineering	ngineering Faculty (Institut				
Head of Academic Council	Educational and	Professional program			Bachelor in chemical technologies and engeneering			
Mykhaylo ILCHENKO	Chemical tech	hnologies of cosmetic	products and food additives	Study duration	3 years 10 months			
	Graduation Depa	artment Physical C	hemistry	Base level	Full Secondary Education			

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AR	í		Sep	tembe	r		-	Octob	oer			No	vem	ber			Dece	mbe	r		Jar	uary			Fel	bruary	,		М	arch				April				Ma	ay			Ju	ne				July				Aug	gust	
YE	! [	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
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	II. Summary table of time budget (Weeks)											
YEAR	Learning period	Examination	Practice	Assessment	Research	Holiday	Total					
-	36	4				12	52					
ш	36	4				12	52					
Ш	36	4				12	52					
I۷	27	3	5	4	2	2	43					

III. P	ractice					
Type of practice	YEAR	Weeks				
undergraduate	4	5				

IV. Graduates assessment								
Subjects	Form of graduates assessment (exam, graduation project)	YEAR						
Graduation project	Defence of graduation work	4						

	V. Plan of E	ducati	onal pr	rocess							
		Dist	tributio		rms			Numb	per of h	ours	
			(seme	esters)		ts			ures/prac		
o o			ιχ	task	st	ECTS Credits		Loci	lessons	Jucai	>
Code	Educational components	πs	Final tests	<u>a</u>	Module test	ū	<del>-</del>	ς.	<del>-</del>	Ž	Self-study
		Exams	a t	Ē	ğ	135	Total	n.e	ţį	atc	-S
		ш	뜶	ndividual	δ	Ĕ		Lectures	Practical	Laboratory	Sel
				드				_			
1	2	3	4	5	6	7	8	9	10	11	12
	1. NORMATIVE e				onents	3					
301	1.1. General Principles of oral professional speech (rhetoric)	ai tra	ining (	cycle	2	2	36	18	18		24
302	History of Kyiv Polytechnic		1		1	2	36	18	18		24
303	Physical training		2, 4		1,3	5	144		144		6
304	Foreign language		2, 4		1,3	6	144		144		36
305	Physics	1,2		1,2	1,2	13	198	108	36	54	192
306	General and Inorganic Chemistry	1,2		1,2	1,2	14	216	108	36	72	204
307 308	Higher Mathematics	1,2		1,2	1,2	13,5 4,5	216	108 36	108 18	10	189
309	Organic chemistry  Economics and Manufacturing	3	7	7	7	4,5	72 72	36	36	18	63 48
3010	Labor safety and civil defence	ļ	7	7	7	4	72	36	27	9	48
	1.2. Vocation	onal ti	rainin					, ,,,			
ПО1	Engineering Graphics		1	1	1	3	54	18	36		36
ПО2	Software Graphics		1	1	1	3	54	18	36		36
ПОЗ	Information technologies		2	2	2	4	72	36	36		48
ПО4	Introduction to Profession	3			3	5	72	36	9	27	78
ПО5	Course Work on Introduction to Profession		3			1					30
ПО6	Technical Analysis of Food and Cosmetic Products	4	3		3	4	72	18		54	48
ПО7 ПО8	Organic chemistry in profession Surface Phenomena and Disperse Systems	4		4	4	4,5 4,5	72 72	36 36		36 36	63 63
	Chemical Analysis of Food Additions and Cosmetic	-			<u> </u>						
ПО9	Products		4	4	4	7	108	36	18	54	102
ПО10	Physical Chemistry	5	6	5,6	5,6	10,5	180	90	18	72	135
ПО11	Processes and Equipment of Chemical Plants	6	5	5	5,6	9	144	72	36	36	126
ПО12 ПО13	Plants	-	6	-	-	1,5	144	72	36	20	45 156
ПО13	Methods of Compounds Separation and Identification  General Chemical Technology	5 7	6	5 6,7	5 6,7	10 9	144	72	36	36 36	126
	Monitoring and Control of Chemical Technological		0				t -		30		
ПО15	Processes	7		7	7	4,5	54	27		27	81
ПО16	Chemistry and Technology of Food Additives	7			7	6	72	36	18	18	108
ПО17	Chemical Reaction Mechanisms		7		7	4	54	36	18		66
ПО18 ПО19	Course Work on Chemical Reaction Mechanisms Process Design and Equipment selection in Food and		7		8	7	108	45	63		30 102
ПО19	Cosmetic Mecutar Hiddess Design and Equipment		8		P	1,5	100	45	03		45
ПО21	Undergraduate Internship	ļ	8			6					180
ПО22	Graduate project work			-	-	6		-			180
	TOTAL of NORMATIVE educational components	16	23	21	34	180	2682	1152	945	585	2718
	,										
	2.1. General training cycle (Optio	nal su	bjetc	s from	Univ	ersity	catalo	gue)			
3B1	Educational component 1 of the CU-Catalog		3		3	2	36	18	18		24
3B2	Educational component 2 of the CU-Catalog		3		3	2	36	18	18		24
3B3	Educational component 3 of the CU-Catalog		4		4	2	36	18	18		24
3B4	Educational component 4 of the CU-Catalog	_	6		6	2	36	18	18		24
3B5	Foreign language in professional direction	8	6	ntoo f	5,7	6	126	a\	126		54
ПВ1	2.2. Vocational training cycle (Op Educational component 1 of the F-Catalog		Subje		3 3		<b>72</b>	gue) 36	36		78
ПВ2	Educational component 1 of the F-Catalog  Educational component 2 of the F-Catalog	3	3	3	3	5 4	72	18	30	54	48
ПВ3	Educational component 1 of the D-Catalog	4	-	4	4	9	144	54	36	54	126
ПВ4	Educational component 3 of the F-Catalog	i i	5	5	5	3	54	18		36	36
ПВ5	Educational component 2 of the D-Catalog	5			5	3	36	18	18		54
ПВ6	Educational component 3 of the D-Catalog		5	5	5	3	54	36	18		36
ПВ7	Educational component 4 of the D-Catalog	6		6	6	6	72	36	36		108
ПВ8	Educational component 5 of the D-Catalog	6		8	6	5 8	72	36	18	18 18	78
ПВ9	TOTAL of ELECTIVE educational components	8 <b>7</b>	8	7	8 15	60	90 <b>936</b>	36 360	36 <b>396</b>	180	150 <b>864</b>
<b>-</b>	TOTAL OF ELECTIVE educational components	23	31	28	49	240	3618	1512	1341	765	3582
	IOTAL	_~	_ J.		75	270	2213			. 55	3002

Approved by University	Academic Council, Meeting protocol № from 2	2020
Head of the Department Dean of the Faculty	/ Chyhyrynets O.E./ / Astrelin I. M./	