

## MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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

## **CURRICULUM**

(Enrolment 2021)

1 110	VLD																								(-		Hell	. 20	,21)	•																					
Acader	nic Co	uncil											Lev	el					Ma	aste	er																F	orı	m c	of s	tuc	ly		ful	l-tir	ne					
Sikors	sky Kyi	v Pol	/tech	nnic	Instit	ute	9									=									-																			(full-	time,	part	-time	1			_
eting p	rotoco	INº_	fr	om _			_ 20	021	)				Spe	ecia	lity	١.	162	2 -	Bio	tec	hnc	olog	ју а	ınd l	bioe	ngi	nee	ring							_		F	ac	ult	y (I	nst	itut	te)	Bio	tech	nnol	ogy	and	biot	echni	cs
ad of A	caden	nic Co	ounc	il									Edι	ıca	tio	nal	anc	ı S	cie	ntif	ic p	rog	gran	n	Bio	otec	hno	log	ies						_		c	Qua	lifi	cat	ior	1		М	aste			echn ineer		y and	
		Mykł	naylo	ILC	HEN	IKC	O					_									(7	Title	of t	he p	rogr	am)									_		5	tu	dy	du	ati	on		1 y	ear	9 m	ont	hs			
													Gra	dua	atio	on C	)en	art	me	nt				Biot etics				tics	an	d Ec	obic	tec	hnol	oav	<u>,                                     </u>		E	Bas	e le	eve	ı			Ba	chel	or d	legr	е			_
																			I.	Sc	hec	dul	е о	f ed	uca	itio	nal	pro	осе	SS																					
YEAR	Sep	tember			Oct	obe	er			Nov	emb	er		D	есе	mber			Jar	nuary	,		Fe	bruar	,		Ma	ch			A	oril		Т		Мау		Т		Ju	ne		Т		July				Aug	ıst	٦
YE	1 2	3	4	5	6 7	7	8	9	10	11 1	12	13	14	15	16	17	18	19	20				24	25	26	27	28	29	30	31	32 3	3 3	35	3	6 3	7	38 3	9 4	40		42	43								1 5	
1					_	4				_		_		_				Е	_	_	_	_										4				4		4		Е	Е	Н	Н	Н	Н	Н	Н	Н	Н	Н	1
II																		Е					Р		Р	Р	R	R		R		₹	R R	F	R F	₹	R.	A						L.							
Syn	bols:		Learr	ning p	eriod		l	Е	Exar	ninatio	on		L	Р	Prac	ctice			R	Re	searc	ch		Α	Ass	essm	ent		Η	Holid	ay																				

	II. Summary table of time budget (Weeks)												
YEAR	Learning period	Examination	Practice	Assessment	Research	Holiday	Total						
- 1	38	4				12	52						
II	18	2	5	2	10	2	39						

ractice	
YEAR	Weeks
2	5
	YEAR 2

IV. Graduates assessment									
Subjects	Form of graduates assessment (exam, graduation project)	YEAR							
Work on master's dissertation	Defence of master's dissertation	2							

	V. Plan of E	ducati	onal p	rocess	3									
		Distribution for terms (semesters) σ						Number of hours						
9					st	redits		Lect	ures/prad lessons	tical	<u> </u>			
Code	educational components	Exams	Final tests	Individual task	Module test	ECTS Credits	Total	Lectures	Practical	Laboratory	Self-study			
1	2	3	4	5	6	7	8	9	10	11	12			
1. NORMATIVE educational components														
	1.1. Gene	ral tra	ining	cycle										
301	Intellectual Property and Patenting		2		2	3	90	36	18		36			
302	Fundamentals of Engineering and Technology for Sustainable Development		2		2	2	60	18	18		24			
303	Practical course of foreign language business communication		2,3	1	1,3	4,5	135		108		27			
304	Development of startap-projects		1		1	3	90	18	36		36			
305	Higher Education Pedagogy		3		3	2	60	18	18		24			
306	Mathematical Optimization Methods		3		3	4	120	36	18		66			
307	Modeling in biotechnology		3	3	3	4	120	36	18		66			
1.2. Vocational training cycle														
ПО1	System analysis of biotechnological objects	1			1	5	150	18	18		114			
ПО2	Problematic issues of modern biotechnology	1		1	1	5	150	18	18		114			
ПО3	Biological and Chemical Sensor Systems	1		1	1	5	150	18	18		114			
ПО4	Biochemical and physical methods of analysis in biotechnology		1	1	1	4	120	18	18		84			
ПО5	Applied bioinformatics		1	1	1	4	120	18	18		84			
ПО6	Coursework on system analysis of biotechnological objects		1			1	30				30			
ПО7	Scientific work on the topic of master's dissertation		1,3	2		10	300	9	36		255			
ПО8	Scientific and research practice		4			9	270				270			
ПО9	Work on master's dissertation					17	510				510			
	TOTAL of NORMATIVE educational components	3	14	6	13	82,5	2475	261	360		1854			
	2. ELECTIVE ed													
	2.1. Vocational training cycle (Op	tiona		etcs fr										
ПВ1	Educational components 1 from F-catalogue		2		2	4	120	18		18	84			
ПВ2	Educational components 2 from F-catalogue		2		2	4	120	18		18	84			
ПВ3	Educational components 3 from F-catalogue	2		2	2	5	150	18	40	18	114			
ПВ4	Educational components 4 from F-catalogue	2	<b> </b>		2	5	150 150	18 18	18 18		114 114			
ПВ5	Educational components 5 from F-cataloque Educational components 6 from F-cataloque	3	-	-	3	5 5	150	18	10	18	114			
ПВ6	Educational components 6 from F-catalogue  Educational components 7 from F-catalogue	3		-	3	5 5	150	18	18	10	114			
ПВ8	Educational components 7 from F-catalogue  Educational components 8 from F-catalogue	J	3	<del>                                     </del>	3	4.5	135	18	18		99			
TIDO	TOTAL of ELECTIVE educational components	5	3	1	8	37,5	1125	144	72	72	837			
	TOTAL of ELECTIVE educational components	8	17	7	21	120	3600	405	432	72	2691			
	IUIAL	0	17		41	120	3000	403	432	14	2031			

Approved by University Academic Council, Meeting protocol № from 2021								
Head of the Department	/ Tetiana TODOSIICHUK /							
Head of the Department	/ Nataliia GOLUB /							
Dean of the Faculty	/ Olexiy DUGAN /							