

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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

CURRICULUM

(Enrolment 2020)

by Academic Council							Level					F	hD															Form of			f st				full-time																	
	or Sikorsky Kyiv Polytechnic Institute neeting protocol № from 2020)						Speciality <u>Automation and computer integrated technologies</u>								Study duration					(full-time, part-time) 4 years																																
Head o	Head of Academic Council						Educational and Scientific program											Base level					Master degree																													
	Mykhaylo ILCHENKO					-	Automation and computer integrated technologies											Educational componer				nt 48 ECTS Credits																														
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	Ϋ́E	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19 2	0 2	1 2	2 2	23 2	24	25 2	26	27 2	28 2	9 30	3	1 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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	Sym	bols	3:		Lear	ning	period	i		Е	Exa	mina	ion		l	I	Inter	nship)	F	Re	esea	rch		Į	RT	Repoi	rt		Α	. As	sessr	nent		Н	Holid	ay															

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						I. I	Educational com	ponent			
Summary table of time budget (Weeks)					Veeks)				Inter	nship	
YEAR	Learning period	Examinatio n	Internship	Holiday	Total				Type of Internship	YEAR	Weeks
-	28	5		9	42				Pedagogical	2	4
=	24	5	4	9	42				-		

	Plan of E	ducati	onal pr	ocess									
			tributio	n for te	rms		Number of hours						
0			S	ask	st	redits		Lect	Lectures/practical lessons				
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. Norma	ative c	ompo	nents									
	1.1. General scientific	(phil	osoph	ical) t	rainin	g cycl	е						
N1	Philosophical principles of scientific activity 1. Scientific worldview and scientist's ethical culture 2. Philosophical epistemology	2	1	2	1	6	180	31	49		100		
	1.2. Lang	uage 1	trainin	g cycl	е								
N2	Foreign language for scientific activity 1. Foreign language for scientific research 2. Foreign language for scientific communication	2	1	1	2	6	180		75		105		
	1.3. Special kr	nowled	dge tra	aining	cycle								
N3	Research methodology		2		2	4	120	27	27		66		
N4	Special sections of the automatic control theory	3			3	4	120	26	26		68		
N5	Control systems software and hardware	4			4	4	120	18		36	66		
N6	Objects and control systems modeling and optimization	4			4	4	120	18	36		66		
	1.2.	Reser	ch cyc	cle									
N7	Scientific and innovative activities organization		1	1	1	4	120	26	26		68		
N8	Pedagogical internship		3			4	120				120		
	TOTAL of NORMATIVE educational components		5	3	7	36	1080	146	239	36	659		
	2. Elect	tive co	mpon	ents									
V1	The course of the personal post-graduate research topic		3		3	6	180	39	39		102		
V2	The course of the personal post-graduate research topic		4		4	6	180	36	36		108		
	TOTAL of ELECTIVE educational components		2		2	12	360	221	314	36	869		
	TOTAL	5	7	3	9	48	1440	221	314	36	869		

	II. Scientific component											
YEAR	The content of the graduate student's scientific work	Forms of control (Reporting)										
1st year	Selection and substantiation of the personal scientific research topic, determination the content, performance terms and volume of scientific vorks; selection and substantiation the personal research methodology, review, analysis and approaches that have developed in modern science in the chosen field. Preparation and publication of at least one article (usually a review) in scientific professional publications (domestic or foreign) about the research topic, taking part in scientific and practical conferences (seminars) with abstracts publication.	Approval the post-graduate student's work individual plan at the institute / faculty academic council, reporting about the progress according to the individual post-graduate student's plan twice a year.										
2nd year	Conducting own research under the supervisor guidance, which includes solving research problems using a set of theoretical and empirical methods. Preparation and publication of at least 1 article in scientific professional publications (domestic or foreign) on the research topic; participation in scientific and practical conferences (seminars) with the publication of abstracts.	Reporting about the progress according to the individual post-graduate student's plan twice a year.										
3rd year	Analysis and generalization of the personal scientific research obtained results, obtained results scientific novelty substantiation, their theoretical and / or practical significance. Preparation and publication of at least 1 article in scientific professional publications on the research topic; participation in scientific and practical conferences (seminars) with the abstracts publication.	Reporting about the progress according to the individual post-graduate student's plan twice a year.										
4th year	Arrangement the post-graduate student scientific achievements in the dissertation form, summing up concerning the coverage completeness of dissertation results in scientific articles according to the current requirements. Obtained results implementation and preparing the supporting documents. Documents submission for dissertation preliminary examination. Preparation of a scientific report for final certification (defense of the dissertation).	Reporting about the progress according to the individual post-graduate student's plan twice a year. Providing the summary about the scientific novelty, theoretical and practical significance of the dissertation results.										

Head of the Scientific and Methodical Board of Speciality ______/ Prof. Anatoliy ZHUCHENKO