



MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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

CURRICULUM

(Enrolment 2020)

APPROVED

by Academic Council

Igor Sikorsky Kyiv Polytechnic Institute

(meeting protocol № ___ from _____ 2020)

Head of Academic Council

_____ Mykhaylo ILCHENKO

Level Master

Form of study full-time

(full-time, part-time)

Speciality 151 Automation and computer - integrated technologies

Faculty (Institute)

**FACULTY OF
INSTRUMENTATION
ENGINEERING**

Educational and Scientific program

**Master in Automation and
Computer Integrated
Technology**

Qualification

Computer-Integrated Technologies and Navigation and Control Systems

Study duration

1 year 9 months

Department of Instruments and Systems of

Graduation Department

Orientation and Navigation

Base level

Bachelor degree

I. Schedule of educational process

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	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																			E	E	H	H																						E	E	H	H	H	H	H	H	H	H	H	H		
II																			E	E	H	H	P	P	P	P	P	R	R	R	R	R	R	R	R	R	R	A	A																		

Symbols: Learning period E Examination P Practice R Research A Assessment H Holiday

II. Summary table of time budget (Weeks)

YEAR	Learning period	Examination	Practice	Assessment	Research	Holiday	Total
I	36	4				12	52
II	18	2	5	2	12	2	39

III. Practice

Type of practice	YEAR	Weeks
Scientific research	2	5

IV. Graduates assessment

Subjects	Form of graduates assessment (exam, graduation project)	YEAR
	Protection of Master's Work	2

V. Plan of Educational process

Code	Subjects	Distribution for terms (semesters)				ECTS Credits	Number of hours				
		Exams	Final tests	Individual task	Module test		Total	Lectures/practical lessons			Self-study
								Lectures	Practical	Laboratory	
1	2	3	4	5	6	7	8	9	10	11	12
1. Compulsory educational components											
1.1. General training cycle											

301	Modern Control Theory	1			1	4	120	36	36		48
302	Intellectual Property and Patent		2			3	90	36	18		36
303	Fundamentals of engineering and sustainable development technologies		2		2	2	60	18	18		24
304	Practicum in Foreign Professional Communication		2,3	1	2,3	4,5	135		108		27
305	Development of startup projects		1		1	3	90	18	36		36
306	Higher Education Pedagogy		3		3	2	60	18	18		24
307	Mathematical modeling of systems and processes	3				4	120	18	18		84
total number of part I.1		2	6	1	6	22,5	675	144	252	0	279
1.2. Vocational training cycle											
Π01	Theory and Calculation of Instruments and Systems	1		1	1	7	210	36		54	120
Π02	Theory and Calculation of Instruments and Systems Coursework					1	30				30
Π03	Navigation Systems		1	1	1	6,5	195	54		36	105
Π04	Systems of Orientation and Stabilization		1		1	4	120	36		18	66
Π08	Supplementary Topics of Sensitive Element Theory	3		3	3	6	180	36	36		108
Π09	Supplementary Topics of Professional Disciplines	3			3	5,5	165	18	36		111
Π05	Scientific work on the theme of the master's dissertation		1,2,3	1	2,3	7,5	225	9	36		180
Π06	Scientific Research Practice		4			9	270				270
Π07	Training of Master Thesis					21	630				630
total number of part I.2		3	6	4	7	67,5	2025	189	108	108	1620
TOTAL IN GENERAL TRAINING		5	12	5	13	90	2700	333	360	108	1899
2. Optional educational components											
2.1. Vocational training cycle (Optional subjects from Faculty catalogue)											
ΠB1	Educational component 1 of the F-Catalog	2		2	2	5	150	36	18		96
ΠB2	Educational component 2 of the F-Catalog		2		2	5	150	36	18		96
ΠB3	Educational component 3 of the F-Catalog		2	2	2	5	150	36		36	78
ΠB4	Educational component 4 of the F-Catalog		2	2	2	4,5	135	18	36		81

ПБ5	Educational component 5 of the F-Catalog		2	2		3	90	18	18		54
ПБ6	Educational component 6 of the F-Catalog		3			4	120	36	36		48
ПБ7	Educational component 7 of the F-Catalog		3			3,5	105	36	18		51
total number of part 2.1.		1	6	4	4	30	900	216	144	36	504
TOTAL IN SELECTIVE educational components		1	6	4	4	30	900	216	144	36	504
TOTAL		6	18	9	17	120	3600	549	504	144	2403

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