



CURRICULUM

(Enrolment 2020)

APPROVED

Level Bachelor

Form of study full-time
(full-time, part-time)

By Head of Academic Council
Igor Sikorsky Kyiv Polytechnic Institute

Speciality 173 Avionics

Faculty (Institute) Institute of Aerospace Technologies

Mykhaylo ILCHENKO
2020

Education and Professional program

Qualification Bachelor in Avionics

Control systems of flight vehicles and complexes engineering

Study duration 3 year 10 months

Graduation Department Control systems of flight vehicles

Base level Full Secondary Education

I. Schedule of educational process

Year	September				October				November				December				January				February				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																														
II																			E	E	H	H																														
III																			E	E	H	H																														
IV																			E	E	H	H									E	P	P	P	P	R	R	R	R	R	R	A	A									

Symbols: Learning period Examination Practice Research Assessment Holiday

II. Summary table of time budget (Weeks)

Year	Learning period	Examination	Practice	Assessment	Research	Holiday	Total
I	36	4				12	52
II	36	4				12	52
III	36	5				11	52
IV	27	3	5	2	4	2	43

III. Practice

Type of practice	YEAR	Weeks
Pre-diploma	4	5

IV. Graduates assessment

Subjects	Form of graduates assessment (exam, graduation project)	YEAR
	Defense of the diploma project	4

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 education components											
1.1. General training cycle											
30 1	Ukrainian Language Subjects		2		2	2	60	18	18		24
30 2	History Subjects		1		1	2	60	18	18		24
30 3	Physical education or basics of a healthy lifestyle		2,4		1,3	5	150		144		6
30 4	Foreign language		2,4		1,3	6	180		144		36
30 5	Economics and Management of Enterprise		7		7	4	120	36	36		48
30 6	Labor Safety and Civil Security		7		7	4	120	36	28	8	48
30 7	Higher mathematics	1,2,3		1,2,3	1,2,3	18	540	144	144		252
30 8	Physics	1,2		2	1,2	10	300	90	36	36	138
30 9	Chemistry		1		1	3	90	27		18	45
30 10	Descriptive Geometry. Engineering and Computing Graphics	1		1	1	5	150	36	18	27	69
30 11	Fundamentals of Algorithm Presentation and Programming	2	1,3	1,2,3	1,2,3	11	330	72	108		150
30 12	Fundamentals of Aviation and Cosmonautics		2	2	2	2	60	36			24
30 13	Electrical Engineering		2		2	4	120	36	9	18	57
30 14	Technical Mechanics	3	2,4	2,3,4	2,3,4	14,5	435	117	117		201
30 15	Electronics and Fundamentals of Circuitry Engineering	3,4		3,4	3,4	10	300	72	36	36	156
30 16	Automatic Control Theory	4	5	5	4,5	9,5	285	72	36	36	141
30 17	Coursework on Automatic Control Theory		4			1	30				30
30 18	Mathematical support of digital systems	5	6	5	5,6	10	300	72	36	36	156
total number of part 1.1		12	18	16	29	121	3630	882	928	215	1605
1.2. Vocational training cycle											
ΠО 1	Microcontrollers		5		5	6,5	195	54	9	36	96
ΠО 2	Coursework on Microcontrollers		5			1	30				30
ΠО 3	Information-Measuring Devices		5		5,6	7	210	54	9	36	111
ΠО 4	Course project on Information-Measuring Devices		6			1,5	45				45
ΠО 5	Sensors of Avionics System		6,7		6,6,7	6,7	17	510	153	45	240
ΠО 6	Course project on Sensors of Avionics System		7			1,5	45				45
ΠО 7	Basis of Aircraft Control Systems Building		7,8		8	7,8	9	270	63	9	153
ΠО 8	Coursework on Basis of Aircraft Control Systems Building		8			1	30				30
ΠО 9	Pre-Diploma Practice		8			6	180				180
ΠО 10	Diploma Project					6	180				180
total number of part 1.2		6	6	4	7	56,5	1695	324	72	189	1110
TOTAL IN NORMATIVE education components		18	24	20	36	177,5	5325	1206	1000	404	2715
2. Optional education components											
2.1. General training cycle (Optional subjects from University catalogue)											
3B 1	Educational component 1 of the U-Catalog		3		3	2	60	18	18		24
3B 2	Educational component 2 of the U-Catalog		3		3	2	60	18	18		24
3B 3	Educational component 3 of the U-Catalog		4		4	2	60	18	18		24
3B 4	Educational component 4 of the U-Catalog		6		6	2	60	18	18		24
3B 5	Foreign Language for Professional Purposes	8	6		5,7	6	180		126		54
total number of part 1.1:		1	5		6	14	420	72	198	0	150
2.2. Vocational training cycle (Optional subjects from Faculty catalogue)											
ΠВ 1	Educational component 1 of the F-Catalog		3	3	3	4	120	36	36		48
ΠВ 2	Educational component 2 of the F-Catalog		4	4	4	3	90	36	9	9	36
ΠВ 3	Educational component 3 of the F-Catalog		4	4	4	3	90	27		18	45
ΠВ 4	Educational component 4 of the F-Catalog	4		4	4	5,5	165	54	9	18	84
ΠВ 5	Educational component 5 of the F-Catalog		5	5	5	3	90	36		18	36
ΠВ 6	Educational component 6 of the F-Catalog		5	5	5	3,5	105	18		36	51
ΠВ 7	Educational component 7 of the F-Catalog	6		6	6	6	180	63	9	18	90
ΠВ 8	Educational component 8 of the F-Catalog	6		6	6	4,5	135	36	18	9	72
ΠВ 9	Educational component 9 of the F-Catalog	7		7	7	4	120	36		18	66
ΠВ 10	Educational component 10 of the F-Catalog		7	7	7	3	90	36		18	36
ΠВ 11	Educational component 11 of the F-Catalog		8	8	8	5	150	36	9	18	87
ΠВ 12	Educational component 12 of the F-Catalog		8	8	8	4	120	36		27	57
total number of part 12.2		4	8	12	12	48,5	1455	450	90	207	708
TOTAL IN Selective educational components		5	13	12	18	62,5	1875	522	288	207	858
TOTAL		23	37	32	54	240	7200	1728	1288	611	3573

Approved by University Academic Council, Meeting protocol № ___ from ____, 2020

Head of the Department _____ / Olexandr ZBRUTSKY /

Director of the Institute _____ / Ivan KOROBKO /