MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
CURRICULUM
(Enrolment 2024)

APPROVED
by Header Academic Council
Igor Sikorsky Kyiv Polytechnic
Institute
"13" 05 2024
protocol № 5
Mykhaylo ILCHENKO

Bachelor level in 17 Electronics, automation and electronic communications
Speciality 172 Electronic communications and Radio Engineering
Educational and Professional Program
"INTELLIGENT TECHNOLOGIES OF RADIOELECTRONIC EQUIPMENT"
Form of study Full-time
Graduation department
Department of Applied Radioelectronics

Institute Radio Engineering Faculty
Qualification Study duration Bachelor of Electronic Communications and Radio Engineering
Basic education 3 years 10 months complete general secondary education
Academic groups PE-41

I. Schedule of educational process

Year	September				October				November				December				January				February				March				April				May				June				July				August			
		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
1																			C	C	K	K																			C	C	K	K	K	K	K	K	K	K	K	K
2																			C	C	K	K																			C	C	K	K	K	K	K	K	K	K	K	K
3																			C	C	K	K																			C	C	K	K	K	K	K	K	K	K	K	K
4																			C	C	K	K											C	П	П	П	П	Д	Д	Д	Д	Д	A	A	-	-	-	-	-	-	-	-	-

Symbols: Learning period; C Examination; П Practice; Д Diploma project; A Atestation; K Vacation

II. Summary table of time budget (Weeks)

year	Learning period	Examination	Practice	Diploma project	Atestation	Vacation	Total
1	36	4	0	0	0	12	52
2	36	4	0	0	0	12	52
3	36	4	0	0	0	12	52
4	28	3	4	4	2	2	43

III. Practice

Type of practice	Semester	Weeks
Pre-diploma practice	8	4

IV. Atestation

Subject	Form of graduates assessment	Semester
Diploma project	Graduation Project	8

V. Plan of Educational process

Code in EP	Subjects	Control activities: Exams	Final tests	Module test	CGW, CW, GW	HCW	Abstracts	ECTS crds.	Hours: Total amount	Auditorial: Total	Lectures	Practices	Labs	Self-study	Hours distributing per week among years and semesters: 1st year, Semester 1	2	2nd year, Semester 3	4	3rd year, Semester 5	6	4th year, Semester 7	8
															Weeks in semester							
															18	18	18	18	18	18	18	10
1	2	3	4	5	6	7		9	10	11	12	13	14	15	17	18	19	20	21	22	23	24
	1. Normative educational components																					
	1.1. General training cycle																					
GN 01	Ukrainian language for Professional Purposes		1	1				2.0	60	36	18	18		24	2							
GN 02	History of Science and Technology		2	2				2.0	60	36	18	18		24		2						
GN 03	Fundamentals of Healthy Lifestyle		2	1,2				3.0	90	72	18	54		18	2	2						
GN 04.1	Foreign Language. Part 1		2	1				3.0	90	72		72		18	2	2						
GN 04.2	Foreign Language. Part 2		4	3				3.0	90	72		72		18			2	2				
GN 05	Economics and Production Organization		7	7				4.0	120	72	36	36		48							4	
GN 06	Analytic Geometry and Linear Algebra		1	1		1		4.0	120	72	36	36		48	4							
GN 07.1	Higher Mathematics. Part 1. Differential and Integral Calculus of Functions of One Variable	1		1		1		4.0	120	72	36	36		48	4							
GN 07.2	Higher Mathematics. Part 2. Differential and Integral Calculus of Functions of Many Variables, Differential	2		2		2		7.0	210	108	54	54		102		6						
GN 07.3	Higher Mathematics. Part 3. Series and Functions of a Complex Variable	3		3	3			5.0	150	108	54	54		42			6					
GN 08.1	General Physics. Part 1	1		1		1		4.0	120	72	36	36		48	4							
GN 08.2	General Physics. Part 2	2		2		2		8.0	240	126	72	36	18	114		7						
GN 09	Engineering and Computer Graphics		1	1	1			5.0	150	90	18	36	36	60	5							
GN 10.1	Informatics. Part 1. Fundamentals of Programming and Algorithms	1		1		1		6.0	180	90	18		72	90	5							
GN 10.2	Informatics. Part 2. Fundamentals of Computer Technology		2	2		2		4.0	120	72	36		36	48		4						
GN 11	Fundamentals of Metrology		2	2		2		3.0	90	54	18		36	36		3						
GN 12	Introduction to Speciality		1					2.0	60	36			36	24	2							
GN 13.1	Fundamentals of Circuits Theory. Part 1		2	2		2		3.0	90	72	36	36		18		4						
GN 13.2	Fundamentals of Circuits Theory. Part 2	3		3	3			5.0	150	90	36	36	18	60			5					
GN 14	Electrodynamics and Propagation of Radio Waves	3		3	3			7.0	210	126	54	36	36	84			7					
GN 15	Fundamentals of Electronic Communications Networks		4	4		4		3.0	90	54	18		36	36				3				
GN 16	Signals and Processes in Radio Engineering	4		4	4			5.0	150	90	36	36	18	60				5				
GN 17	Digital Signal Processing	5		5	5			5.0	150	90	36	36	18	60					5			
GN 18	Circuit Engineering	4		3,4	4	3		7.0	210	144	72	36	36	66			3	5				
GN 19.1	Foreign Language for Professional Purposes. Part 1		6	5				3.0	90	72		72		18					2	2		
GN 19.2	Foreign Language for Professional Purposes. Part 2	8		7				3.0	90	56		56		34							2	2
GN 20	Introduction to Philosophy		4	4				2.0	60	36	18	18		24				2				
GN 21	Environmental Protection Strategy		3	3				2.0	60	36	18	18		24			2					
GN 22	Business Law		6	6				2.0	60	36	18	18		24						2		
GN 23	Labor Safety and Civil Defense		7	7				4.0	120	72	36	28	8	48							4	
	Total number of part 1.1	12	18	31	7	11	0	120	3600	2234	846	984	404	1366	30	30	25	17	7	4	10	2
	1.2. Professional training cycle																					
PN 01	Programmable means in intelligent radio electronic equipment	4		4	4			5.0	150	90	18	72		60				5				
PN 02	Intelligent Elements Design of Radio Electronic Systems	5		5	5			6.0	180	108	54	36	18	72					6			
PN 03	Microwave Devices and Antennas	5		5	5			5.0	150	90	36	36	18	60					5			
PN 04	Communication Methods in Intelligent Radio Electronic Systems	6		6	6			5.0	150	90	54	18	18	60						5		
PN 05	Printed Circuit Boards Design	6		6	6			5.0	150	90	18	72		60						5		
PN 06	Communication Means in Intelligent Radio Electronic Systems	7			7			5.0	150	90	36	36	18	60							5	
PN 07	Design and Production Technologies of Intelligent Radio Electronic Equipment	7		7	7			7.0	210	126	72	36	18	84							7	
PN 08	Information Protection in Intelligent Radio Electronic Systems		8	8	8			4.0	120	50	20	30		70								5
PN 09	Computer Simulation in Intelligent Systems		8	8	8			4.0	120	50	20	30		70								5
PN 10	Pre-diploma Practice		8					6.0	180	0				180								x
PN 11	Degree Project							6.0	180	0				180								x
PN 12	Intelligent Elements Design of Radio Electronic Systems. Coursework		5					1.0	30	0				30					x			
PN 13	Communication Means in Intelligent Radio Electronic Systems. Coursework		7					1.0	30	0				30							x	
	Total number of part 1.2	7	5	8	9	0	0	60	1800	784	328	366	90	1016	0	0	0	5	11	10	12	10
	TOTAL IN	19	23	39	16	11	0	180	5400	3018	1174	1350	494	2382	30	30	25	22	18	14	22	12
	2. Selective Educational components																					
	2.1. General training cycle																					
GS 01	Educational component 1 GU- Catalog		3	3				2,0	60	36	18	18		24			2					
GS 02	Educational component 2 GU- Catalog		4	4				2,0	60	36	18	18		24				2				
	Total number of part 2.1	0	2	2	0	0		4.0	120	72	36	36	0	48	0	0	2	2	0	0	0	0
	2.2. Professional training cycle																					
PS 01	Educational component 1 F- Catalog		3	3	3			4.0	120	54	18		36	66			3					
PS 02	Educational component 2 F- Catalog		4	4	4			4.0	120	54	18		36	66				3				
PS 03	Educational component 3 F- Catalog		4	4	4			4.0	120	54	18		36	66				3				
PS 04	Educational component 4 F- Catalog		5	5	5			4.0	120	54	18		36	66					3			
PS 05	Educational component 5 F- Catalog		5	5	5			4.0	120	54	18		36	66					3			
PS 06	Educational component 6 F- Catalog		5	5	5			4.0	120	54	18		36	66					3			
PS 07	Educational component 7 F- Catalog		6	6	6			4.0	120	54	18		36	66						3		
PS 08	Educational component 8 F- Catalog		6	6	6			4.0	120	54	18		36	66						3		
PS 09	Educational component 9 F- Catalog		6	6	6			4.0	120	54	18		36	66						3		
PS 10	Educational component 10 F- Catalog		6	6	6			4.0	120	54	18		36	66						3		
PS 11	Educational component 11 F- Catalog		7	7	7			4.0	120	54	18		36	66							3	
PS 12	Educational component 12 F- Catalog		7	7	7			4.0	120	54	18		36	66							3	
PS 13	Educational component 13 F- Catalog		8	8	8			4.0	120	50	20		30	70								5
PS 14	Educational component 14 F- Catalog		8	8	8			4.0	120	50	20		30	70								5
	Total number of part 2.2	0	14	14	14	0	0	56.0	1680	748	256	0	492	932	0	0	3	6	9	12	6	10
	TOTAL IN OPTIONAL educational components	0	16	16	14	0	0	60	1800	820	292	36	492	980	0	0	5	8	9	12	6	10
	TOTAL	19	39	55	30	11	0	240	7200	3838	1466	1386	986	3362	30	30	30	30	27	26	28	22

Exams	3	2	3	3	3	2	2	1
Final Tests	4	6	3	6	4	6	5	5
Course works	0	0	0	0	1	0	1	0
Course projects	0	0	0	0	0	0	0	0
Module test	8	7	8	8	7	7	6	4
CGW, CW, GW	1	0	4	5	6	6	4	4
Home Control Works (HCW)	4	5	1	1	0	0	0	0
Abstracts	0	0	0	0	0	0	0	0

Registration Number (NP): 12599

The educational component "Practical Training in Basic General Military Training," totaling 7 ECTS credits, is included in the individual curricula of higher education students in accordance with Cabinet of Ministers of Ukraine Resolution No. 734 of June 21, 2024.

Head of Science and Methodic Univercity Board - 172 Leonid URYVSKII

Dean REF Serhii MARTYNIUK

Head of the Department Andrii MOVCHANUK