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

APPROVED
by Head of Academic Council
Igor Sikorsky Kyiv Polytechnic
institute
"23" 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; 2 years 10 months completeJunior Specialist Diploma (Associate Level)
Basic education
Academic groups: PE-п41

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	51	52
1																			C	C	K	K																			C	C	K	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	K
3																			C	C	K	K											C	П	П		П	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	28	3	4	4	2	2	43

III. Practice

Type of practice	Semester	Weeks
Pre-diploma practice	6	4

IV. Atestation

Subject	Form of graduates	Semester
Diploma project	Graduation Project	6

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		2nd year		3rd year	
															Semester					
															1	2	3	4	5	6
															Weeks in semester					
															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
	1. Normative educational components																			
	1.1. General training cycle																			
GN 01	Ukrainian language for Professional Purposes*							2.0	60	0				0	x					
GN 02	History of Science and Technology*							2.0	60	0				0	x					
GN 03	Fundamentals of Healthy Lifestyle*							3.0	90	0				0	0	0				
GN 04.1	Foreign Language. Part 2		2	1				3.0	90	72		72		18	2	2				
GN 04.2	Foreign Language. Part 1*							3.0	90	0				0	0	0				
GN 05	Economics and Production Organization*							4.0	120	0				0	x					
GN 06	Analytic Geometry and Linear Algebra *							4.0	120	0				0	x					
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						5.0	150	0				0			x			
GN 08.1	General Physics. Part 2	1		1		1		8.0	240	126	72	36	18	114	7					
GN 08.2	General Physics. Part 1*							4.0	120	0				0	x					
GN 09	Engineering and Computer Graphics							5.0	150	0				0	x					
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*							4.0	120	0				0		x				
GN 11	Fundamentals of Metrology							3.0	90	0				0		x				
GN 12	Introduction to Speciality		1					2.0	60	36			36	24	2					
GN 13.1	Fundamentals of Circuits Theory. Part 2	1		1	1			5.0	150	90	36	36	18	60	5					
GN 13.2	Fundamentals of Circuits Theory. Part 1**		1	1		1		3.0	90	72	36	36		18	4					
GN 14	Electrodynamics and Propagation of Radio Waves	2		2	2			7.0	210	126	54	36	36	84		7				
GN 15	Fundamentals of Electronic Communications Networks		3	3		3		3.0	90	54		18	36	36			3			
GN 16	Signals and Processes in Radio Engineering	3		3	3			5.0	150	90	36	36	18	60			5			
GN 17	Digital Signal Processing	4		4	4			5.0	150	90	36	36	18	60				5		
GN 18	Circuit Engineering	3		2,3	2,3			7.0	210	144	72	36	36	66		3	5			
GN 19.1	Foreign Language for Professional Purposes. Part 1		4	3				3.0	90	72		72		18			2	2		
GN 19.2	Foreign Language for Professional Purposes. Part 2	6		5				3.0	90	56		56		34					2	2
GN 20	Introduction to Philosophy*							2.0	60	0				0				x		
GN 21	Environmental Protection Strategy*							2.0	60	0				0			x			
GN 22	Business Law *							2.0	60	0				0						x
GN 23	Labor Safety and Civil Defense*							4.0	120	0				0	x					
	Total number of part 1.1	11	5	15	6	6	0	120	3600	1298	450	560	288	982	29	18	15	7	2	2
	1.2. Professional training cycle																			
PN 01	Programmable means in intelligent radio electronic equipment	3		3	3			5.0	150	90	18	72		60			5			
PN 02	Intelligent Elements Design of Radio Electronic Systems	4		4	4			6.0	180	108	54	36	18	72				6		
PN 03	Microwave Devices and Antennas	3		3	3			5.0	150	90	36	36	18	60			5			
PN 04	Communication Methods in Intelligent Radio Electronic Systems	5		5	5			5.0	150	90	54	18	18	60					5	
PN 05	Printed Circuit Boards Design	5		5	5			5.0	150	90	18	72		60					5	
PN 06	Communication Means in Intelligent Radio Electronic Systems**	1						5.0	150	0				150	x					
PN 07	Design and Production Technologies of Intelligent Radio Electronic Equipment	5		5	5			7.0	210	126	72	36	18	84					7	
PN 08	Information Protection in Intelligent Radio Electronic Systems		6	6	6			4.0	120	50	20	30		70						5
PN 09	Computer Simulation in Intelligent Systems		6	6	6			4.0	120	50	20	30		70						5
PN 10	Pre-diploma Practice		6					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		4					1.0	30	0				30				x		
PN 13	Communication Means in Intelligent Radio Electronic Systems. Coursework**		1					1.0	30	0				30	x					
	Total number of part 1.2	7	5	8	8	0	0	60	1800	694	292	330	72	1106	0	0	10	6	17	10
	TOTAL IN	18	10	23	14	6	0	180	5400	1992	742	890	360	2088	29	18	25	13	19	12
	2. Selective Educational components																			
	2.1. General training cycle																			
GS 01	Educational component 1 GU- Catalog		1	1				2,0	60	36	18	18		24	2					
GS 02	Educational component 2 GU- Catalog							2,0	60	0				0				x		
	Total number of part 2.1	0	1	1	0	0		4.0	120	36	18	18	0	24	2	0	0	0	0	0
	2.2. Professional training cycle																			
PS 01	Educational component 1 F- Catalog		2	2	2			4.0	120	54	18		36	66		3				
PS 02	Educational component 2 F- Catalog		2	2	2			4.0	120	54	18		36	66		3				
PS 03	Educational component 3 F- Catalog		2	2	2			4.0	120	54	18		36	66		3				
PS 04	Educational component 4 F- Catalog		3	3	3			4.0	120	54	18		36	66			3			
PS 05	Educational component 5 F- Catalog		3	3	3			4.0	120	54	18		36	66			3			
PS 06	Educational component 6 F- Catalog		4	4	4			4.0	120	54	18		36	66				3		
PS 07	Educational component 7 F- Catalog		4	4	4			4.0	120	54	18		36	66				3		
PS 08	Educational component 8 F- Catalog		4	4	4			4.0	120	54	18		36	66				3		
PS 09	Educational component 9 F- Catalog		4	4	4			4.0	120	54	18		36	66				3		
PS 10	Educational component 10 F- Catalog		5	5	5			4.0	120	54	18		36	66					3	
PS 11	Educational component 11 F- Catalog		5	5	5			4.0	120	54	18		36	66					3	
PS 12	Educational component 12 F- Catalog		5	5	5			4.0	120	54	18		36	66					3	
PS 13	Educational component 13 F- Catalog		6	6	6			4.0	120	50	20		30	70						5
PS 14	Educational component 14 F- Catalog		6	6	6			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	9	6	12	9	10
	TOTAL IN OPTIONAL educational components	0	15	15	14	0	0	60	1800	784	274	18	492	956	2	9	6	12	9	10
	TOTAL	18	25	38	28	6	0	240	7200	2776	1016	908	852	3044	31	27	31	25	28	22
									Exams						5	2	5	2	3	1
									Final Tests						4	4	3	6	3	5
									Course works						0	0	0	1	0	0
									Course projects						0	0	0	0	0	0
									Module test						7	6	8	6	7	4
									CGW, CW, GW						1	5	6	6	6	4
									Home Control Works (HCW)						4	1	1	0	0	0
									Abstracts						0	0	0	0	0	0

Registration number of the NP: 13853
* Recalculated.
** External.

Head of Science and Methodic Univercity Board - 172 Leonid URYVSKII

Dean REF Serhii MARTYNIUK

Head of the Department Andrii MOVCHANUK