V. PLAN OF EDUCATIONAL PROCESS

№ з/п	NAME OF THE COURE, PRACTICE, CCERTIFICATION	Semester distribution		Number of credits ECTS	Number of hours						Time breakdown in hours and credits by courses and semesters																																							
					total number of hours on the course	classroom				independent-training	I year										II year										III year										IV year									
							including:				semesters																																							
											1					2					3					4					5					6					7					8				
											hours				ECTS credits	hours				ECTS credits	hours				ECTS credits	hours				ECTS credits	hours				ECTS credits	hours				ECTS credits	hours				ECTS credits	hours				ECTS credits
		eexams	credits			total	lectures	practical classes, seminars	laboratories		lectures	practical classes, seminars	laboratories	independent-training		lectures	practical classes, seminars	laboratories	independent-training		lectures	practical classes, seminars	laboratories	independent-training		lectures	practical classes, seminars	laboratories	independent-training		lectures	practical classes, seminars	laboratories	independent-training		lectures	practical classes, seminars	laboratories	independent-training		lectures	practical classes, seminars	laboratories	independent-training		lectures	practical classes, seminars	laboratories	independent-training	
1	*2*	*3*	*4*	*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*	*53*	*54*	*55*
5.1. CORE CURRICULUM MODULE																																																		
5.1.1. SET OF COMPULSORY COURSES																																																		
5.1.1.1	Philosophy	**2**	**1**	**6**	*180*	64	32	32		116	16	16		58	**3**	16	16		58	**3**																														
5.1.1.2	English for scientific communication	**4**	**1,2,3**	**12**	*360*	128		128		232		32		58	**3**		32		58	**3**		32		58	**3**		32		58	**3**																				
5.1.1.3	Methodology, organization and technology of scientific research	**3**	**1;2**	**9**	*270*	96	48		48	174	16		16	58	**3**	16		16	58	**3**	16		16	58	**3**																									
Total of Compulsory Courses		**3**	**6**	**27**	***810***	**288**	**80**	**160**	**48**	**522**	**32**	**48**	**16**	**174**	**9**	**32**	**48**	**16**	**174**	**9**	**16**	**32**	**16**	**116**	**6**		**32**		**58**	**3**																				
Total of disciplines of general preparation		**3**	**6**	**27**	***810***	**288**	**80**	**160**	**48**	**522**	**32**	**48**	**16**	**174**	**9**	**32**	**48**	**16**	**174**	**9**	**16**	**32**	**16**	**116**	**6**		**32**		**58**	**3**																				
5.2. PROFESSIONAL CURRICULUM MODULE																																																		
5.2.1. SET OF COMPULSORY COURSES																																																		
5.2.1.1	Statistical methods of information processing	**4**	**3**	**6**	*180*	64	32		32	116											16		16	58	**3**	16		16	58	**3**																				
5.2.1.2	Mathematical and simulation modeling of complex systems	**4**	**3**	**6**	*180*	64	32		32	116											16		16	58	**3**	16		16	58	**3**																				
5.2.1.3	Information systems and technologies in scientific researches	**4**	**3**	**6**	*180*	64	32		32	116											16		16	58	**3**	16		16	58	**3**																				
Total of compulsory disciplines		**3**	**3**	**18**	***540***	**192**	**96**		**96**	**348**											**48**		**48**	**174**	**9**	**48**		**48**	**174**	**9**																				
5.2.2. SET OF COURSES AT A FREE CHOICE OF A STUDENT																																																		
5.2..2.1	Surface physical and chemical processes	**5**	**4**	**6**	*180*	64	32		32	116																16		16	58	**3**	16		16	58	**3**															
	Methods of determining the properties of materials																																																	
5.2..2.2	System analysis		**4**	**3**	*90*	32	16		16	58																16		16	58	**3**																				
	Mathematical decision making methods																																																	
5.2..2.3	Deformation and destruction of materials	**6**	**5**	**6**	*180*	64	32	32		116																					16	16		58	**3**	16	16		58	**3**										
	Theoretical foundations of structuring scientific research, preparation of the manuscript and defense of the dissertation																																																	
Total of disciplines at the student's free choice		**2**	**3**	**15**	***450***	**160**	**80**	**32**	**48**	**290**																**32**		**32**	**116**	**6**	**32**	**16**	**16**	**116**	**6**	**16**	**16**		**58**	**3**										
Total of disciplines of professional training		**5**	**6**	**33**	***990***	**352**	**176**	**32**	**144**	**638**											**48**		**48**	**174**	**9**	**80**		**80**	**290**	**15**	**32**	**16**	**16**	**116**	**6**	**16**	**16**		**58**	**3**										
the total number		**8**	**12**	**60**	***1800***	**640**	**256**	**192**	**192**	**1160**	**32**	**48**	**16**	**174**	**9**	**32**	**48**	**16**	**174**	**9**	**64**	**32**	**64**	**290**	**15**	**80**	**32**	**80**	**348**	**18**	**32**	**16**	**16**	**116**	**6**	**16**	**16**		**58**	**3**										

	1	2	3	4	5	6	7	8	
The number of classroom hours per semester	**96**	**96**	**160**	**192**	**64**	**32**			**640**
The number of exams		**1**	**1**	**4**	**1**	**1**			**8**
Number of credits	**3**	**2**	**4**	**2**	**1**				**12**
Semester	*3*	*3*	*5*	*6*	*2*	*1*			