V. PLAN OF EDUCATIONAL PROCESS

№	TITLE OF EDUCATIONAL DISCIPLINE, PRACTICE, ATTESTATION	Distribution by semesters: exams	credits	course projects	course works	calculation and graphic work	test papers, abstracts	Number of ECTS credits	Number of hours: total hours of discipline	classroom: in all	including: lectures	practical, seminars	laboratory lessons	independent work
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	5.1. GENERAL TRAINING CYCLE													
	5.1.1. UNIT OF COMPULSORY ACADEMIC DISCIPLINES													
5.1.1.1	Philosophy	**2**	**1**					**6**	*180*	64	32	32		116
5.1.1.2	English for scientific communication	**4**	**1,2, 3**					**12**	*360*	128		128		232
5.1.1.3	Methodology, organization and technology of scientific research	**3**	**1,2**					**9**	*270*	96	48		48	174
	Total of compulsory disciplines	**3**	**6**					**27**	***810***	**288**	**80**	**160**	**48**	**522**
	5.2. PROFESSIONAL PREPARATION CYCLE													
	5.2.1. UNIT OF COMPULSORY ACADEMIC DISCIPLINES													
5.2.1.1	Statistical methods of information processing	**4**	**3**					**6**	*180*	64	32		32	116
5.2.1.2	Mathematical and simulation modeling of complex systems	**4**	**3**					**6**	*180*	64	32		32	116
5.2.1.3	Information systems and technologies in scientific researches	**4**	**3**					**6**	*180*	64	32		32	116
	Total of compulsory disciplines	**3**	**3**					**18**	**540**	**192**	**96**		**96**	**348**
	5.2.2. UNIT OF ACADEMIC DISCIPLINES BY THE ASPIRANTS CHOICE													
5.2.2.1	Distributed computer networks	**3**						**3**	*90*	32	16		16	58
5.2.2.2	Methods and models of protection in computer networks	**3**						**3**	*90*	32	16		16	58
5.2.2.3	Theory of coding	**3**						**3**	*90*	32	16		16	58
5.2.2.4	Neural networks in distributed computer systems		**3**					**3**	*90*	32	16		16	58
5.2.2.5	Evolutionary calculations in systems		**3**					**3**	*90*	32	16		16	58
5.2.2.6	Methods of mathematical logic		**3**					**3**	*90*	32	16		16	58
5.2.2.7	Mathematical methods of optimization of complex systems		**4**					**3**	*90*	32	16		16	58
5.2.2.8	Theory of random processes		**4**					**3**	*90*	32	16		16	58
5.2.2.9	The theory of automata		**4**					**3**	*90*	32	16		16	58
5.2.2.10	Additional sections of discrete mathematics		**4**					**3**	*90*	32	16		16	58
5.2.2.11	Theory of formal grammar	**5**						**3**	*90*	32	16		16	58
5.2.2.12	Models and methods of fuzzy logic	**5**						**3**	*90*	32	16		16	58
5.2.2.13	System analysis	**5**						**3**	*90*	32	16		16	58
5.2.2.14	Methods of automatic proofing of theorems	**5**						**3**	*90*	32	16		16	58
5.2.2.15	Mathematical methods of decision making	**5**						**3**	*90*	32	16		16	58
5.2.2.16	Innovative methods of teaching and teaching methods of professional disciplines		**6**					**3**	*90*	32	16		16	58
5.2.2.17	Methods of management of development of IT projects		**6**					**3**	*90*	32	16		16	58
5.2.2.18	Software development technologies		**6**					**3**	*90*	32	16		16	58
	Total of disciplines at a free choice	**2**	**3**					**15**	***450***	**160**	**80**		**80**	**290**
	Total of disciplines of professional training	**5**	**6**					**33**	**990**	**352**	**176**		**176**	**638**
	The total number of disciplines	**8**	**12**					**60**	**1800**	**640**	**256**	**160**	**224**	**1160**

Distribution of time in hours and credits by courses and semesters (I course: semesters 1, 2; II course: semesters 3, 4)

№	1: lectures	practical, seminars	laboratory lessons	independent work	ECTS credits	2: lectures	practical, seminars	laboratory lessons	independent work	ECTS credits	3: lectures	practical, seminars	laboratory lessons	independent work	ECTS credits	4: lectures	practical, seminars	laboratory lessons	independent work	ECTS credits
1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
5.1.1.1	16	16		58	**3**	16	16		58	**3**										
5.1.1.2		32		58	**3**		32		58	**3**		32		58	**3**		32		58	**3**
5.1.1.3	16		16	58	**3**	16		16	58	**3**	16		16	58	**3**					
Total of compulsory disciplines	**32**	**48**	**16**	**174**	**9**	**32**	**48**	**16**	**174**	**9**	**16**	**32**	**16**	**116**	**6**		**32**		**58**	**3**
5.2.1.1											16		16	58	**3**	16		16	58	**3**
5.2.1.2											16		16	58	**3**	16		16	58	**3**
5.2.1.3											16		16	58	**3**	16		16	58	**3**
Total of compulsory disciplines											**48**		**48**	**174**	**9**	**48**		**48**	**174**	**9**
5.2.2.1											16		16	58	**3**					
5.2.2.2											16		16	58	**3**					
5.2.2.3											16		16	58	**3**					
5.2.2.4											16		16	58	**3**					
5.2.2.5											16		16	58	**3**					
5.2.2.6											16		16	58	**3**					
5.2.2.7																16		16	58	**3**
5.2.2.8																16		16	58	**3**
5.2.2.9																16		16	58	**3**
5.2.2.10																16		16	58	**3**
5.2.2.11–5.2.2.18																				
Total of disciplines at a free choice											**32**		**32**	**116**	**6**	**16**		**16**	**58**	**3**
Total of disciplines of professional training											**80**		**80**	**290**	**15**	**64**		**64**	**232**	**12**
The total number of disciplines	**32**	**48**	**16**	**174**	**9**	**32**	**48**	**16**	**174**	**9**	**96**	**32**	**96**	**406**	**21**	**64**	**32**	**64**	**290**	**15**

Distribution of time in hours and credits by courses and semesters (III course: semesters 5, 6; IV course: semesters 7, 8)

№	5: lectures	practical, seminars	laboratory lessons	independent work	ECTS credits	6: lectures	practical, seminars	laboratory lessons	independent work	ECTS credits	7: lectures	practical, seminars	laboratory lessons	independent work	ECTS credits	8: lectures	practical, seminars	laboratory lessons	independent work	ECTS credits
1	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
5.2.2.11	16		16	58	**3**															
5.2.2.12	16		16	58	**3**															
5.2.2.13	16		16	58	**3**															
5.2.2.14	16		16	58	**3**															
5.2.2.15	16		16	58	**3**															
5.2.2.16						16		16	58	**3**										
5.2.2.17						16		16	58	**3**										
5.2.2.18						16		16	58	**3**										
Total of disciplines at a free choice	**16**		**16**	**58**	**3**	**16**		**16**	**58**	**3**										
Total of disciplines of professional training	**16**		**16**	**58**	**3**	**16**		**16**	**58**	**3**										
The total number of disciplines	**16**		**16**	**58**	**3**	**16**		**16**	**58**	**3**										

	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	Total
The number of classroom hours per semester	**96**	**96**	**224**	**160**	**32**	**32**			**640**
The number of exams		**1**	**2**	**4**	**1**				**8**
Number of credits	**3**	**2**	**5**	**1**		**1**			**12**
Semester	*3*	*3*	*7*	*5*	*1*	*1*			