## CIT Department's Curriculum for the 2019-2020 academic year -- Master's degree 122 "Computer Science in Engineering, Business and Medicine" (1 year and 4 months)

line		Semester Coursework Course project		ject			Hours  Classroom training						Number of classr hours in semeste		
scip	DIAGON DIEG TITLE		itroi	- IOM	proj	credits	amount					dent			
No. of discipline	DISCIPLINES TITLE	ms	sts	Coursework	urse	cre	am	al	Lectures	Lab. work	Practical training	Independent	1 cc	ourse	2 course
۸٥. ر		Exams	Tests	ŭ	ŝ	ECTS	Total	Total	Tol		Prac rain	Inde	1	2	3
		2		-		四 7		0		1.1		10	15	18	15
1	2 1 MANDATOR	3 X ED	4	5	6 L DIG	,	8 NEG	9	10	11	12	13	27	28	29
	1 MANDATOR						NES								
1.1.1	Intellectual property	scipiii	1	,cncr a	ti aii	2,0	60	14	10		5	46	1		Т
1.1.2	Methodology and organization of scientific research		1			2,0	60	30	15		15	30	2,0		
1.1.3	Methods for quality assurance of computer system components		2			4,0	120	36	18	18	- 10	84	_,-	2	
1.1.4	Labor protection in the industry and civil protection	1	_			3,0	90	30	15	10	15	60	2		+
1.1.5	Physical education	1				2,0	60,0	15	13		15	45			+
	Physical education		1			2,0	60	15			15	45	2+c		1
	Physical education		2ф*					C * - sec	tion clas	ses, F * -	optiona			C*	1
	Total p.1.1.:		1			13,0	390,0	125,0	58,0	18,0	50,0	265,0	5,0	2,0	0,0
	1.2 Disci	plines	of pro	fessio	nal tra	aining	•								
1.2.1	Theory of computerized design	1				4,5	135	45	30	15		90	3		
1.2.2	Computational intelligence technologies	2				4,5	135	54	18	36		81		3	
1.2.3	Distributed computer systems and networks		2			4,5	135	54	18	36		81		3	
1.2.4	Modern methods of designing programmable systems based on OOP	1				5,0	150	60	30	30		90	4		
	Modern methods of designing programmable systems based on OOP (Coursework)			2		1,0	30	18			18	12		1	
	Total p.1.2.:					19,5	585,0	231,0	96,0	117,0	18,0	354,0	7,0	7,0	0,0
		1.3 Pı	actica	l train	ing										
1.3.1	Research practice		1			5,0	150	1 day a week in 1 semester (90 hours)							
1.3.2	Pre-diploma practice		3			6,0	180	4 weeks + 1 day a week in 3 semesters (90 hours)							
1.3.3	Master's thesis		3			21,0	630								
	Total p.1.3.:					32,0	960							<u> </u>	

		1.4 St	ate cei	tificat	tion										
1.4.1	1.4.1 Protection of Master's thesis					3,0	90	2 weeks in semester 3							
	Total p.1.4.:					3,0	90								
	Total for the regulatory disciplines					67,5	2025,0	356,0	154,0	135,0	68,0	619,0	12,0	9,0	0,0
	2. SE	ELEC'	TIVE	DISCI	PLIN	ES									
	2.1 Dis	sciplir	nes of	genera	ıl train	ing									
Discipline	1 semester		1			1,5	45	30	15		15	15	2		
Discipline 2 semester - 1			2			2,0	60	36			20	24		2	
Discipline 2 semester - 2		2				5,0	150	54	36		18	96		3	
	Total p.1.1					8,5	255,0	120,0	51,0	0,0	53,0	135,0	2,0	5,0	0,
		Set of	f discip	olines .	<b>№</b> 1		-					-			
2.1.1	Foreign language (for professional purposes)					3,5	105	66			66	39			
	Foreign language (for professional purposes)		1			1,5	45	30			30	15	2		
	Foreign language (for professional purposes)		2			2,0	60	36			36	24		2	
2.1.2	Modern methods of organization and analysis of data	2				5,0	150	54	36		18	96		3	
		Set of	f discip	olines .	№2										
2.1.3	Evaluating the effectiveness of design solutions		1			1,5	45	30	15		15	15	2		
2.1.4	Scientific work and principles of its organization		2			2,0	60	36	18		18	24		2	
2.1.5	System analysis of the subject area	2				5,0	150	54	36		18	96		3	
	2.2 Disci	plines	of pro	ofessio	nal tra	ining									
Discipline	1 semester - 1	2				5,0	150	54	18	36		96		3	
Discipline	1 semester - 2		1			5,0	150	45	15	30		105	3	<u></u>	
Discipline	2 semester		2			4,0	120	54	36	18		66		3	
	<b>Total p.2.2.:</b>					14,0	420,0	153,0	69,0	84,0	0,0	267,0	3,0	6,0	0,
		Set of	f discip	olines .	№1										
2.2.1	Calculations and computer-aided design of optimal structures	2				5,0	150	54	18	36		96		3	
2.2.2	Planning and processing of research results		1			5,0	150	45	15	30		105	3	<del></del>	
2.2.3	Virtual and augmented reality technologies		2			4,0	120	54	36	18		66		3	

		Set of	discip	lines J	<b>№</b> 2										
2.2.4	Regenerative engineering and design of optimal structures	2				5,0	150	54	18	36		96		3	
2.2.5	Mathematical modeling in biotechnical systems		1			5,0	150	45	15	30		105	3		
2.2.6	Virtual and augmented reality technologies		2			4,0	120	54	36	18		66		3	
	Total for the selective disciplines					22,5	675,0	273,0	120,0	84,0	53,0	402,0	5,0	11,0	0,0
Total															
	Total amount:					90,0	2700,0	629,0	274,0	219,0	121,0	1021,0	17,0	20,0	0,0
									Number	of exams	3		3	3	
									Number	r of tests			5	4	1
							Nur	nber of c	ourse pro	jects and	coursev	vorks		1	КРМ
									No. of s	semester			1	2	3
													30,0	30,0	30,0

Head of CIT dept.	 O. Tarasov
FAMIT's Dean	 S. Podlesnij