MINISTRY FOR HIGHER AND SECONDARY SPECIALIZED EDUCATION OF THE REPUBLIC OF **UZBEKISTAN**

"APPROVED" Rector of the Bukhara state University
University
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COX Xamidov
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"AGREED"

Minister of Higher and Secondary Specialized education of the Republic of Uzbekistan

> I.Majidov 2019

"APPROVED"

President of Holon institute of Technology, Israel

Eduard Yakubov 2019

CURRICULUM

Direction: Industrial mathematics (5130200 – Amaliy matematika va informatika)

Academic level: Bachelor Form of education: Module-Credit **Duration:** 4 years Module of program: 3+1

I. SCHEDULE OF EDUCATIONAL PROCESS

																												Т	he numl educa	tional p	orocess			
																												1 48		From	this:			
GRADE								W	EE	KS																		Subtotal	Theoretical and ractical education	amination	Introduction	al Thesis	Holidays	Total
	September	October	November	December	r	Janu	ary	Feb	ruary	T	Mar	ch		Api	ril		May	,	Γ.	June			July	v	TA	Aug	ust	0	Theoret actical	Exa	Intr	Final		
	1 2 3 4 5	6 7 8 9	10 11 12 13 14	4 15 16 17 18	8 19	20 21	22 23	24 25	26 27	28	29 30	31	32 33	343	35 36	37	38 39	40	414	12 43	44	45	16 4	7 48		50			T					
I	C			H	H	E	EE													EE	E	Н	HH	H	Н	Н	НН	42	36	4	2	-	10	52
II				H	Н	E	EE													EE	E	Н	HH	H	Н	Н	НН	42	36	6			10	52
Ш				H	Н	E	EE													EE	Е	Н	HI	H	Н	Н	НН	42	36	6			10	52
IV				E	E	НН	НН	НН	FF	F	FF	F	FF	F	FF	F	FF	F	F	Н	Н	Н	HH	H				35	16	2	1	16	13	48
	515525																									To	tal	161	124	18	3	16	-	204
													*														1							
		1	Theoretical an	1 1		Exa	mina	tion	1		Inte	erns	hip		C	I	ntro	duc	tion		F		F	ina	I Th	nesi	s	Н	Hol	idays				

II. CURRICULUM

				(Conta	et h	ours		pı						Cont	act ho	urs		р
Blocks	Title of the course	Credits	Total Hours	Sub total	Lecture	Practice	Laboratory	Seminars	Students workload	Blocks	Title of the course	Credits	Total Hours	Sub total	Lecture	Practice	Laboratory	Seminars	Students workload
	1-se	mester									2	-seme	ester						
1	Basic English	. 8	204	144		144			60	1	English for academic purposes	8	204	144		144			60
2	Information technologies	6	152	108	36	72			44	2	Information technology	6	152	108	36	72			44
3	Basic mathematics	5	102	72	36	36			55	3	Selected topics in Mathematics	4	102	72	36	36			30
4	Introduction to physics	5	102	72	36	36			55	4	Introduction to Biology	3	51	36	18	18			40
5	Multidisciplinary Studies	6	152	108	36	72			44	5	Introduction to Chemistry	3	51	36	18	18			40
7	. 3445									6	Multidisciplinary Studies- Biomimicry as a model for innovation	6	152	108	36	72			44
	Total (semester):	30	762	504	144	360			258		Total (semester):	30	762	504	144	360			258
											Total (year):	60	1524	1008	288	720			516
	3-sei	mester	teet.								4	-seme	ester						
1	Calculus 1	8	204	144	90	54			60	1	Calculus 2	6	152	108	72	36			44
2	Lenear Algebra	6	152	108	72	36			44	2	Algorithms in multimedia and machine learning using Python	5	127	90	36	54			37
3	Introduction to computer science	6	152	108	72	36			44	3	Discrete mathematics	6	152	72	54	18			30
4	Multidisciplinary Studies – Global economics and regional influences	2	51	36	18	18			15	4	Probability	4	102	72	54	18			30
5	Elective Course	6	152	72	54	18			30	5	Multidisciplinary Studies – Technology, Innovation and New Media	2	51	36	36	0			15
6	Industrial project 1	2	51	36	18	18			15	6	Elective Course	4	102	72	54	18			30
										7	Industrial project 2	3	76	54	18	36			22
1	Total (semester):	30	762	504	324	180			208		Total (semester):	30	762	504	324	180			208
							-	-			Total (year):	60	1524	1008	648	360		-	416

	5-sei	nester							6	-seme	ester				
	Jumeral Analysis	6	152	108	72	36	44	1	Partial Differential equations	4	102	72	54	18	30
1	Graph Theory	4	102	72	54	18	30	2	Fourier Series and Integral Transforms	4	102	72	54	18	30
3	Data structures	6	152	90	54	36	62	3	Complex Functions	4	102	72	54	18	30
4	Ordinary Differential Equations	4	102	72	54	18	30	4	Multidisciplinary Studies – Facial Expressions – from Darwin until the present	2	51	36	18	18	15
5	Advanced programming Workshop	6	152	102	50	52	50	5	Elective Course	4	102	72	36	36	30
6	Elective Course	4	102	72	36	36	30	6	Elective Course	4	102	72	36	36	30
								7	Elective Course	4	102	72	36	36	30
								8	EC(network and interenet security)	4	102	72	36	36	30
	Total (semester):	30	762	516	320	196	246		Total (semester):	30	765	540	324	216	225
									Total (year):	45	1527	1056	644	412	471
	7-ser	nester							8	-seme	ster				
1	Introduction to Modern Analysis	4	108	72	54	18	30	1	Sequential Modifies in Data Science	4	102	72	54	18	30
2	Object Oriented Programming	6	152	108	72	36	44	2	Algorithms in Optimization	4	102	72	54	18	30
3	Design and Analysis of Algorithms	5	127	90	54	36	37	3	Machine Learning	4	102	72	54	18	30
4	Mathematical Models	4	102	72	54	18	30	4	Digital Signal Processing	5	127	90	54	36	37
5	Elective Course	4	102	72	36	36	30	5	Elective Course	4	102	72	36	36	30
6	Elective Course	4	102	72	36	36	30	6	Elective Course	4	102	72	36	36	30
	Total (semester):	27	693	486	306	180	201		Total (semester):	25	637	450	288	162	187
									Total (year):	52	1330	936	594	342	388
									Total (4 years):	232	5905	4008	2174	1834	1791

Definitions:

State orderer for specialist: UR

center for the provision of state services of Bukhara region

1. This program is based on the Resolution of the President of the Republic of Uzbekistan PQ-2909 in 20th of April, 2017 "On Measures for Further Development of Higher Education System" in 27th of July, 2017, PQ-3151 "Measures to Extend the Participation of the Spheres and Industries in Higher Education" and PQ-3775 in 5th of June, 2018 "Enhance the quality of education in higher education institutions and take additional measures to ensure their active participation in the country's comprehensive reforms".

2. Monitoring and evaluation of students' knowledge is carried out in accordance with the module-credit system.

3. The requirements of the stakeholders are taken into consideration when developing elective course.

4. This curriculum is implemented from 2019-2020 academic years.

Head of the Main Department control over the introduction of new programs and educational literature	S.Niyazbekov	Approved by the Coordinating Council of the activities of educational associations in the areas of higher and secondary special education under the Ministry of Higher and Secondary Special
Head of Department		Education.
spiritual and moral education	O.Bazarov	
Director of Higher Education Development Research and Advanced Technology Center	Z.Xakimov	Protocol Nofrom "" 2019
Bukhara state University		Holon institute of Technology, Israel
Vice Rector for Academic Affair M.I. Damir		Vice-President for Academic Affairs Prof. D.Shoikhet
Head of educational-methodical department M.Ya. Ergasher	rtment v	