Kyrgyz State University of Geology, Mining and Natural Resources Development named after academic U. Asanaliev

CURRICULUM

Direction: 630100 - APPLIED GEOLOGY PhD Education Program: APPLIED GEOLOGY Qualification: DOCTOR BY PROFILE (PhD)

Rector of KSMU n.a. academic U. Asanaliev Signature Prof. Dr. A.O. Maralbaev

Study period: 3 YEARS

Protocol # 7_ Academic Council of KSMU n.a. academic U. Asanaliev

"APPROVED"

from " <u>25</u> " <u>March</u> 2021 Γ.

Education form: FULL TIME

1. Academic calendar

		Weeks of the academic year																																															
Ye	ar	SEPT	EMBE	R	(СТОВЕ	ER			NC	VEMI	BER			I	DECEMI	BER			JAN	UARY		FE	BRUA	RY		I	MARC	Ή			AP	RIL			N	MAY				JUNE	1		JUL	_Y			AUGU	JST
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23 2	4 25	5 26	27	28	29	30	31	32	33	34	35	36	37	38 3	39 4	40	41 4	2 4	3 44	45	46	47	48	49	50 :	51 52
1			EE			•	•	•	•	•	•				•		•		•	•		E	E =	=		•	•	•		•	•	•	•	•	•	•	•	•	•	• 1	E E	: =	=	=	=	=	=	= :	= =
2	R	R	R	R	R	R	R	R	R	R	R	R	R	SRI	SRI	SRI	SRI	SRI	E	=	=	=	= B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R E	=	=	=	=	=	=	= :	= =
3	=	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	E	=	= B	R	R	R	R	R	R	R	R	R	R	R	R	E F	PDD E	PD E	EPD I	EPD E	PD DI	D =	=	=	=	=	=	= :	= =

2. Summary of time budget in weeks

			1 year			2 year			T.4.1		
		Semester 1	Semester 2	Subtotal	Semester 3	Semester 4	Subtotal	Semester 5	Semester 6	Subtotal	Total
EE	Entrance examinations	5		5							5
•	Theoretical studies	16	16	32							32
E	Examinations	2	2	4	1	1	2	1	1	2	8
R	Scientific -Research work, incl. a doctoral dissertation				13	19	32	19	13	32	64
SRI	Scientific -research internship				5		5				5
PDD	Pre-defense of the doctoral dissertation								1	1	1
FPD	Final preparation of the doctoral dissertation								4	4	4
DD	Defense of the doctoral dissertation								1	1	1
=	Holidays	2	9	11	4	9	13	3	9	12	36
	Total:	25	27	52	23	29	52	23	29	52	156

3. PLAN OF THE LEARNING PROCESS

				Acaden	nic vol	ume in h	nours		QA form	ı				Distr	ribution of teachin	g hours per sem	esters				
						include	d						1 ye	ar	2 y	ear		3 year	•	Res-	Realized
No.	Course names	ECTS credits	m . 1: 1	Class				Self	F.()		1 s	emeste	r	2 semester	3 semester	4 semester	5 semester	r	6 semester	pons	competence according to
			Total in hrs	hrs	Lec	Prac	Lab	study	E (sem,)		16	weeks		16 weeks	16 weeks	16 weeks	16 weeks		16 weeks	dept.	NQF
										L	ec	Prac 1	Lab	Lec Prac Lab	Lec Prac Lab	Lec Prac Lab	Lec Prac L	ab L	ec Prac Lab		
								BL	оск і												
						I.	COUR	SES OF	THE DIF	RECT	Ю	N									
D.1.0.	COMPULSORY COURCES	10	300	90	45	45		210													
D.1.2.	SPATIAL DATA SCIENCE	10	300	90	45	45		210	2					45 45						WOR&G	NQF Level 8
D.1.3.	ELECTIVE COURCES	15	450	135	45	90	0	315													
D.1.3.1	SCIENTIFIC RESEARCH METHODOLOGY AND METHODS / ACADEMIC WRITING AND COMMUNICATION	5	150	45	15	30		105	1	1	15	30								CB&S	NQF Level 8
D.1.3.2	HISTORY AND PHILOSOPHY OF SCIENCE / SCIENTOMETRICS	5	150	45	15	30		105	1	1	15	30								PS&HS	NQF Level 8
D.1.3.3	MODERN DATA ANALYSIS METHODS - GEOSTATISTICS, NEURAL NETWORKS - PROGRAMMING BASICS	5	150	45	15	30		105	1	1	15	30								WOR&G	NQF Level 8
	SUBTOTAL of CYCLE 1 (in academic hours)		750	225	90	135	0	525				135		90							
	SUBTOTAL of CYCLE 1 (in ECTS credits)	25										15		10							
					II. (COURS	SES FO	R THE	SPECIAL	IZE	D T	RAIN	NG								
D.2.0.	COMPULSORY COURCES	15	450	135	60	45	30.0	315													
D.2.1.	DIGITAL TECHNOLOGIES IN APPLIED GEOLOGY: MODELING OF GEOLOGICAL OBJECTS AND PROCESSES	10	300	90	45	45		210	1	4	15	45								WOR&G	NQF Level 8
D.2.2.	ADVANCED GEOINFORMATION TECHNOLOGIES IN GEOLOGY	5	150	45	15		30	105	1	1	15		30							G	NQF Level 8
D.2.3.	ELECTIVE COURCES	15	600	180	75	45		420													
D.2.3.1	INNOVATIVE METHODS AND TECHNOLOGIES IN SEARCH AND EXPLORATION OF MINERAL RESOURCES	10	300	90	45	45		210	2					45 45						G	NQF Level 8
D.2.3.2	MODERN METHODS AND TECHNOLOGIES OF REMOTE SENSING IN GEOLOGY	10	300	90	30		60	210	3					30 60						WOR&G	NQF Level 8
	SUBTOTAL of CYCLE 2 (in hours)		1050	315	135	90	30	735				135		180							
	SUBTOTAL of CYCLE 2 (in ECTS credits)	30					<u>L</u>	<u> </u>				15		20							
	TOTAL for BLOCK I (in hours)		1800	540				1260				270		270							
	TOTAL for BLOCK I (in ECTS credits)	55										30		30							

BLOCK II																										
	SCIENTIFIC RESEARCH WORK (INCLUDING DOCTORAL DISSERTATION WORK) AND INTERNSHIP																									
				Acade	mic volume in	hrs							Di	istrib	ution	by se	mest	er, in	cred	its					Res-	Realized
No.	Course names	ECTS credits	Total in	Class	include	ed	Self	E	Total		semeste 16 week	_	2 semester 16 weeks		semes 6 wee			semes 6 wee			emes wee			semes 6 weel	 pons	competence
		credits	hrs	hrs	Lec Prac	Lab	study		weeks		1		Lec Prac La			Lab		1	T			Ιa		Prac	dept.	according to NQF
R.3.1	SCIENTIFIC RESEARCH WORK	100	3000	900	900		2100	3-6	83						180			270			270			180	WOR&G	NQF Level 8
R.3.2	3.2 SCIENTIFIC RESEARCH INTERNSHIP 10 300 90 90 210 3 8 90 90												WOR&G	NQF Level 8												
	TOTAL for BLOCK II (in hours) 3300 270 270 180																									
	TOTAL for BLOCK II (in ECTS credits) 110 30 30 30 20																									
BLOCK III																										
]	FINAL	STATE	EXA	AMINA	OIT	N															
No.	Course names																								Res-pons dept.	
FSE.1	PREPARATION AND DEFENSE OF THE DOCTORAL DISSERTATION	10	300	90	90		210	6	6															90	WOR&G	NQF Level 8
	TOTAL for BLOCK III (in hours) 300 90																									
	TOTAL for BLOCK III (in ECTS credits) 10																							10		
•	Number of exams										5		3		2			1			1			2		
•	TOTAL (in hours)		5400								270		270		270			270		270 27				270		
	TOTAL (in ECTS credits)	175									30		30		30			30			30		<u> </u>	30		

The curriculu	ım was reviewed and ado	pted by the Academic Council of the KSMU n.	a. academic U. Asanaliev	Protocol No7_ from	m _25.03 2021
Vice rector for science	Signature	K.K. Orozov			

Vice rector for academic affairs _____Signature_____N.N. Kydyraliev