KYRGYZ STATE UNIVERSITY OF CONSTRUCTION, TRANSPORT AND ARCHITECTURE named after N.ISANOV

CURRICULUM

Direction: 620100 - GEODESY AND REMOTE SENSING

PhD Education Program: GEODESY AND GEOINFORMATION TECHNOLOGIES

Qualification: DOCTOR BY PROFILE (PhD)

Study period: 3 YEARS

Education form: FULL TIME

"APPROVED" Rector of KSUCTA n.a. N.Isanov

_____Prof. Dr. A.A.Abdykalykov

Protocol # 6 Academic Council of KSUCTA n.a. N.Isanov

from "<u>26</u>" <u>February</u> 2021

1. Academic calendar

																							Wee	eks o	of th	e aca	ıdem	ic ye	ar																					
Year		SEPT	EMBE	R	(остов	ER			NC	OVEMI	BER			DI	ЕСЕМВ	ER			JAN	UARY		1	FEBR	UARY	7		M	ARCH	I			APRIL				MA	Y			JUI	NE			JUL	Y		A	UGUST	ſ
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31 3	32	33 34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49 5	50 51	52
1			EE			•	•		•			•						•		•	•	E	E	11	=		•	•	•	•				•			•	•			E	E	=	=	=	=	=		- -	=
2	R	R	R	R	R	R	R	R	R	R	R	R	R	SRI	SRI	SRI	SRI	SRI	E	=	=	=	=	R	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	=	=	R	R	R	R	R	R	R	R	R	R R	R	R	E	PDD	FPD	FPD	FPD	FPD	DD	=	=	-	-	-			-

2. Summary of time budget in weeks

			1 year			2 year					
		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

			Academic volume in hours							(A for	rm					Dist	tributi	on of te	aching	g hours per	r seme	sters				Realized
NI-	C	ECTS credits				include	d							1 ye	ear				2 ye	ear			3 у	ear	Res-	competence
No.	Course names	EC18 credits	Total in hrs	Class	_	_		Self	F	E (sem	n,)		meste			ıester		3 semest		4 semes		5 sem		6 semester	pons dept.	according to
				hrs	Lec	Prac	Lab	study			-		weeks Prac			veeks	h Le	16 weel		16 wee			eeks	16 weeks		NQF
				Lec Prac Lab Lab													Lee True Lub									
	I. COURSES OF THE DIRECTION																									
D.1.0.	COMPULSORY COURCES	10	300	90	45	45		210																		
D.1.1.	SPATIAL DATA SCIENCE	10	300	90	45	45		210	2						45 4	15									G&G	NQF Level 8
D.1.2.	ELECTIVE COURCES	15	450	135	45	90		315															•			
D.1.2.1	SCIENTIFIC RESEARCH METHODOLOGY AND METHODS / ACADEMIC WRITING AND COMMUNICATION	5	150	45	15	30		105	1			15	30												CB&S	NQF Level 8
D.1.2.2	HISTORY AND PHILOSOPHY OF SCIENCE / SCIENTOMETRICS	5	150	45	15	30		105	1			15	30												PS&HS	NQF Level 8
D.1.2.3	INTRODUCTION TO GEOSPATIAL PROGRAMMING / APPLIED MATHEMATICS AND STATISTICS	5	150	45	15	30		105	1			15	30												G&G	NQF Level 8
	SUBTOTAL of CYCLE 1 (in academic hours)		750	225	90	135		525					135		9	00										
	SUBTOTAL of CYCLE 1 (in ECTS credits)	n ECTS credits) 25 15 10																								
					II.	COURS	ES FOI	R THE	SPEC	CIAL	IZED	TRA	ININ	G												
D.2.0.	COMPULSORY COURCES	15	450	135	60	45	30	315																		
D.2.1.	COORDINATE SYSTEMS IN GEODESY	10	300	90	45	45		210	1			45	45												G&G	NQF Level 8
D.2.2.	ADVANCED GEOINFORMATION TECHNOLOGIES	5	150	45	15		30	105	1			15		30											G&G	NQF Level 8
D.2.3.	ELECTIVE COURCES	20	600	180	75	45		420											1	l						
D.2.3.1	INTEGRATED POSITIONING AND NAVIGATION / PHYSICAL GEODESY	10	300	90	45	45		210	2						45 4	15									G&G	NQF Level 8
D.2.3.2	REMOTE SENSING APPLICATIONS IN LAND AND ENVIRONMENTAL MANAGEMENT / SPATIAL DATA INFRASTRUCTURE	10	300	90	30		60	210	3						30	61	0								G&G	NQF Level 8
	SUBTOTAL of CYCLE 2 (in hours)		1050	315	135	90	30	735					135		1	80										
	SUBTOTAL of CYCLE 2 (in ECTS credits)	35											15		2	20										
	TOTAL for BLOCK I (in hours)		1800	540				1260					270		270											
	TOTAL for BLOCK I (in ECTS credits)	60											30		3	80										

BLOCK II																									
SCIENTIFIC RESEARCH WORK (INCLUDING DOCTORAL DISSERTATION WORK) AND INTERNSHIP																									
	Academic volume in hrs Distribution by semester, in credits										Realized														
No.	Course names	ECTS	m . 1 .	CI.	include	d	G 16	E	Total		semester		semester	3 seme		_	emes			semester	_	semes	tei	Res-	competence
140.	Course names	credits	Total in hrs	Class hrs	Lec Prac	Lab	Self study	E	weeks		16 weeks		6 weeks	16 weeks			wee					6 wee	. d	ons lept.	according to
			1113	1113	Lee True	Lab	study			Lec	Prac Lab	Lec	Prac Lab	Lec Prac La		Lec	Prac	Lab	Lec	Prac La	b Lec	Prac	Lab	1	NQF
R.3.1	SCIENTIFIC RESEARCH WORK	100	3000	900	900		2100	3-6	83					180			270			270		180		G&G	NQF Level 8
R.3.2	SCIENTIFIC RESEARCH INTERNSHIP	10	300	90	90		210	3	8					90										G&G	NQF Level 8
	TOTAL for BLOCK II (in hours) 3300 270 270 1												180												
	TOTAL for BLOCK II (in ECTS credits) 110 30 30 30 30 20																								
BLOCK III																									
					1	FINAL	STATE	EXA	MINATI	ON															
No.	Course names																							Res- pons dept.	
FSE.1	PREPARATION AND DEFENSE OF THE DOCTORAL DISSERTATION	10	300	90	90		210	6	6													90		G&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		270			
	TOTAL (in ECTS credits)	180									30		30	30			30			30		30			

The curriculum was reviewed and adopted by the Academic Council of the	ne institute of construction and technology, Protocol No. <u>6</u> from <u>22.02.</u> 2021
Director of the Institute of Construction and Technology	Candidate of Physico-Mathematical Sciences, Associate Professor Zh.Y. Mamatov
Head of the Department of Postgraduate Doctoral Studies	Candidate of Technical Sciences, Associate Professor M.A. Dzhusupova
Director of the Geodesy and Geoinformation technologies (PhD) Program	1 <u>Signature</u> Candidate of Technical Sciences, Acting Professor A.U. Chymyrov
"Geodesy and geoinformation technologies" PhD Education Program	is developed within the Erasmus+ CBHE Project: 617695-EPP-1-2020-1-ES-EPPKA2-CBHE-JP

"Developing Interdisciplinary Postgraduate Programmes and Strengthening Research Networks in Geoinformation Technologies in Armenia and Kyrgyzstan" (GeoTAK)