KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY named after K.I.SATIRYEW



Chairman of the Management Board Rector of Kaznin named affer K.Satpayev M.M.Begentaev A.M.Begentaev A.M.Begentaev

рттеу

CURRICULUM of Educational Program on enrollment for 2023-2024 academic year

Educational program 6B07218 - "Technology of foundry production" Group of educational programs B069 - "Production of materials (glass, paper, plastic, wood)"

LNG 108 Engl LNG 104 Kaza LNG 104 Kaza Fill LNG 104 Phys 104 Fill CSE 677 Info tech HUM 137 Hist Fill HUM 132 Phill Soc HUM 134 Soc Geo HUM 134 Soc Creat HUM 136 Fur ent HUM 138 Soc Creat HUM 138 Soc Creat MNG 489 Fur ent HPP128 Soc Creat CHE 656 Ecc Creat GEN 429 En Phy GEN 429 En Phy PHY533 Fu ChE127	Name of disciplines GENERAL EDUCATION glish language zakh (Russian) language ysical Culture ormation and communication hnologies (in English) story of Kazakhstan ilosophy cicio-political knowledge module bciclogy, politology) wcio-political knowledge module ulturology, psychology) undamentals of anti-corruption lture		10 10 8 5	M-1 300 300 M-240 M-3. N 150	classroo m volume of lek/lab/p Module 0/0/6 2 Module 0/0/8 Vodule of 2/1/0	210 210 e of phys 120	E E sical trai Difcredit	1 semester 5 5 ning 2	urse 2 semester 5 5 2	3	4 semester	5semeste	ourse 6 semester	IV cc 7 semester	8
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HUM 134 (cul HUM 136 Fur cult MNG 489 Fur entr HPP128 Sci CHE 656 Ecc CYCLE OF MAT 101 MA PHY 468 Phy MAT 102 Ma GEN 429 En PHY533 Fu CHE127 Ph	ulturology, psychology) Indamentals of anti-corruption Iture		3	90	1/0/1	00								-	
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HUM 136 cult MNG 489 Fur HPP128 Sci CHE 656 ECC CYCLE OF MAT 101 Ma PHY 468 Phy MAT 102 Ma GEN 429 En PHY533 Fu CHE127 Ph	lture	M-4	5 Modul	e of anti	i-corrupti	ion cultu	re, ecolo	gy and l	ife safety	base					_
HUM 136 cult MNG 489 Fur HPP128 Sci CHE 656 ECC CYCLE OF MAT 101 Ma PHY 468 Phy MAT 102 Ma GEN 429 En PHY533 Fu CHE127 Ph	lture	141-2		- or anti											
енні нРР128 Sci СНЕ 656 Есс СҮСLЕ ОГ МАТ 101 Ма РНУ 468 Рhу МАТ 102 Ма СНЕ 429 Еп РНУ 533 Fu СНЕ 127 Рh	indamentals of economics and	GED, CCH	5	150	2/0/1	150	E	r				1.1			
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MAT 101 Ma PHY 468 Phy MAT 102 Ma GEN 429 En PHY533 Fu CHE127 Ph	cientific research methods					1									
MAT 101 Ma PHY 468 Phy MAT 102 Ma GEN 429 En PHY533 Fu CHE127 Ph	BASIC DISCIPLINES (B	D)													
PHY 468 Phy MAT 102 Ma GEN 429 En PHY533 Fu CHE127 Ph	BASIC DISCIPLINES (D.	D)	M-0	6. Modu	le of phys	sical and	mathem	natical tr	aining						_
PHY 468 Phy MAT 102 Ma GEN 429 En PHY533 Fu CHE127 Ph	lathematics I	BD, UC	5	150	1/0/2	105	E	5						-	-
MAT 102 Ma GEN 429 En PHY533 Fu CHE127 Ph	hysics	BD, UC	5	150	1/1/1	105	E	5						-	
GEN 429 En PHY533 Fu CHE127 Ph	fathematics II	BD, UC	. 5	150	1/0/2	105	E		5						
PHY533 Fu CHE127 Ph		55, 55		M-7. Ba	sic gener	al techni	ical trair	ning mod	lule					1	_
PHY533 Fu CHE127 Ph	ngineering and computer	BD, UC	5	150	1/0/2	105	E	5							
CHE127 Ph	undamentals of materials science	BD, UC	4	120	2/1/0*	75	E	4		-		_		-	-
	hysical chemistry	BD, UC	5	150	1/1/1*		E			5	-	-		-	
	trength of materials	BD, UC	5	150	1/1/1*	105	E				-	5			
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PHY561 M	Aechanical properties of materials	BD, UC	6	180	2/1/1*	120	E	-		6	-	1			
PHY544 an	Application by chemical methods and study of the properties of the obtained thin films	BD, CCH	5	150	2/0/1/	105	E			5					
PHY495 DH	Deusing of Strongth and Dissticity				1/1/1/				1						
FI	Physics of Strength and Plasticity Metallography	BD, UC	5	150	2/1/0*	105	E					5			
	Mechanics of Materials	BD, UC	5	150	1/0/2*	105	E					5		-	
1111470	Fundamentals of space materials	.,			2/0/1/	'				1		-			
DUV501 D	Fundamentals of space materials Defects in the Crystal Structure of Materials	f BD, CCH	5	150	1/1/1/	105	E					5			
E	Fundamentals of Heat Treatment	PD, UC	5	150	1/1/1*	* 105	E							5	
PHY485 ai	and Surface Hardening		_	150										5	
	Functional materials Non Metallic Materials and	PD, UC	5										1 A.	6	
PHY542 T	Technologies Physics of semiconductor	PD, UC		180		-					_		4		
PHY543 m	materials	PD, UC	4	120	2/1/0	15						-	-		-
PHY 548 C	Physicochemical principles of coating	PD, CCH	4	120	2/0/1	15	E						4		
	Fundamentals of laser ablation	-													
PHY569 F fr PHY552 I	Fundamentals of designing	BD, CCH	H 6	180	2/1/1 2/1/1 2/1/1	1/ 120) E							6	

PHY554	Physics of Low-Dimensional			-	2/1/1/								1.1.1		
PHY526	firethous for studying powder and	PD, CCH	5	150	1/1/1/	105	E						1111	5	
HY527	Memous for proddeing powder	rb, cen	21	150	1/1/1/	105	-			2				1	1999
HY557	selection				1/1/1/									1. 1. 1	
	Methods for calculating phase	PD, CCH	5	150	1/1/1/	105	E				1.1	Sec. 1			5
PHY558	diagrams					-					-	1.1	1		1.1.1
		DD UG		150	2/1/0*	Foundry			5						144
PHY562	Foundry technology	BD, UC	5	150	2/1/0*	105	E		2		5				
PHY563	Foundry basics	BD, UC	5	150 150	2/1/0*	105	E				5		-		
PHY564	Construction and a large state of the second s	BD, UC	5	150	2/1/0+	105	1.000				3				
PHY565	Design and production of cast parts	BD, UC	5	150	2/1/0*	105	E					5			
PHY496	Corrosion and anti-corrosion treatment	BD, CCH	5	150	2/0/1/	105	E				5				
	Calculation and design of foundry	1.1			1/1/1/							1.00			
PHY567	equipment	DD UG	-	100	1/1/1#	75	E		-			4			1.1.1
PHY571	Advanced casting methods	BD, UC	4	120	1/1/1*	75	E					4			
PHY566	Foundry equipment and machines	BD, UC	5	150	2/1/0*	105	E						5		1
PHY568	Special types of casting				2/0/1/		121					1.5.74		2026	
PHY511	Computer Modeling in Materials Science (thermocalc)	BD, CCH	5	150	1/1/1/	105	E						5		
PHY507	Fundamentals of Technology Processes of Manufacturing Materials	DD COUL	And Annual Second	150	1/1/1/	105	Е						5		
PHY570	Automatic and complex mechanized lines for foundry production	PD, CCH	5	150	2/0/1/	105	E						5		
PHY555	Probing methods on materials research	DD COV		100	2/1/1/	120	Е							6	
PHY572	Injection molding equipment and technology	PD, CCH	6	180	2/1/1/	120	E		10000						
				M	- 10. Nar	otechno	logy mod	lule	Service and the					1	
PHY502	Methods of structural analysis and Quality control methods				1/1/1/										
PHY503	Methods of obtaning and research of nanostructered materials	BD, CCH PD, CCH	5	150	1/0/2/	105	E			1			5		
PHY505	Methods of obtaning and research of nanostructered materials				2/0/1/										
PHY573	Equipment and technology of casting on gasified patterns				1/1/1/	105									5
PHY480	Technologies of obtaining nanomaterials and nanosystems				1/1/1/										
PHY587	Nanomaterials and nanotechnologies in construction	PD, UC	4	120	2/0/1*	75	E								4
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4006	Elective	PD, CCH	5	150	2/1/0*	105	E								5
State .	Phillippine and		1	M	- 12. Prac	tice-orie	ented mo	dule							-
AAP179	Training Practice	BD, UC	2						2					12	
AAP143	Production practice I	PD, UC	2				1.16				2		17		
PET506	Production practice II	PD, UC	3			-							3		
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ECA108	Final attestation	FA	8				184.1					-			8
1.00				I - 14. N	lodule of	addition	al types	of traini	ng		1.0			No. or	
	Military affairs						1.1.1			1					
AAP500	Wintary analis	ATT	0	1200	1	Par 1918	1220 31					1.1.1		1. 1. 1. 1.	

Number of credits for the entire period of study
Cycles of disciplines Credits required component (RC) component of choice (CCH) mponent (UC) university Cycle code Total Cycle of general education disciplines Cycle of basic disciplines GED 56 5 51 BD 81 31 176 25 106 PD Cycle of profile disciplines 39 Total for theoretical training: 75 232 51 FA Final attestation 8 8 TOTAL: 240

Decision of the Academic Council of Kazntu named after K.Satpayev. Protocol № 5 "24" 11 2022 y.

Decision of the Educational and Methodological Council of Kazntu named after K.Satpayev. Protocol № 3 "17" 11 2022 y.

Decision of the Academic Council of the Institute M&M. Protocol Ny 2 "17" 10 2022 y.

Vice-Rector for Academic Affairs

Director of M&M Institute

Head of the MN&EP Department

Specialty Council representative from

Zhautikov B.A. Rysbekov K.B. Kudaibergenov K.K. Gazizov O.G.