

PPROVED Chairman of the Matragement Board-Rector of Kazntu named after I Satpayev MEVI. Begentaev

2024 y.

CURRICULUM

of Educational Program on enrollment for 2024-2025 academic year

Educational program 7M07112 - "Digitalization of engineering manufacturing" Group of educational programs M103 - "Mechanics and metalworking"

Fo	rm of study: full-time	Durati	on of s	tudy:	2 year	Acad	emic d		ster of tech		
Discipline code	Name of disciplines	Cycle	Total amount in	Total	Classroom amount	SIS (including TSIS) in hours	Form of control	Allocation of face-to-face training based on courses and semesters			
				hours	lec/lab/pr			I co	ourse	2 co	urse
			credits					1 semester	2 semester	3 semester	4 semester
CYCLE (OF BASIC DISCIPLINES (BD)										
I NICO12						versity compo		3			1
LNG213 HUM214	Foreign language (professional) Management psychology	BD UC BD UC	5	150 90	0/0/3	105 60	E E	3			
	History and philosophy of science	BD UC	3	90	1/0/1	60	E	3	3		
HUM213	Higher school pedagogy	BD UC	3	90	1/0/1	60	E		3		
	1-6-62		co		nt of choice						
MSM231	Lean manufacturing methodology										
MSM222	Advanced additive manufacturing materials	BD CCH	5	150	2/0/1	105	Е	.5			
IND251	Fundamentals of research activity										
		BD CCH	5	150	2/0/1	105	Е	5			
MNG781	Intellectual Property and Research										
MSM232	Digitalization tools for machine-building production	BD CCH	5	150	2/0/1	105	Е			5	
MNG782	Sustainable development strategies										
	OF PROFILE DISCIPLINES (PD)										
	M-2. Production	digitaliza	tion mo	dule (u	niversity c	omponent, con	nnonen	t of choice)			
MSM201	Virtual factory and Augmented reality production	PD UC	5	150	2/0/1	105	Е	5			
MSM218	Digital design and modeling	PD UC	5	150	2/0/1	105	Е	5			
MSM238	3D scanning methods and technologies	PD UC	5	150	2/0/1	105	Е		5		
1010101236		1000		130	2/0/1	103			J		-
MSM206	Innovative processes of digitalization of machine-building production	PD UC	5	150	2/0/1	105	Е		5		
MSM210	CAE/PLM of machine-building production	PD CCH	5	150	2/0/1	105	Е			5	
MSM237	PLM technologies										
MSM219	Computer-integrated production	PD CCH	5	150	2/0/1	105	Е		5		
MSM234	Organizational and technical bases of flexible automated production	FD CCH							,		
IND249	Actual problems of advanced scientific research	PD CCH	5	150	2/0/1	105	E		5		
IND210	Risk management in digital production										
MSM211	Digital systems of machine-building production	PD CCH	5	150	2/0/1	105	Е			5	
MSM236	Additive manufacturing technologies and equipment										
MSM224		DD			0.00.00		_				4
MSM223		PD CCH	4	120	2/0/1	75	Е				4
MSM235											
UND225	Occupational health and safety of digital	PD CCH	5	150	2/0/1	105	Е			5	1.5
01.0223	engineering production										
			M-3. P	ractice	oriented m	odule					
AAP273	Pedagogical practice	BD UC	8							8	
AAP256	Research practice	PD UC	4								4

		M-	4. Expe	rimental	research	module				
	Research work of a master's student, including internship and completion of a master's thesis	RWMS UC	4				4			
AAP268	Research work of a master's student, including internship and completion of a master's thesis	RWMS UC	4					4	7	
AAP251	Research work of a master's student, including internship and completion of a master's thesis	RWMS UC	2						2	
AAP255	Research work of a master's student, including internship and completion of a master's thesis	RWMS UC	14							14
		N	1-5. Mo	dule of f	inal attes	tation			*	
ECA212	Preparation and defense of a master's thesis	FA	8							8
	Total based on UNIVERSITY:						30	30	30	30
							60		60	

	Number of credits for the entire pe	riod of	fstudy				
	Cycles of disciplines	Credits					
Cycle code			university component (UC)	component of choice (CCH)	Total		
BD	Cycle of basic disciplines		20	15	35		
PD	Cycle of profile disciplines		24	29	53		
	Total for theoretical training:	0	44	44	88		
	RWMS				24		
FA	Final attestation	12			8		
	TOTAL:	12	44	44	120		

Decision of the Academic Council of Kazntu named after K.Satpayev. Protocol № 14 or "41 " 04 20 24 y.

Decision of the Educational and Methodological Council of Kazntu named after K.Satpayev. Protocol № 60T " 0 20 4 y.

Decision of the Academic Council of the Institute E&ME. Protocol № 4 or "19" 20 4 y.

Board Member -Vice-Rector for Academic Affairs

E&ME Institute Director

ME Department Head

Representative of the Council for EP from Employers

R.Uskenbaeva

K.Yelemessov

E.Nugman

I. Dyusebaev