

APPROVED

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Chairman of the Management Board
Rector of Kazntu named after K.Satpayev

M.M. Begentaev

2024 y.

## CURRICULUM

of Educational Program on enrollment for 2024-2025 academic year

Educational program 8D07209 - "Advanced materials processing technologies Group of Educational programs D113 - "Technology of materials processing by pressure

Duration of study: 3 year Academic degree: Doctor of Philosophy (PhD) Form of study: full-time SIS Allocation of face-to-face training based on courses and semesters Total Classroom Discipline Total (includin Form of Name of disciplines Cycle amount TSIS) in I course control hours credits lec/lab/pr hours 1 semester 2 semester 3 semester 4 semester 5 semester 6 semester CYCLE OF BASIC DISCIPLINES (BD) M-1. Technical training module (university component) BD UC MET322 Methods of scientific research 150 2/0/1 105 E 5 BD UC 150 0/0/3 105 Academic writing Component of choice MSM308 Digital factory technologies BD. Sustainability Science 150 2/0/1 105 E 5 CCH MNG349 Intellectual property and the global market CYCLE OF PROFILE DISCIPLINES (PD) M-2. Module of scientific and industrial training (component of choice) Design optimization analysis of technologies MSM309 5 PD, CCH 5 150 2/0/1 105 P and technological systems IND311 Advanced production systems MSM303 Advanced 3D nanoprinting technologies PD, CCH 150 2/0/1 105 E 5 IND313 Development of advanced control systems M-3. Practice-oriented module BD UC 10 10 AAP350 Pedagogical practice AAP355 Research practice PD UC 10 10 M-4. Experimental research module Research work of a doctoral candidate, RWDS 5 5 AAP336 including internships and completion of a UC doctoral dissertation Research work of a doctoral candidate, RWDS AAP347 including internships and completion of a 40 20 20 UC doctoral dissertation Research work of a doctoral candidate, RWDS 30 AAP356 30 including internships and completion of a 60 UC doctoral dissertation Research work of a doctoral candidate, RWDS 18 AAP348 including internships and completion of a 18 UC doctoral dissertation M-5. Module of final attestation Writing and defending a doctoral 12 12 ECA303 FA dissertation Total based on UNIVERSITY: 30 30 30 30 30 30 60 60 60

	Number of credits for the entire per	iod of s	tudy		
Cycle code	Cycles of disciplines	Credits			
			university component (UC)	component of choice (CCH)	Total
BD	Cycle of basic disciplines		20	5	25
₽D	Cycle of profile disciplines		10	10	20
	Total for theoretical training:	0	30	15	45
	RWDS				123
FA	Final attestation	12			12
	TOTAL:	12	30	15	180

Decision of the Academic Council of Kazntu named after K.Satpayev. Protocol № 120 " 14" 14 20 14 y.

Decision of the Educational and Methodological Council of Kazntu named after K.Satpayev. Protocol No 6 or "19 " 04 20 24 y.

Decision of the Academic Council of the Institute <u>E&ME</u>. Protocol No 4 or "19" 04 20 34.

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

M.Azimbekov