

APPROVED Chairman of the Management Board-Received Kazntu named after K.Satpayev M.M. Begentaev 2023 y.

CURRICULUM

of Educational Program on enrollment for 2023

Educational program 8D07209 - "Advanced materials processing technologies

Group of Educational programs D113 - "Technology of materials processing by pressure"

Duration of study: 3 year

Academic deffect Doctor of Philosophy (PhD) Form of study: full-time Duration of study: 3 year Allocation of face-to-face training based on courses and semesters SIS (includin Classroom Total amount in Total Discipline TSIS) in I course 2 course Name of disciplines Cycle control credits hours lec/lab/pr 1 semester 2 semester 3 semester 4 semester 5 semester 6 semester CYCLE OF BASIC DISCIPLINES (BD) M-1. Technical training module (university component) 105 BD UC 150 2/0/1 Scientific research methods 5 0/0/3 105 E 150 BD UC 5 LNG305 Academic writing Component of choice MSM307 Virtual production BD E 105 150 2/0/1 5 CCH MSM306 Advanced digital factory CYCLE OF PROFILE DISCIPLINES (PD) M-2. Module of scientific and industrial training (component of choice) 5 IND319 Advanced optimization 2/0/1 105 150 PD, CCH IND311 Advanced production systems
IND301 Smart manufacturing 5 105 2/0/1 PD, CCH 150 IND300 Digital production M-3. Practice-oriented module 10 AAP350 Pedagogical practice BD UC 10 10 PD UC 10 AAP355 Research practice M-4. Experimental research module 5 5 Research work of a doctoral candidate, including internships **RWDS** AAP336 UC and completion of a doctoral dissertation 20 20 40 Research work of a doctoral RWDS candidate, including internships AAP347 UC and completion of a doctoral dissertation Research work of a doctoral 30 RWDS 30 candidate, including internships AAP356 UC and completion of a doctoral dissertation Research work of a doctoral 18 **RWDS** candidate, including internships 18 AAP348 UC and completion of a doctoral dissertation M-5. Module of final attestation 12 Writing and defending a doctoral FA 12 ECA303 dissertation 30 30 30 30 30 Total based on UNIVERSITY: 60

	Number of credits for the en	ntire period of study Credits			
Cycle code	Cycles of disciplines		university component (UC)	component of choice (CCH)	Total
BD	Cycle of basic disciplines	7	20	5	25
PD	Cycle of profile disciplines		10	10	20
TD	Total for theoretical training:	0	30	15	45
	RWDS			7	123
FA	Final attestation	12			12
IA	TOTAL:	12	30	15	180

Decision of the Academic Council of Kazntu named after K.Satpayev. Protocol Na 2 or "17 10 20 11

Decision of the Educational and Methodological Council of Kazntu named after K.Satpayev. Protocol No 10 " 10" 20 114.

Decision of the Academic Council of the Institute E&ME . Protocol Not Lory " 10 20 lls.

Vice-Rector for Academic Affairs

B. A. Zhautikov

E&ME Institute Director

K.Yelemessov

ME Department Head

E.Nugman

Representative of the Council for EP from Employers

M.Azimbekov