



**SATBAYEV
UNIVERSITY**



APPROVED

Chairman of the Management Board-
Rector of Kazntu named after K. Satpayev
E.M.E. Bogentaev

CURRICULUM

of Educational Program on enrollment for 2024-2025 academic year

Educational program 8D07111 - "Digitalization of engineering manufacturing"
Group of Educational programs D103 - "Mechanics and metalworking"

Form of study: full-time

Duration of study: 3 year

Academic degree: Doctor of Philosophy (PhD)

Discipline code	Name of disciplines	Cycle	Total amount in credits	Total hours	Classroom amount lec/lab/pr	SIS (including TSIS) in hours	Form of control	Allocation of face-to-face training based on courses and semesters									
								1 course		2 course							
								1 semester	2 semester	3 semester	4 semester	5 semester	6 semester				
CYCLE OF BASIC DISCIPLINES (BD)																	
M-1. Technical training module (university component)																	
MET322	Methods of scientific research	BD UC	5	150	2/0/1	105	E	5									
LNG305	Academic writing	BD UC	5	150	0/0/3	105	E	5									
Component of choice																	
MSM308	Digital factory technologies	BD CCH	5	150	2/0/1	105	E	5									
MNG350	Sustainability Science																
MNG349	Intellectual property and the global market																
CYCLE OF PROFILE DISCIPLINES (PD)																	
M-2. Digital Engineering Module (component of choice)																	
MSM309	Design optimization analysis of technologies and technological systems	PD CCH	5	150	2/0/1	105	E	5									
IND311	Advanced production systems	PD CCH	5	150	2/0/1	105	E	5									
IND317	Advanced design of industrial experiments																
IND321	Advanced solution analysis																
M-3. Practice-oriented module																	
AAP350	Pedagogical practice	BD UC	10							10							
AAP355	Research practice	PD UC	10								10						
M-4. Experimental research module																	
AAP336	Research work of a doctoral candidate, including internships and completion of a doctoral dissertation	RWDS UC	5						5								
AAP347	Research work of a doctoral candidate, including internships and completion of a doctoral dissertation	RWDS UC	40							20	20						
AAP356	Research work of a doctoral candidate, including internships and completion of a doctoral dissertation	RWDS UC	60									30	30				
AAP348	Research work of a doctoral candidate, including internships and completion of a doctoral dissertation	RWDS UC	18												18		
M-5. Module of final attestation																	
ECA303	Writing and defending a doctoral dissertation	FA	12												12		
Total based on UNIVERSITY:																	
								30	30	30	30	30	30	30			
								60	60	60	60	60	60	60			

Number of credits for the entire period of study					
Cycle code	Cycles of disciplines	Credits			Total
		university component (UC)	component of choice (CCH)		
BD	Cycle of basic disciplines	20	5		25
PD	Cycle of profile disciplines	10	10		20
	<i>Total for theoretical training:</i>	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 № 12 от "22" 04 2024 y.

Decision of the Educational and Methodological Council of Kazntu named after K.Satpayev, Protocol № 6 от "19" 04 2024 y.

Decision of the Academic Council of the Institute E&ME, Protocol № 4 от "19" 04 2024 y.

Board Member -Vice-Rector for Academic Affairs

R.Uskenbaeva

E&ME Institute Director

K.Yelemessov

ME Department Head

E.Nugman

Representative of the Council for EP from Employers

M.Azimbekov