



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

Educational program 8D6102 - "Machine Learning & Data Science"
Group of educational programs D094 - "Information technologies"

Discipline code	Name of disciplines	Cycle	Duration of study: 3 year					Form of control	Academic degree:							
			Total amount in credits	Total hours	Classroom amount lec/lab/pr	SIS (including TSIS) in hours	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. Module of basic training (university component)																
MET322	Scientific research methods	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																
CSE305	Fundamentals of distributed intelligent systems	BD CCHBD	5	150	2/0/1	105	E	5								
CSE306	Big Data Storage Systems And Computations	CCH														
CYCLE OF PROFILE DISCIPLINES (PD)																
M-2. Module of professional activity (component of choice)																
CSE304	Natural Language Processing	PD, CCH	5	150		105	E	5								
CSE309	Machine Learning & Deep Learning															
CSE331	Data Science & Machine Learning for Research	PD, CCH	5	150		105	E	5								
CSE330	Data Science for Business Innovation															
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
	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 № 5 от "24" 11 2022 y.

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

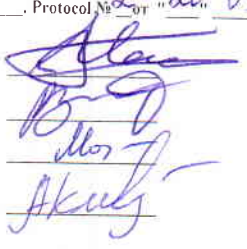
Decision of the Academic Council of the Institute _____ . Protocol № 2 от "20" 09 2022 y.

Vice-Rector for Academic Affairs

Director of the Institute AalT

Department head SE

Employers Council Representative



B.A. Zhautikov

R.K. Uskenbayeva

A.N. Moldagulova

A.T. Konysbayev