KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY named after K.I.SATPAYEV

SATBAYEV UNIVERSITY

CURRICULUM
of Educational Program on enrollment for 2024-2025 academic year

Educational program 8D06102 - "Machine Learning & Data Science"
Group of educational programs 8D094 - "Information technologies"

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					
								I 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)													
CSE339	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													
CSE340	Machine Learning I	BD CCH	5	150	2/0/1	105	E	5					
CSE306	Big Data Storage Systems And Computations												
MNG350	Sustainability Science												
CYCLE OF PROFILE DISCIPLINES (PD)													
M-2. Module of professional activity (component of choice)													
CSE341	Machine Learning II	PD, CCH	5	150	2/1/0	105	Э	5					
CSE327	Predictive Analytics and Data Mining				1/1/1								
CSE342	Applied Machine Learning Research Projects	PD, CCH	5	150	1/1/1	105	Э	5					
CSE304	Natural Language Processing				2/1/0								
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
								60		60		60	

Number of credits for the entire period of study

Cycle code	Cycles of disciplines	Credits		
		university component (UC)	component of choice (CCH)	Total
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 №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 of Automation and Information Technology. Protocol №8 от "29" 02 2024 y.

Vice-Rector for Academic Affairs — Uskenbayeva R.K.

Acting Director of the Institute of A&IT — Kalpeeva Zh.B.

Head of the Department of Software Engineering — Abdoldina F.N.

Specialty Council representative from employers, President of the Association of Innovative Companies of the SEZ "PIT", Ph.D. — Konysbayev A.T.