



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

Educational program 8D06101 - "Software Engineering"  
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					
								1 course			2 course		
								1 semester	2 semester	3 semester	4 semester	5 semester	6 semester
<b>CYCLE OF BASIC DISCIPLINES (BD)</b>													
<b>M-1. Module of basic training (university component)</b>													
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					
<b>component of choice</b>													
CSE344	Foundations of Software Engineering	BD CCH	5	150	2/0/1	105	E	5					
CSE306	Big Data Storage Systems And Computations												
MNG350	Sustainability Science												
<b>CYCLE OF PROFILE DISCIPLINES (PD)</b>													
<b>M-2. Module of professional activity (component of choice)</b>													
CSE343	Software DevSecOps	PD, CCH	5	150	2/0/1	105	Э	5					
CSE307	High Load Distributed Computing												
CSE345	Software Architecture & Design	PD, CCH	5	150	2/0/1	105	Э	5					
CSE327	Predictive Analytics and Data Mining												
<b>M-3. Practice-oriented module</b>													
AAP350	Pedagogical practice	BD UC	10						10				
AAP355	Research practice	PD UC	10							10			
<b>M-4. Experimental research module</b>													
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
<b>M-5. Module of final attestation</b>													
ECA303	Writing and defending a doctoral dissertation	FA	12										12
<b>Total based on UNIVERSITY:</b>								30	30	30	30	30	30
								60	60	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	
	<b>Total for theoretical training:</b>	<b>0</b>	<b>30</b>	<b>15</b>	
	RWDS			<b>123</b>	
FA	Final attestation	12		12	
	<b>TOTAL:</b>	<b>12</b>	<b>30</b>	<b>15</b>	

Decision of the Academic Council of Kazntu named after K.Satpayev. Protocol № 12 or "22" 04 2024.

Decision of the Educational and Methodological Council of Kazntu named after K.Satpayev. Protocol № 8 or "19" 09 2024.

Decision of the Academic Council of the Institute of Automation and Information Technology. Protocol № 8 or "29" 02 2024.

Vice-Rector for Academic Affairs

Acting Director of the Institute of A&IT

Head of the Department of Software Engineering

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

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