



«APPROVED»
Decision of the Academic Council
NPJSC«KazNRTU
named after K.Satbayev»
dated 06.03.2025 Minutes № 10

WORKING CURRICULUM

Academic year

2025-2026 (Autumn, Spring)

Group of educational programs

D095 - "IT Security"

Educational program

8D06301 - "Information Security Systems"

The awarded academic degree

Doctor of Philosophy PhD

Form and duration of study

full time (scientific and pedagogical track) - 3 years

Discipline code	Name of disciplines	Block	Cycle	Total ECTS credits	Total hours	lek/lab/pr Contact hours	in hours SIS (including TSIS)	Form of control	Allocation of face-to-face training based on courses and semesters						Prerequisites	
									1 course		2 course		3 course			
									1 sem	2 sem	3 sem	4 sem	5 sem	6 sem		
CYCLE OF GENERAL EDUCATION DISCIPLINES (GED)																
CYCLE OF BASIC DISCIPLINES (BD)																
M-1. Module of basic training (university component)																
CSE339	Research methodology		BD, UC	5	150	30/0/15	105	E	5							
LNG305	Academic writing		BD, UC	5	150	0/0/45	105	E	5							
CSE314	Information Security Management Systems	1	BD, CCH	5	150	30/0/15	105	E	5							
SEC303	Blockchain Technologies and Data Security	1	BD, CCH	5	150	15/15/15	105	E	5							
MNG350	Sustainability Science	1	BD, CCH	5	150	30/0/15	105	E	5							
M-3. Practice-oriented module																
AAP350	Pedagogical practice		BD, UC	10				R		10						
CYCLE OF PROFILE DISCIPLINES (PD)																
M-2. Module of professional activity (component of choice)																
CSE317	Quantum cryptography	1	PD, CCH	5	150	30/0/15	105	E	5							
CSE315	Information security in database management systems	1	PD, CCH	5	150	30/0/15	105	E	5							
CSE309	Machine Learning & Deep Learning	2	PD, CCH	5	150	30/0/15	105	E	5							
CSE311	Big Data Processing	2	PD, CCH	5	150	30/0/15	105	E	5							
M-3. Practice-oriented module																
AAP355	Research practice		PD, UC	10				R			10					
M-4. Experimental research module																
AAP336	Research work of the doctoral student, including internships and doctoral dissertation		RWDS	5				R	5							
AAP347	Research work of the doctoral student, including internships and doctoral dissertation		RWDS	20				R		20						
AAP347	Research work of the doctoral student, including internships and doctoral dissertation		RWDS	20				R			20					
AAP356	Research work of the doctoral student, including internships and doctoral dissertation		RWDS	30				R				30				
AAP356	Research work of the doctoral student, including internships and doctoral dissertation		RWDS	30				R					30			
AAP348	Research work of the doctoral student, including internships and doctoral dissertation		RWDS	18				R						18		
M-5. Module of final attestation																
ECA325	Final examination (writing and defending a doctoral dissertation)		FA	12											12	
									30	30	30	30	30	30		

	60	60	60	
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Number of credits for the entire period of study

Cycle code	Cycles of disciplines	Credits			
		Required component (RC)	University component (UC)	Component of choice (CCH)	Total
GED	Cycle of general education disciplines	0	0	0	0
BD	Cycle of basic disciplines	0	20	5	25
PD	Cycle of profile disciplines	0	10	10	20
Total for theoretical training:		0	30	15	45
RWDS	Research Work of Doctoral Student				123
ERWDS	Experimental Research Work of Doctoral Student				0
FA	Final attestation				12
TOTAL:					180

Decision of the Educational and Methodological Council of KazNRTU named after K.Satpayev. Minutes № 3 dated 20.12.2024

Decision of the Academic Council of the Institute. Minutes № 4 dated 22.11.2024

Signed:

Governing Board member - Vice-Rector for Academic Affairs

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Approved:

Vice Provost on academic development

Kalpeyeva Z. B.

Head of Department - Department of Educational Program
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Representative of the Academic Committee from Employers

Pokusov V. V.

____Acknowledged____

