



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

WORKING CURRICULUM

Academic year

2025-2026 (Spring, Autumn)

Group of educational programs

M094 - "Information technologies"

Educational program

7M06108 - "Management of information systems"

The awarded academic degree

Master of engineering and technology

Form and duration of study

full time (professional track) - 1,5 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	
									1 sem	2 sem	3 sem	
CYCLE OF GENERAL EDUCATION DISCIPLINES (GED)												
CYCLE OF BASIC DISCIPLINES (BD)												
M-1.Module of basic training (university component)												
CSE773	Artificial intelligence methods	1	BD, CCH	5	150	30/0/15	105	E	5			
CSE774	Web Mining	1	BD, CCH	5	150	30/0/15	105	E	5			
LNG212	Foreign language (professional)		BD, UC	2	60	0/0/30	30	E		2		
MNG726	Management		BD, UC	2	60	15/0/15	30	E		2		
HUM211	Psychology of management		BD, UC	2	60	15/0/15	30	E		2		
CSE772	Analysis and modeling of information systems	1	BD, CCH	4	120	15/0/30	75	E		4		
CSE771	Methods and Applications of Computer Simulation	1	BD, CCH	4	120	30/0/15	75	E		4		
CYCLE OF PROFILE DISCIPLINES (PD)												
M-3. Practice-oriented module												
AAP248	Internship		PD, UC	5				R		5		
M-4. Experimental and research module												
AAP249	Experimental research work of a master student, including an internship and the implementation of a master's project		ERWMS	18				R			18	
M-5. Module of final attestation												
ECA213	Design and defense of the master's project		FA	8							8	
M-2.Module of professional activity (university component, component of choice)												
CSE765	IT management		PD, UC	5	150	30/0/15	105	E	5			
CSE219	Theory and practice of statistics	1	PD, CCH	5	150	15/15/15	105	E	5			
SEC230	Applied statistics and data analysis	1	PD, CCH	5	150	15/0/30	105	E	5			
CSE258	Data analysis and Data retrieval	2	PD, CCH	5	150	15/15/15	105	E	5			CSE248
SEC234	OLAP and Data Warehousing	2	PD, CCH	5	150	15/15/15	105	E	5			
CSE203	The architecture of information systems		PD, UC	5	150	15/15/15	105	E		5		
CSE211	Models and methods of decision-making in IP	1	PD, CCH	5	150	15/15/15	105	E		5		
SE769	Methods and tools for building information retrieval systems	1	PD, CCH	5	150	30/0/15	105	E		5		
764	Cloud computing	2	PD, CCH	5	150	30/0/15	105	E		5		
	Business Intelligence	2	PD, CCH	5	150	30/0/15	105	E		5		
	Data mining	3	PD, CCH	5	150	30/0/15	105	E		5		
	Methods of modeling business processes	3	PD, CCH	5	150	30/0/15	105	E		5		

SEC246	Big Data and Data Analysis	4	PD, CCH	5	150	30/15/0	105	E		5		
CSE746	Machine Learning & Deep Learning	4	PD, CCH	5	150	30/0/15	105	E		5		
SEC251	IT project and information risk management		PD, UC	4	120	30/0/15	75	E			4	
Total based on UNIVERSITY:									20	40	30	
									60		30	

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	6	9	15
PD	Cycle of profile disciplines	0	19	30	49
Total for theoretical training:		0	25	39	64
RWMS	Research Work of Master's Student				0
ERWMS	Experimental Research Work of Master's Student				18
FA	Final attestation				8
TOTAL:					90

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

Uskenbayeva R. K.

Approved:

Vice Provost on academic development

Kalpeyeva Z. B.

Head of Department - Department of Educational Program Management and Academic-Methodological Work

Zhumagaliyeva A. S.

acting Director of Institute - Institute of Automation and Information Technologies

Chinibayev Y. I.

Department Chair - Cybersecurity, information processing and storage

Satybaldiyeva R. Ж.

Representative of the Academic Committee from Employers

Mamyrbayev O. Z.

____ Acknowledged ____

