Academy of Public Administration under the President of the Republic of Kazakhstan

Approved by the decision of the Academic Council of the Academy March 28, 2025 Protocol №12

Master's Degree Program «7M04123 – Digital Public Administration»

1. Name of the program: Master's Degree Program «7M04123 – Digital Public Administration» (training area «7M041 – Business and Management»).

2. Term of study: 1 year

3. Total credits (ECTS): 65

4. Program description:

The one-year master's program is designed to train digital transformation managers who are able to develop and implement digital solutions in the public sector, manage digital state systems and ensure information security.

5. Aims and objectives of the program:

Purpose: Training of a new generation of managers who are able to implement state policy in the field of digital development in the context of the digital transformation of the economy and the development of the information society.

Objectives of the program:

- to develop managerial competencies in the practical application of the assessment, analysis and implementation of digital management strategies;

- to develop applied interdisciplinary skills in the field of public administration using digital technologies, taking into account the conditions for ensuring information security;

- to develop competencies in managing Big Data, digital ecosystem and infrastructure for the implementation of innovative approaches in the public administration system;

- improve the skills of collecting evidence and data when making management decisions using data analysis and visualization tools Power BI, Python, Tableau, Quantum GIS, etc.

6. Benefits of the program:

- collaboration with the authorized state body in the field of digital development during the educational process, as well as during research and analytical work;

- development of innovative, analytical and managerial abilities in the educational process;

- the opportunity to undergo an internship at a foreign partner university of the Academy, with a certificate confirming the appropriate level of a foreign language;

- the opportunity to undergo practical training in the MDDIAI of the Republic of Kazakhstan, structural divisions for digital development of the central and state bodies, Astana Hub, Park of Innovative Technologies, Government for Citizens, National Agency for the Development of Innovations "QazInnovations", NIT JSC, etc.

- attracting leading foreign and Kazakhstani experts, practitioners in the field of public administration and digital transformation in the public and quasi-public sector for teaching;

- development of social networking, interaction with industry experts, peer learning;

- teaching in the State, Russian and English languages.

7. Expected learning outcomes:

- uses digital technologies for information processing, data analysis and verification and security;

- demonstrates the skills of defining specific tasks in accordance with strategic goals, creating conditions and orienting the team to the high-quality and timely implementation of digitalization tasks;

- uses modern technologies to increase transparency, efficiency and automation of processes in the field of public administration;

- strictly follows the rules of ethical behavior in all situations in accordance with the code of ethics and the principles of integrity, honesty, goodwill to colleagues and stakeholders, compliance with information security rules when working with digital tools and personal data;

- able to set specific goals based on data analysis and aimed at results;

- analyzes opportunities, risks, as well as calculates and plans resources in conditions of uncertainty;

- able to initiate IT projects to improve the activities of a state body and develop proposals for the implementation of innovative approaches.

Semester	Name of the discipline	BD/ PD	UC/ SC	ECTS
1	Public administration	BD	UC	2
	Legal regulation of digitalization processes	PD	UC	4
	Professional English	BD	UC	2
	Digital Transformation of the State and E- Government Infrastructure	BD	UC	5
	Business process reengineering	PD	UC	3
	Information Security of the Digital Ecosystem	PD	UC	4
	Research methods and design	PD	UC	3
	Total theoretical training			23
	Experimental-research work of a Master's student (hereinafter referred to as ERWM)			7
	TOTAL FOR SEMESTER 1			30
2	Artificial Intelligence and Advanced Evidence-Based Analytics	PD	UC	3
	Formal writing and digital discourse (in the state language)	PD	UC	2
	Digital public services	PD	UC	2
	Information Systems Architecture	PD	UC	2
	Project Management	PD	UC	3
	Big Data and Decision Making	PD	UC	3
	Elective Component	BD	SC	4
	Practice			2
	Total theoretical training			21
	Internship			2
	ERWM			4
	Final Attestation (Design and Defense of the Master's Project)			8
	TOTAL FOR SEMESTER 2			35
Total theoretical training + practice				44
Final Attestation (Design and Defense of the master's Project)				8
ERWM + Internship				13
TOTAL CREDITS FOR COMPULSORY DEVELOPMENT				65

8. Program structure and academic content: